# ATTITUDES OF HIGHER SECONDARY ENGLISH TEACHERS TOWARDS THE USE OF COMPUTER AND THE INTERNET

A Thesis Submitted to Faculty of Education, Department of English Language Education, Tribhuvan University, University Campus, Kirtipur In Partial Fulfilment of the Master's Degree in Education (Specialization in English Education)

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Faculty of Education
Tribhuvan University, Kirtipur
Kathmandu, Nepal
2008

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# **DEDICATION**

# This work is dedicated to

My loving parents

Whose inspirations are my steps in creating a small world.

(This thesis can be viewed and downloaded at http://www.lnkhanal.com.np)

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#### **ABSTRACT**

The global spread of Information and Communication Technology has created the great impacts in all daily activities of human life. Education sector including Language Teaching can not be isolated from the new changes in education system of the world. Considering the issues of implementing the technologies in educational and curricular activities, this study has focused on the end users' attitudes towards the modern communication and information tools: computer and the Internet.

This study is has been carried out to study the attitudes of Higher Secondary English Language Teachers of Kathmandu valley and their perception on the basis of their personal characteristics, relative computer and internet advantages, cultural perception, computer competence and the availability of computer and the internet.

The study has concluded with the findings that majority of the teachers have positive attitudes towards the computer and the internet. Although less than twenty five percent English teachers of Higher Secondary School in Kathmandu valley are still away from computer and the internet access, they are aware of use of computer and the Internet and have the positive attitudes towards the use of them in curricular activities. All teachers are interested to increase the computer and the internet access in the future.

This thesis consists of four chapters. The first chapter is the introductory part and sets the background information about the impact of computer and the internet in education to national integral development. It also contains the review of the related literature, objectives of the study and significance of the study.

Second chapter carries out the methodology used in the study. This chapter show the steps adopted in conducting the research. Sources of data, sampling procedures, instrumentation, and process of data collection, research design, research variables, reliability, validity and limitations of the study are the main subjects included in the chapter.

The third chapter explores the data presentation, analysis and interpretation of the selected data. Computer assisted analysis has been adopted in presenting the data. SPSS (Statistical Package for Social Science) has been used for quantitative and descriptive data analysis and NVivo-7 has been used to interpret the qualitative data (interviews and observation) in this chapter. All descriptive data have been presented on table format and detail explanation has been used to interpret the qualitative data. This chapter covers the overall tasks to get the objectives of the study.

Finally, the fourth chapter covers the findings of the study and its pedagogical implications.

#### ABBREVIATION AND SYMBOLS

CAI Computer Assisted Instruction
CAN Computer Association of Nepal

e.g. For example

ELT English Language Teaching

Email Electronic Mail

etc. Etcetera

HSS Higher Secondary School (10+2)

http Hypertext Transfer Protocol

ICT Information and Communication Technology

ID Identification

INGOs International Non Government Organizations

IT Information Technology

M. Phil. Master of Philosophy

MS. Microsoft

NELTA Nepal English Language Teachers' Association

NGOs, Non Government Organizations

NVivo 7 A Qualitative Data analysis Software

OUP Oxford University Press
Ph.D. Doctor of Philosophy

Standard Daviation

SD Standard Deviation

SLC School Leaving Certificate
SMS Short Messaging Service

SPSS Statistical Package for Social Science

TCP/IP Transmission Control Protocol/ Internet Protocol

UNDP United National Development Program

US United State

Viz In other words.

www World Wide Web

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#### **CHAPTER-ONE**

#### INTRODUCTION

## 1.1 General Background

In recent years there has been an explosion of interest in using computers in various academic disciplines across the curriculum, including ELT (English Language Teaching), which has led to the widespread adoption of the technology in education

We have witnessed a worldwide proliferation of computer and the Internet in the field of education since the last two decades. The global adoption of computers and the Internet into education has been driven by public and economic demand for national development. 'Information Technology (IT) has infiltrated not just practice but policy in a way that no other teaching technology has done in the past' (Murphy, et al. 2001:2)

On one hand computer in education serves as a knowledge tool and a skill base for students' employment preparation as well as for national economic development. On the other hand the Internet has been the medium of unlimited resources to broaden the knowledge of teachers worldwide. Use of computer and the Internet in education can be the blueprint that predicts integral development of a country. The effectiveness of the use of computer and the Internet in education may be an important factor in determining which countries will have overall success in the future.

The 21<sup>st</sup> century is synonymous to 'The Age of Information and Technology' (IT). Rapid growth of the technology in any field has generated a whole set of speculations about the necessity of educational reforms that will sustain the new tools. Governments in the most developing countries have responded to the

challenge by initiating national programs to introduce computer in education. Comparatively, the use of computer for educational purpose is increasing in the cities even in the developing countries like Nepal but the countryside is still out of reach with the tools of the modern technologies. A few private sectors have shown the interest to invest in the technology to enhance the educational foundation but it seems more likely to business purpose rather than developing spirits of use of the technology in nation building.

Although computers are provided to educators to develop and practise the new methods and techniques in teaching and learning process, other considerable factors should be measured to enable educators to develop positive attitudes towards the new tools and to use them. As Baylor and Ritche (2002) state, "regardless of the amount of technology and its sophistication, technology will not be used unless faculty members have the skills, knowledge and attitudes necessary to infuse it into the curriculum" (p. 398). Therefore, teacher should develop the quality of an effective agent to be able to make use of technology in the classroom.

A recent innovation in the computerization of education is a challenging process where many other seen and unseen factors play a role. Watson (1998) warns against the severance of the innovation from the classroom teacher and the idea that "the teacher is an empty vessel into which this externally defined innovation must be powered" (P 191).

The earlier implementation of many promising technological innovations fails to achieve its goal due to the negligence of the end user's attitudes and needs. (Mc Carthy 1998). However, fast changes in education influenced by the use of

the technology have made the teachers and educators consider their attitudes towards the subsequent demand of changes by the new generation of the world.

Different international studies have shown that implementation of educational technologies strictly depends on the educators and teachers who eventually determine the way they are used in the classroom and the practical field. Development of teachers' positive attitudes towards use of computer and Information and Communication Technology (ICT) is an indispensable factor for enhancing proper implementation of computer in education. It also helps to avoid teachers' barriers to computer use. The successful reshaping in educational activities requires the reform of the positive attitude of the users towards the new technologies.

Up to now many international studies have been done to find out the relationship between the new technology and the attitudes of the educators and the teachers. The result of these studies has come to the point that the implementation of any computer skills is futile unless they have the positive attitudes. Those studies have suggested that teacher is the most important agent of transformation on the educational ground. Therefore, before implementing computer and the technologies in education the concerned authority should address teachers' attitudes towards use of them as a core for its success.

As a student of Master Degree of Education in Nepal, the researcher felt that it is important to study teachers' attitudes particularly in developing country where computer and the Internet are not basically part of the school culture. That is why the teachers of developing countries might not have practised the use of the technology as a part of their daily life and culture of the society. The concerned authority of a developing country should be sensitive about the

factors that affect in implementing the new technologies in education. Unless the teacher develops the positive attitudes towards the new tools they simply turn a blind eye and deaf ear to them. Rogers (1995) considers that adopter's attitudes are indispensable to the innovation—decision process. Because of their critical role in the innovation implementation process educators' attitudes towards computer and the Internet should be the focus of studies at the early stage of the technology implementation.

#### 1.2 Review of the Related Literature

No previous study was found in the Department of English Language that is related to new technology and attitudes towards it. One of the study based on the information and communication technology can be found which is taken as the review of the related literature here in this study.

**Sapkota** (2004) conducted the research in the field of communication and sharing information via email, chat (instant message) and SMS. He had studied different aspects of language e.g. lexical and syntactic structure, language functions and other nonverbal expression used in e-mail, chat and SMS.

The present study has some how related with the use of means of communication and information but it is from the different perspective so further review of the literature has been considered as an important part of the study.

Focus of the review of related literature will be on five major topics (a) Computer, the Internet, Education and Development (b) Developing Countries and Educational Computing (c) The Rise of Computer in Education in Kathmandu Valley (d) Teachers' Attitudes towards Computer and the Internet

in Education (e) Variables Related to Teachers' Attitudes in Using Computer and the Internet.

### 1.2.1 Computer, the Internet, Education and Development:

We cannot imagine the development of any nation by isolating the computer, the Internet and education totally from one another. It is widely accepted fact that no economic growth is possible without an essential implementation of the technology. The possibilities are boundless because of the invention of computers, the Internet and the Science and Technology. People, society and the nation are changing by leaps and bounds for new destinations of development. Information Technology (IT) and application of computer and the Internet in education has been identified as a tool to transform the subsistence energy into information, knowledge and the accelerated economic growth. That is why the relationship of computer, the Internet and education with development cannot be isolated. Their relation is like the flesh and the bone in which absence of one might be the death of the other.

Among many resources needed for a national development human resource are the pioneer and the last tool as well. All other resources and investment are unproductive unless the nation has the skilled and qualified human resources. Successful adoption of computer technology has been a major force for the human resource development. "Impact of technology such as use of computer, the Internet and other tools; radio, television and telephone are increasingly critical to nation's economic success and personal advancement." (Zimulinda Celestin, 2000)

The importance of expanding the access of developing countries to the Internet and computer has been recognized by governments and international agencies with increasing consensus that the Internet and educational technologies should be regarded as strategic national development. "Implementation of such infrastructures in developing countries is considered marginal impact in improved network of communications very high and leading to improved economic productivity, governance, education, health and quality of life, particularly in rural areas." (Kenney, 1995) We should not take the economic growth of the people and improvement in their life style as the perfect measurement of the development. But the main message of the sustainable development movement that arose in the 1970s and 1980s was that development depended on the ecology and culture of the locality rather than on a western model of economic growth. More recently, in the context of Africa, McGeary and Michaels (1998) observe that a new spirit of self-reliance is taking root among many Africans as they seize control of their destiny through local models of development. (Shrin Madon, http://www.emerland-library.com)

That is why the current spread of the technologies worldwide has changed the concept of global development, which is the new perspective and one step forward in redefined meaning of development. The diffusion of Information and Communication Technologies, computer and the Internet has led to the different goal of development with much greater emphasis on non-economic aspects. "Development has come to be conceived of and measured not only in economic terms, but also in terms of social wellbeing and political structures, as well as in terms of the physical environment as reflected in the UNDP Report on Human Development published annually since 1992 (UNDP, 1991). This report takes increasing account of alternative dimensions of development such as social welfare, social equity, democracy, empowerment and sustainable development.

Incorporating this multi-faceted approach to development, Press recently brought evidence to show a positive correlation between the number of the Internet hosts in a country and the UNDP Human Development Index (Press, 1997).

## 1.2.2 Developing Countries and Educational Computing

Developed countries are the product of the implementation of the technologies in education. The global use of computers has created a new way of thinking and change to reform the whole educational programs even in the developing countries. The developing countries are just crawling as a newly born baby to assimilate with the rapid changes on system of education in developed countries. "Given the global demand for technologically skilled labor force, together with the challenges of an increasingly competitive global market, developing countries have suddenly found themselves under economic, social, vocational and pedagogic pressures to use technology in education (Kiangi 1998)"

Many ministries of education in developing countries have been driven to introduce the computers and use of Information Technology (IT) in school curriculum as a background tool to transform the traditional concept in education. But due to the cultural background of people living in developing countries, practice of the technology in education has been as slow as the speed of tortoise. Hiring the human resources from the developed countries might be economically non-affordable which the developing countries have to face. Developing the manpower and the technology alone is again a great challenge in itself.

Although they borrow the technology from the developed countries many other factors will play a role in implementing in education. Political, geographical, cultural, economic, and social structures and the perception of the people of the country are only the factors to be illustrated here that affect the adoption of the technologies for integral development for the country and its success in future.

There are other common problems of implementing the technologies in education in developing countries; the drought of skilled and qualified teachers, spread of computer illiteracy, deterioration of infrastructure base, lack of computer resources, insufficient investment, poor governmental activities, lack of political sustainability, inappropriate visualization of the planner and the policy makers. Abas (1995:153-162) reports in her study of the technology implementation in Malaysian school that "the main hindrance to successful technology implementation was the scarcity of resources. Malaysian ministry of education had supplied software packages but with no funds to purchase additional resources materials."

Frank Hernos, Morten Hestmann and Erna Haaland (2006) from Norwegian University of Science and Technology have stated that implementation of Information and Communication Technology (ICT) in Norway is facing some problems form the base such as the pre-service teacher education is not sufficient. Life long learning implies that, teacher through in-service training, will constantly have to upgrade their knowledge and there by their way of teaching in accordance with the present situation.

Veen (1995:179) concluded that "educational change is a slow process and teachers need time to gain experiences with computers". We are witnessing the common problems faced by the other developing countries that are common in

the context of Nepal too. Nepal is the landlocked country with the sufficient natural resources but the productions of those resources could not have been consumed by the people of the nation because of lack of integral implementation of the technologies.

The government of Rwanda finalized its Information and Communication Technology blueprint dubbed –"An Integrated framework for Socio-Economic Policy and Plan Development and Implementation for Rwanda" in 1998. But the problem is still everywhere; the recurring question on many ordinary people's minds is "how far is ICT going to solve Rwanda's problems? Arguments from laymen like "starving school kids are not going to eat computer" are not uncommon. However the case in Nepal is not exactly similar to Rwanda but some problems come to be in the same category. On one hand high percentage of people in Nepal depends on the agriculture and they are unaware of advantages of the modern technology. The main problem of everyday hand to mouth does not let them think about the innovation of the technology. The perception of the people towards the modern technology always raises the question 'how far the technologies will be productive for them? They are not sure about the future because the use of the technologies has not been the culture and the part of life. So unless the technologies, computer and the Internet are the culture and part of daily life people still remain in full doubt on the certainty of their future.

Finally, developing countries need to find the formula to arrange those tools systematically in service of their own needs, purpose and circumstance. The government, NGOs, INGOs, and other responsible sectors should make the people aware of implementation of the new technologies and the infrastructures for the national development. Otherwise, total budget invested in implementing

the technologies will be the weapon of warping debt on the heads of the people in the developing countries.

## 1.2.3 The Rise of Computer in Education in Kathmandu Valley

Computer was first introduced in Nepal by (His Majesty Government) Government of Nepal for processing data in 1971. The private sector began its activities in this area in early eighties. In the beginning only computer education spread widely in the major cities of Nepal that also helped the more or less people to be computer literate. Among all other cities of Nepal Kathmandu, the capital city is in the first position in the use of computer and the technology in education. But the computer in education has not been the part of culture of school curriculum. Only few private sectors have introduced the computer in education as tools of teaching and learning process. This also has been limited to certain disciplines like science, mathematics and other technical subjects. Other subjects like social sciences are not making any attempt in using computer as the teaching and learning process. The recent survey of Computer Association of Nepal (CAN) carries out the current figure of human resources in the field of Information and Communication Technology. According to the report there are 4,053 skilled manpower in the field of ICT only. Among them 73.80% have no formal degree from recognized universities or institutions 1000 have the degree from the reputed colleges and institutions. 77.2% have the degree from the institutions of motherland (Nepal). 13.6% have the degree form India and other from the third countries like Australia, China, Russia, and America.

Most of the institutions and colleges in the field of computer, the Internet and technology are centralized within Kathmandu Valley. But no study has been conducted on how many institutions, schools and colleges in Kathmandu are

using computer in education rather than the computer education itself. How many teachers are trained for online learning and teaching with the technology, is unknown.

## 1.2.4 Teachers' Attitudes towards Computer and the Internet in Education

Everybody has some kinds of attitudes towards the job and the profession he/she is holding. Teaching as a profession is crucial for the national development and the teachers are the backbone of it. Therefore, unless the teachers have the spirit of dedication in their profession the goal of national education system will be completely unproductive. Time and changes bring new ways of thinking and doing the job. The present diffusion of the technologies has brought the revolution in every field of human life and their daily livings. The education field could not have remained untouched from the impact of it.

Every teacher's attitudes towards the innovation of the technologies in teaching and learning process have the key role in its diffusion. Attitudes affect behavior directly and indirectly and behaviors affect the action performed by the teachers. Aijen and Fishbein, (1980) postulated that 'any action or behavior is determined by one's intention to perform that behavior. However, intentions themselves are a result of an individual's attitudes towards the behavior that is his/her positive or negative judgment of performing the behavior as well as the subjective norms, which are the social pressures put on him or her to perform or not to perform the behavior.' Similarly, subjective norms are based on "normative beliefs" about whether specific individuals or groups agree or disagree with the behavior. Behavioral and normative beliefs are based on information that individuals hold about themselves and the world in which they live.

The past studies had ignored teachers' attitudes towards the use of computers rather the emphasis was given on the computer and its effect on students' achievement, thus the psychological and other appropriate factors involved in determining the attitudes of teachers in using the new technologies were unnoticed. "Teachers' attitudes have been found to be major predictors of the use of new technologies in instructional setting." (Abas, 1995:153-162). Attitudes of the teachers in using computers and the Internet do not only support to frame the way they teach and develop the new experiences but they also help the students to learn and share the experiences in a truly educational environment

"Advanced in technology requires teachers and administrators to review their curricula, approaches, and educational tools and at the same time lead them to consider the possibility of incorporating technology into their teaching. However the success of implementing new technology into any teaching / learning environment relies heavily on the level of commitment and engagement of the related parties (teachers and administrators). The acceptance of transformation cannot and does not take place instantly or by the touch of magic wand" (Metin Timucin, 2006:20-30)

Only after studying the actual attitudes' of the teacher in using new technologies we can make the plan to change the traditional concept and culture of teaching and learning process to new circumstances.

Therefore, it is especially important to understand teachers' attitudes towards the computer and the Internet and their willingness or unwillingness to use in their classroom, since teachers play such an important role as an agent of change and innovation in the world of education.

## 1.2.5 Variables Related to Teachers' Computer and the Internet Attitudes:

No studies have been conducted on the factors that affect the teachers' attitudes in using computers and the Internet for education purpose in the context of Nepal. Theoretically some basic assumptions are placed ahead here as review of the factors related to teachers' attitudes in using computers and the Internet.

- 1.2.5.1 Computer Imputes: Computer imputes refer to the value and strength of its applications perceived by the teachers. The rate of adoption of an innovation of new technologies depends on the attributes perceived by the end user. Rogers (1995) in his research identified five innovation imputes that may contribute the adoption or acceptance of a new technology: relative advantage, compatibility, complexity, observability and trialibility. Relative advantage of an innovation may change the attitudes of the user as he/she find the degree of usability and as better than his/her previous idea. Compatibility is the extent to which an innovation is perceived as consistent with the existing values, past experience, and needs of potential adopters. Complexity is the degree to which the user thinks the difficulty of using and applying in practical field. Observability is the extent to which the results of an innovation are visible to others and trialibility refers to the degree to which results of an innovation are experimented within a limited basis. The above findings state that the attitudes of teachers in using the new technologies depend on how they perceived the innovations.
- **1.2.5.2 Cultural Perceptions:** Cultural perceptions refer to the innovations as the part of the user's life in society. The social system denotes the social context in which the innovation diffuses. Social norms and the system

followed by people play a vital role in determining the rate of an innovation's adoption. According to Rogers, social norms can be a main barrier to change because there might be the mismatch between the culture of technology (computer) and the culture of the society or home. Zhuang and Thomas warn that importing a technology into developing countries without enough understanding of the indigenous culture can result in an incompatibility between the home culture and the technology. The cultural perception in Nepali society is the crucial subject of study where multi-culture societies have numerous varieties.

- 1.2.5.3 Computer Competence: Using new technologies in classroom needs new competencies in teachers. The theoretical knowledge of traditional methods and techniques in teaching and learning process might not have any applications in implementing innovation in the classroom. Computer competence includes not only the knowledge of computers but also the skills and experience necessary for putting them into use. The more computers' competence teachers have there will be the positive attitudes in their use. Francis-Pelton and Pelton (1996) stated "Although many teachers believe computers are important components of a student's education, their lack of knowledge and experience lead to a lack of confidence to attempt to introduce them into their instruction. This lack of confidence then leads to anxiety and reluctance to use technology."
- **1.2.5.4 Availability of Computer:** One of the most important barriers of the transformation in the education system has been the access of computer resources in the developing countries. The most significant aspects of computer are hardware and software. Availability of high quality software is the most pressing challenge in applying the new technologies

in education. Research in developing countries has shown that, while computers were supplied for students' use almost none were available specifically for teachers' use. To create a culture of the technologies; use of computers and the Internet should be the part of daily life, and availability of them is must in developing countries and multi-cultural societies like Nepal.

- 1.2.5.5 Characteristics of Teachers: Getting information on personal characteristics that determines the attitudes in the use of computer and the Internet in the developing countries is very difficult. One of the most important factors in influencing and determining the teachers' attitudes towards the use of computers and the Internet is individual characteristics. Many researches have concluded the following personal characteristics play vital roles in determining the attitudes towards use of computers and the Internet.
  - a. Gender: Gender difference in developing country like Nepal is a real burning issue. The society itself is male dominated and female are regarded as just to hold the position of housewife. Although present situation is a bit different from the last ten years ago the concept of gender difference in adopting innovation has remained unchanged. A series of factors, including literacy and education, language, time, cost, geographical location of facilities, social and cultural norms, and women's computer and information search and spreading skills constrain women's access to computer and the internet. Many researches have been done to carry out the facts about the impact of gender differences in education and other social and political issues. Roja (1994) found no such significant difference in attitude towards the computers between male

and female teachers even when male teachers had greater computer literacy scores and experience in the use of technology than the female teachers. Some researches have found the significant relationship between the gender difference and attitudes towards the use of new technology. Fransis had found the males are more enthusiastic and more confident using computers than females.

b. Age: Age factor is a crucial element for determining attitudes towards something. Different sub elements such as physical, psychological, social aspects are connected with the age factor of a teacher. Young teachers are more enthusiastic and have great energy to experience new things. On the other hand teachers having the older age have more past experience but less interest with new changes in modern technology. A study by Silva Ferrero on "Two generations of teachers Differences in attitudes towards ICT" has illustrated that young people (i.e. the so-called Net Generation) are usually considered to master these technological devices better than adults do. They adapt quickly to technological changes and feel at ease with new releases of software and hardware. The difference between this "Net Generation" and the generation of their parents is often referred to as the "generation divide". Teachers also have to deal with such technological changes.

**c. Income:** Financial aspect is regarded as the most important factor for determining personal investment on learning and adopting the new technology. Income is especially important in developing countries where low wages can be an inhibiting factor to technology purchase and use. The total annual income might be just to solve the problem of hand to mouth. Among all other factors such as age, sex, cultural background, education, and experience, income comes in the first position because it

is the last weapon that the teacher uses for fulfilling his interest. Many studies have come to support the factor of income in adopting the new technology but very few studies have forwarded their unpredictable result. Lee (1997) found a negative correlation between attitude and variables such as income, occupation and educational level. While the impact of income on computer attitudes has been theoretically recognized, the conflicting results of empirical studies leave the relationship between computer attitudes and income quite unpredictable.

- e. Background of pre-education: Pre education background plays a great role on determining the adoption of the new technology. Adopting technology is similar to habit formation. Those who had the real environment for using technological devices in their school education might feel ease to adopt the new changes in their professional life. Those who are already familiar with computers and the Internet transfer the experience in new real life situations. In the context of Nepal one or two generations have passed their academic degree and have involved in teaching profession after introducing the technology in education. Several studies have reported a significant relationship between educational background and attitudes toward computers and the Internet.
- f. Teaching experiences: Different researches have shown the significant relationship between the attitudes towards the use of computer and the internet and teaching experience of the teachers. The teachers having many years of teaching experience following traditional methods are less enthusiastic in learning new technology and applying them in their profession than the fresh teachers. Huang (2003) found that senior teachers have less positive attitudes toward computers and were less willing to use them in their classes than did less fresh teachers. However,

several researchers found no significant relationship between teaching experience and teachers' attitudes (Kim, 1986; Na, 1993).

g. Location of school: Many studies have shown that the location of school where the teachers are interacting with the community and surroundings might have determined the attitudes towards the use of computer and the internet but some other few studies have shown no such significant role of school's location to determine the attitudes of teacher towards the computer and Internet (Na, 1993). The teachers of city and urban location have more interaction with the technology than the teacher teaching the rural area. They have higher level knowledge of computer and the Internet, their cultural perception of computer and the internet might have changed the traditional methods and techniques of learning and teaching.

h. Computer training: The goal of education is achieved totally only if the teachers are trained. In the case of use of computer and the Internet in education, computer training has been hardly available in developing countries like Nepal. Theoretically some courses cover the use of computer, the Internet and some other media like audio video for teaching and learning purpose but no practical applications have been applied. The US Office of Technology Assessments (1995) reported lack of training and lack of knowledge as main barriers to the integration of technology in classroom practices. Many teachers and even government officers have demanded the computer and the Internet training and development in order to improve their knowledge and skills. Many studies have shown that more computer training certainly increase the level of confident to apply the new technology in education system as well as in classroom teaching. Gressard and Loyd (1985) surveyed 15

teachers before and after a training program that was designed to enhance their experience with computers. Teachers reported lower anxiety and more computer confidence after the training program.

i. Teaching methods and techniques: Methods and techniques are more individual phenomena. The teachers who use more innovative instructional approaches (e.g., communicative and interactive, project-oriented work, hands-on activities, etc.) are more likely to use new technologies than those who stick to traditional teaching methods. In a study of school classrooms (Berge & Collins, 1995), many benefits of using Computer-Mediated Communication were reported including increased opportunities for cooperative learning, improved social interactions and increased cultural awareness on the part of students. Instructors who believed in student-centered, collaborative learning found that the Internet was a viable tool for their de-centered class activities. But it can not be declared the negative concept of teachers' attitudes towards the use of computer and the Internet who are not trained with modern teaching methods, techniques and the technology.

# 1.3 Objectives of the Study.

The study had the following objectives.

- (a) To findout the attitudes of higher secondary English Language Teachers towards the use of computer and the Internet for educational purpose in Kathmandu Valley.
- (b) To findout the teachers' perceptions on the use of computers and the Internet on the basis of:
  - (i) Computer imputes
  - (ii) Cultural perceptions

- (iii) Level of computer competencies
- (iv) Availability of computer.
- (c) To find out the relationship between the teachers' attitudes and their personal characteristics: Gender differences, age, personal income, background of pre-education, teaching experience, location of school computer training and teaching methods and techniques.
- (d) To suggest some fruitful points for improving the attitudes of the teacher for better result of implementing technology in education as well as language teaching.
- (e) To suggest some pedagogical implications of the study.

### 1.4. Significance of the Study:

In the Process of the technology implementation in school, importance of teachers' attitudes towards innovation of the technologies has been universally recognized (Watson 1998). Teacher is only and the last agent who determines when, where and how to use these tools in the classroom environment. The use of new tools (computer and the Internet) may be unproductive and worthless until the teachers develop positive attitudes towards the new technology. Unless the teachers love and accept the invested technologies in education, the whole program will be failed. Before practising the technology the concerned authority should examine the pedagogical, psychological and cognitive barriers to the successful use of Information and Communication Technology (ICT), Computer and the Internet for improving the utilization of other technological aids in the educational process (Bossom and Olfman 1990 in Morris 2002).

In recent years a wide range dissemination of the technology in education has created a challenging implementation for its success. Only gathering the tools and the machines do not lead the way of better result for students' achievement and national development. "The problem with the current technology implementation plans is not only their focus on the potential of the technology per se but also their failure to base their implementation efforts on research and enough information gathering" Abdulkafi Albirini, (2004)

Developing technology itself is not the end of the policy of any government of a nation. The success and the failure of educational programs are not determined by the policy makers and the planners but by the attitudes of the end users and the real practitioner (the teachers) within the classroom. Studying the teachers' attitudes itself is important. The other significant effort is to identify the causes that may have generated these attitudes. To study the attitudes of the teacher is not just to take the information that they have either positive or negative attitudes towards the use of computers and the Internet for educational purpose. One of the most crucial factors of this study is to carry out those hidden elements that determine their attitudes. The study is focused in Kathmandu valley where the buds of the technology in education have been growing within 60s B.S.

Economic condition, social system, political satiability, cultural varieties, personal characteristics, physical and psychological aspects of the people, human resources and physical infrastructures are to be considered while implementing the technologies. These factors have a great significance in developing countries. In the context of Nepal and specially, in the capital city Kathmandu, this study will help to identify the primary perspectives of the teachers towards the use of computer and the Internet in education where no previous researches and studies have been done. The study not only examines the view of English Language Teachers towards the implementation of the technologies but also identifies some barriers of use of computer and the

Internet for pedagogical implication as perceived by the teachers. Findings of the study will help the concerned authority to get some idea as to how they can take the necessary steps in making further decision for implementing and investing the technologies to transform the educational programs and the teachers to make them aware of challenging world in educational field.

#### 1.5 Definition of Terms

- Information and Communication Technology (ICT): Technologies and tools that people use to share, distribute and gather information, and to communicate with one another through the use of computer and interconnected computer networks.
- *Information Technology (IT):* A network of information through the digital media including computer, the Internet, television, cellular phone, satellite, fax, and all other tools of the new technology from which people communicate world wide in a fast track.
- Computer Attitudes: An attitude refers to the way that someone thinks and feels about something and the way someone behave towards something or somebody (Oxford Advanced Learner's Dictionary). Computer attitude is, here, operationally defined as the degree of favor and disfavor with which higher secondary English Language Teachers in Kathmandu valley evaluate the presence and the use of computer and the Internet for education purpose.
- Computer Competence: It refers to the belief of English Language Teachers of HSS about their computer knowledge and computer skills.
- *Computer Skills:* The ability to use the main computer hardware components and software applications for educational use.

- *The Internet:* It is a system of many computers linked together via networking system that facilitates data transfer and communications services worldwide. It is a network of networks based on the transmission control protocol or the Internet protocols (TCP/IP)
- WWW (World Wide Web): It is the part of the Internet where web page is formed. Especially it is the system of computer language for placing address of website through which everybody can access the webpage.
- *Website:* A web based address where many collections of pages are stored with the title.
- English Language Teachers: In this context, the English language teachers who teach the English language in Nepal, and the English language is not as their first language or the mother tongue.
- *Higher Secondary School* (+2): The level of education system in Nepal in which the students are allowed to enroll after SLC.
- *Kathmandu Valley*: A valley located in central development region of Nepal where mainly three districts lie such as Kathmandu, Lalitpur and Bhaktapur. Kathmandu is the capital city of Kingdom of Nepal.
- *Computer*: An electronic machine that can store, organize and find information, do calculations and control other machines. (Oxford Advanced Learner's Dictionary, OUP). An electronic machine which can calculate and process data, graphics, audio/video and store them for the purpose of the people as their requirement.

#### **CHAPTER-TWO**

#### **METHODOLOGY**

This chapter describes the research methodology that was used while studying the attitudes of Higher Secondary English Language Teachers towards the use of computer and the Internet for educational purpose in Kathmandu Valley and factors that affects those attitudes. The research methodology can be presented in the following sub sections (a) source of data (b) sample size and sampling procedures (c) tools of data collection (d) Research variables, (e) Research Design, (f) Population, (g) Sample size and sampling procedures, (h) Instrumentation, (i) Data collection and (j) data analysis procedures.

- **2.1 Sources of data:** Both primary and secondary data were used in the study process:
  - 1 Primary source of data: The primary sources of data were collected from the English Language Teachers of Higher Secondary Schools with in Kathmandu Valley.
  - **Secondary source of data:** The secondary sources of data were from different research papers, magazines, journals, websites, NGOs, INGOs, TV and Radio programmes.

# 2.2 Sample size and Sampling Procedures:

There is no record of total numbers of population. The researcher found that, while visiting some of the schools, the concerned authority could not provide the exact number of teachers' record even in a single school. Because of the two folds system (part time and full time) of teacher appointment in most of the schools collecting data was troubleshooting. For the purpose of this study, a simple random sample of 119 subjects was selected to participate in the survey stage of the study.

The researcher employed two stages of collecting the data from different media. In the first stage structured interview of open ended questions were distributed for the in depth knowledge of computer and the Internet which has the freedom of categorizing themselves as computer access and non access group. Each group had to respond 24 different open ended questions.

**2.3 Tools for Data Collection (Instrumentation):** Both quantitative and qualitative instruments were designed by the researcher to fulfill the objectives of this study. In qualitative instruments 24 different open ended semi-structured interview questions were asked to two different groups.

#### **2.3.1 Interview Instruments:**

#### Interview questionnaires were designed on the basis of the following criteria:

On the basis of literature review related to the study the researcher found no such significant past studies in the field. This is the first research in Higher Secondary English Language Teachers' attitudes towards the use of computer and the internet for educational purpose in Nepal. No secondary data and existing instruments were found to assist the researcher. The interview like open ended questionnaires were prepared as means of collecting self-reported data from the participants. The open ended questionnaires were divided for two different groups: Some fundamental questions were similar to both groups.

- i. Access Group
- ii. Non Access Group
- i. Access Group: The open ended questions for this group were distributed to categorize themselves as computer access group. 24 different questions were designed to verify their access in computer and the Internet. Some basic queries were to find the practices of computer and the Internet for educational purpose by the participants.

Questions 1 to 14 were intended to have information on level of technological awareness in the participants. Four questions (15-19) were to find out their level of computer proficiency to verify that they have the computer and the Internet access. The last five questions were to allow their open ended comments on the computer, the internet and technology in education. The participants were left full of choice whether they were willing to participate in follow up inquiry.

ii. Non Access Group: The open ended questions for this group were designed to categorize themselves as computer and the internet non access group. Same numbers of questions (24) were designed to allow their comments how they are non access in computer and the internet. Questions 1 to 15 were intended to have the information on prerequisite knowledge of computer and the internet. Questions 16 to 21 were to inquiry their interest and the attitudes towards approaching to computer and the internet in future. Two questions were to examine their barrier of approaching the computer and the Internet. The last question was similar to the access group which allows their open ended comments.

#### 2.3.2 Questionnaire Instruments:

The questionnaires instruments were designed getting in-depth information form the participants who had very low level of computer literacy to advanced computer operating skills. According to the objectives of research, study variables, and the present situation related to the study, questionnaires instruments were designed on the basis of following criteria.

- a. Background information of participants: (included teachers' personal characteristics)
- b. Section -1: General attitudes towards computer and the Internet.
- c. Section-2 Computer Imputes:
- d. Section-3 Cultural Perception:
- e. Section-4 Level of computer competence:
- f. Section-5 Availability of computer

The questionnaire instruments were on both web and non web system. On web based system some questionnaires were filtered so that the participants could feel ease to respond and the rest of the data could be collected through other medium like telephone conversation. This multi system of data collection makes the result more reliable. Detail description of the instrumentation of each study variable is given below:

- (i) Background information of participants (Teachers' personal characteristics): The items presented in this section were to identify the personal characteristics of English Language Teachers of Higher Secondary (+2) School. They were gender, age, income, teaching experience, and pre education background, school location, teaching methods and techniques and computer training. The study variables are correlated with these demographic variables to determine the attitudes of the participants.
- (ii) Gender: Gender was measured with the choice of male and female as a guided response.
- (iii) Age: Age was measured with the choice of 10 years interval of the participants. Minimum age was determined by calculating from the school education that should have crossed 25 to complete his master degree for being eligible teaching in +2 level.

- (iv) Income: Income was measured by providing freedom in expressing.
- (v) **Teaching experience:** Teaching experience was measured by providing the choice of 5 years interval between 1 to 20 years and over 20.
- (vi) School Location: School location was measured by providing three different choices urban, sub urban and rural as guided response.
- (vii) Pre education background: The participants' pre education background in this study was related to the inclusion of computer in education. The Yes/No choice was provided as a guided response.
- (viii) Computer Training: Participants' computers training measurement was left to express free in months.
- (ix) Teaching methods and techniques: These items were measured by asking what methods they use by providing four different choices of commonly used methods e.g. Communicative, Demonstration, Lecture, Computer assisted instruction and others.

## **Section 1- General attitudes towards the computer and the Internet:**

Twelve attitudes related items were presented in this section to overview the attitudes of the participants towards the computer and the internet. Five different Likert type scales were designed to quantify the response of the participants. The order of those scales were strongly agree, agree, undecided disagree to strongly disagree. The questions were based on three subscales (a) affective (b) cognitive and (c) behavioral.

# **Section 2 – Computer Imputes:**

Twelve different Likert type statements were designed in this section. Based on the innovation attributes identified by the Rogers (1995) only four computer attributes, relative advantage, compatibility, complexity, and observability were examined in the questionnaire. The fifth attributive Triability was ignored thinking that most of the teachers were not introduced with the computer and the Internet in real teaching purpose before they joined in teaching profession. Both negative and positive statements were provided to ensure that they have guided positively with the questionnaires.

#### **Section 3 - Cultural Perception:**

Twelve different types of Likert type statements were designed in this section. Based on the current spread of computer and the Internet in Kathmandu valley, the questionnaires were presented to find out impact of innovation in their society, culture and their personal daily activities.

#### **Section 4 - Level of computer competence:**

Sixteen different Likert type statements were designed to acquire the information on the computer competence of the participants. The questionnaires were presented in the order of common use of computer and the Internet in education. The statements were for the participants who have very low level of computer competence to those who have advanced computer skills. The clear instruction was provided to them so they could feel ease to response. The level of computer competence was categorized form Beginner, Intermediate, Advanced and Never use. The items focused on the common computer uses in education: software installation, basic hardware, productivity software (e.g., word processing), graphic application (e.g. Photoshop), educational software evaluation, organization tools (e.g., use of files and folders), and virus handling.

## **Section 5 – Availability of computer and the Internet:**

In this section the questionnaires were designed to get the information of participants on the access of computer and the Internet. Six statements were presented to acquire the information on where the English Language Teachers

might have the access of computer and the Internet. Different five possible locations were provided for their open choice e.g. home, college, cyber café or internet house and other for their specification. The frequency of use of computer and the Internet was quantified by access related items on 4 points scales ranging from daily, once a week, once a month and never use. And an open ended comment was allowed for their short opinion in the end of the questionnaire.

#### 2.4 Research Variables:

The researcher has designed this study basically to find out the two objectives: first to find out the attitudes of the higher secondary English language teachers towards the use of computer and the Internet and secondly to find out the relationship between the attitudes and influencing factors related to the teachers personal characteristics. The research variables were computer attitudes, computer imputes, cultural perceptions, level of computer competence, availability of computer and the Internet and the teachers' characteristics. In this study the dependent variable is the attitudes of higher secondary English language teachers towards the use of computer and the Internet for educational purpose in Kathmandu valley and other independent variables were (a) computer imputes, (b) cultural perceptions (c) computer competence, (d) availability of computer and (e) teachers characteristics (gender, age, income, background of pre-education, teaching including experience, computer training, school's location, teaching methods and techniques

## 2.5 Research Design

This is descriptive study of an explorative nature. Descriptive research, also referred to as survey research (Gay & Airasian, 2000:275), is mainly concerned with "attitudes, opinions, preferences, demographics, practices, and

procedures". It includes some other co relational elements regarding with dependent variable and other independent variables. No any past study was done in this field so the researcher selects the topic which is explorative nature. Creswell (2003) suggests that exploratory studies are most advantageous when "not much has been written about the topic or the population being studied" (p. 30). Survey researches are done to collect the data from the large scale of population. Normally descriptive data are collected by questionnaires, interview, telephone and observation. A cross sectional method was administered while collecting the data. Cross sectional survey methods refers to the collecting the data in a single period of time. The study was conducted to carry out the interest, the attitudes from two different groups; computer access group and the other one is non access group. Multiple data collection methods were used to collect the data from the participants. Regarding the use of technology both web and non web based system was followed to make the data more trustworthiness.

## 2.6 Population of the Study:

Population of the study refers to the group of individuals towards which the researcher forwards his interest. Gay and Airasian (2000:122) define a target population as "The population that the researcher would ideally like to generalize to." The target population in this study was Higher Secondary (+2) English Language Teachers of the Kathmandu valley. It includes the three districts, Kathmandu, Lalitpur and Bhaktapur. The list of teachers was collected by visiting the Higher Secondary Schools (+2) of three districts as well as from the NELTA members' list.

#### 2.7 Process of Data Collection:

The data were collected in two stages. In the first primary stage, semi structured interview like open ended questions were administered to the 119 participants for three districts of Kathmandu Valley starting on 23 November 2006. Two stets of questionnaires were provided for two groups, computer access group and **non access group**. Full freedom was provided to the participants to categorize themselves as access group or non access group. The questionnaires were distributed individually for the targeted population by visiting the Higher Secondary Schools of three districts of Kathmandu valley. Two weeks was taken to distribute the questionnaires and one week for collecting the response form the participants. Among all 114 questionnaires were responded by 14 December 2006. Rest five questionnaires couldn't be collected due to the absence of teachers. The first stage was completed on 30 December 2006. The response rate was 95.79%. The response rate was high enough to distribute questionnaires for further sampling of population. Three out of 114 were invalid because two of them were answered in both access group and non access group and one was unanswered of all questions.

Table no. 1

	Distributed	Returned	Valid
Number of questions	119	114	111
Percentage	100	95.79	93.27

Response rate and percentage

In stage two questionnaires were distributed both online and offline. Those who had shown interest participating through email and the Internet were distributed questionnaires through my personal website. <a href="http://www.lnkhanal.com.np">http://www.lnkhanal.com.np</a> (Appendix-6) Hardcopies of questionnaires were distributed by hand to non

access group and those who were not interested participating through email and internet. Online participants were validated by the email ID previously provided in follow up inquiry form. Offline were distributed individually.

#### 2.8 Data analysis procedures:

Both descriptive and quantitative statistics were employed for analyzing the data of this study. Two software NVivo-7 (Appendix-5) and SPSS 12 (Appendix-4) were used to analyze the qualitative and descriptive and quantitative data respectively. Descriptive statistics was used to describe and summarize the properties of the mass of data collected from the respondents. The researcher has developed the following questions to make the both descriptive and quantitative analysis easier or to answer the issues of the study.

- 1. How many English Language Teachers are in computer access and non access group?
- 2. What are the attitudes of English Language Teachers of HSS (+2) towards the use of computer and the Internet for educational purpose?
- 3. What are the teachers' perception of computer and the Internet? On the basis of :
  - a. Computer imputes
  - b. Cultural perceptions
  - c. Computer Competences.
  - d. Availability of computer.
- 4. What is the relationship between the teachers attitudes towards the use of computer and the Internet for educational purpose and their personal characteristics including; age, gender, income, background of preeducation, teaching experience, location of school, computer training and teaching methods and techniques.

Quantitative statistics was used to answer the first question. Descriptive statistics was used to answer the rest of the questions. Qualitative data were analyzed using the qualitative interpretative approach. Mainly the semi structured interviews were transcribed and coded followed by the procedure of Glesne (1998). First the interviews were grouped into two categories; Computer Access Group and Non-access Group. Then the answers of the participants were studied systematically according to the research questions. After grouping the data of interview the researcher coded those reoccurred phrase, words, and the theme of the answer provided by the participants. Computer assisted methods were used to code the answers. Qualitative research software NVivo 7 was used to code the data systematically.

#### 2.9 Validity:

Face validity refers to "the degree to which a test appears to measure what it claims to measure". Face validity of instruments was established with help of supervisor and other seniors of the department. Content validity is "the degree to which a test measures an intended content area" Content validity was also established by frequent feedback of the supervisor and other seniors of English department. The instruments were evaluated during and after development. Feedback from the supervisor was used to make modifications and clarifications prior to and after conducting the pilot study.

# 2.10 Reliability:

"Reliability is the degree to which a test consistently measures whatever it is measuring" Reliability in this study was established using the pilot study data. The pilot study was carried out immediately after the approval of the supervisor

# 2.11 Limitation of the study:

The study has limited to explore the attitudes of Higher Secondary School (10+2) English Language Teachers of Kathmandu Valley. Others governments school, private boarding school, university teachers and places outside Kathmandu valley has been excluded from the study.

# CHAPTER - THREE ANALYSIS AND INTERPRETATION

Before starting the result and finding of the data, the researcher summarizes the numbers of teacher in computer access group and non access group in this first part. In the second part, descriptive statistics of teacher's characteristics that includes gender, age, income, school location, education, computer training, and teachers' attitude towards computer and the Internet is presented. Thirdly the teachers' perception of computer and the Internet on the basis of (a) computer imputes, (b) cultural perceptions (c) computer competence and (d) availability of computer are analyzed. The fourth part carries out the relationship between the teachers' attitudes and the teacher's characteristics. Finally, explanation of dependent variable and the relationship with each independent variable is stated.

## 3.1 Descriptive Summary of Primary Survey

# 3.1.1 Descriptive Summary of Computer Access and Non-Access Group

In the first stage of data collection a semi-structured interview questions were administered to the participants in which they had the choice of freedom to categorise themselves on Computer Access group or Non-Access group. Among the valid 111 participants, 75.7 % (n-84) stated as they were in Computer Access group, where 24.3% (n-27) stated as they were in the Non Access group.

Among 84 respondents in computer access group 20.23% (n-17) were female and 79.77% (n-67) were male. Four point seven six (4.76%, n-4) percentage were in the age group of 20-25, 38.09 % (n-32) were in age group of 26-30, 27.40% (n-23) were in the age group of 31-35, 16.66% (n-14) were in the age

group of 35-40, 8.33% (n-7) were in the age group of 41-46 and 4.76% (n-4) were in the age group of 46-50 and 0% (n-0) were in the age group of 50 above.

Participants' response on their teaching experience showed that thirty six point nine zero percent (36.90%, n-31) of them had 1-5 years of teaching experience. 45.24 % (n-38) were in their 6-10 years of teaching experience. 15.48% (n-13) were in their 11-15 years of teaching experience. And 2.38% (n-2) were in their 16-20 years of teaching experience. None were in the above 20 years of teaching experience in Higher Secondary School the researcher found while data collected. Participants' response on the teaching methods they often use in the classroom 70.24% (n-59) use lecture method while the least used method was OSS in which participant response was of 4.76% (n-4). More than seventy three percent 73.43% (n-60) of the participants were in 2-5 years of using computer and 21.43% (n-18) were in 6-10 years of using computer and 7.14 % (n-6) are 0-1 years of using computer. The participants' response on their level of computer proficiency sixty five point four eight percent stated that they were computer literate while 5.95% (n-5) stated that they were advanced user of computer and the Internet. 92.82% were fully aware about the spreading of computer in providing as reference and essential tools of teaching and learning process in the present context but 7.14% participants are uninformed about it.

Ninety point four eight percent (90.48%, n-76) participants used Microsoft Office package like Ms. Word, Excel, and PowerPoint and 9.52% (n-8) participants use other software like Hot-potatoes, Lingua and other specific educational software for teaching and learning purpose. Seventy five percent of computer access participants had not interacted with students via email. 3.57%(n-3) participants frequently used email for interacting with the students.

Hundred percent of the participants agree that computer has eased their work at school and outside of school. Eighty five percent of Colleges were not supportive for teachers' use of computer and the Internet. The following table shows the data taken in interview with the participants.

Table no. 2

S.N.	Variable	Category	Frequency	Percentage.
1.	Gender	Male	67	79.77
		Female	17	20.23
2.	Age (In Year)	20-25	4	4.76
		26-30	32	38.10
		31-35	23	27.38
		36-40	14	16.67
		41-45	7	8.33
		46-50	4	4.76
		51- over	0	0.00
3.	Teaching	1-5	31	36.90
	Experience (	6-10	38	45.24
	In Year)	11-15	13	15.48
		16-20	2	2.38
4.	Teaching	Interactive and Communicative	7	8.33
	Methods	Lecture	59	70.24
		OSS	4	4.76
		Discussion and Demonstration	8	9.52
		Role playing and dramatization	6	7.14
5.	Level of	Literate	55	65.48
	computer	Intermediate	24	28.57
	proficiency	Advanced	5	5.95
6.	Use of	Ms. Office (Word, Excel.		
	Software	PowerPoint)	76	90.48
		Others (Specific software for	8	9.52
		teaching and learning purpose)		
7.	Website they	Google., yahoo	48	57.14
	visit most	Others Specific websites	36	42.86
8.	Interaction	Often	3	3.57
	with students	Sometimes	12	14.29
	through email	Rarely	6	7.14
		Never	63	75.00

Primary data of computer and the internet Access Group

### 3.1.2 Non Access Group:

The total participants in Non Access Group were 27. Among them eighty eight point eight nine percentage 88.89% (n-24) were male and 11.11% (n-3) were female participants. Age groups of non access group were as fallows: the highest numbers of age group were in the age range of 31-35 in which, 40.74% (n-11) participants responded the interview. The least numbers were in the age between the age group of 20-25 and 46-50 where 3.70% (n-1) were in the each groups. Fifty nine point two six (59.26%) percent participants had some experiences of learning through computer and the internet but the rest of others had no experience about computer and the Internet. The following table shows the some of the statistics of non access group.

Table no - 3

S.N.	Variables	Category	Frequency	Percentage.
1.	Gender	Male	24	88.89
		Female	3	11.11
2.	Age (In Year)	20-25	1	3.70
		26-30	6	22.22
		31-35	11	40.74
		36-40	5	18.52
		41-45	3	11.11
		46-50	1	3.70
		51- over	0	0.00
3.	Teaching	1-5	12	44.44
	Experience (	6-10	7	25.93
	In Year)	11-15	4	14.81
		16-20	4	14.81
4.	Teaching	Interactive and Communicative	4	14.81
	Methods	Lecture	22	81.48
		OSS	0	0.00
		Discussion and Demonstration	1	3.70
		Role playing and dramatization	0	0.00

Primary data of computer and the internet Non Access Group

# 3.2 Descriptive analysis of second or follow up stage of the participants:

In this stage response from the participants were again acquired by two medium. Participants who showed interest to response through the Internet were mailed the link of the personal website http://www.lnkhanal.com.np/survey (Appendix 3) through which they could response all the questionnaires. And hard copies of the questionnaires were distributed individually who were interested to response on paper. Numbers of questions and their types were left same for making the consistency in the questionnaires. Intending to include more participants in this survey they were encouraged to response through the website. Email IDs were verified by previous data collection to make the data collection more reliable. Other participants' email IDs were also acquired through the authorized organization Nepal English Language Teachers' Association (NELTA). Both media (database of website and the manually collected data) had been merged in the analysis because the nature, types and numbers of questionnaires were exactly the same. Only the quantitative statistics are listed separately. All descriptive and qualitative data are analyzed by keeping in the single group. Among 111 participants in the previous primary survey 80 participants have been included in the follow up stages. Other 21 participants Email IDs provided by NELTA were also included in this stage of data collection. (Appendix- 6) More than fifty percent of computer access group showed interest to participate through the website. Following tables show the detail study of response from the participants.

Table no - 4

		Distributed	Response	Valid
Total	51+20=75	75	65	65
Participants				
Percentage	100%	100%	89.33%	100%

Response rate of participants on website

Table no 5

		Distributed	Response	Valid
Total	21	21	20	20
Participants				
Percentage	100%	100%	95.23%	95.23%

*Participants' responses from individually distributed questionnaires:* 

Total 85 randomly selected participants and their response will be analyzed in the following sections.

#### 3.2.1 Teachers' Characteristics:

At the follow up stage of research teachers' characteristics were strictly taken as important factors of determining attitudes towards subject of the study. Teachers' characteristics are presented in terms of demographic information including sex, age, income, teaching experience, school location, education, and preferred teaching method as well as (2) information regarding background in computer knowledge at school level education and computer training; Table-6. At the follow up stage of respondents' data were merged to make the analysis easier both online and offline respondents were equally evaluated. Descriptive summary of teachers' characteristics is as below.

Eighty-one point two percent (81.2%, n-69) of the respondents were male while eighteen point eight percent (18.8, n-16) of the respondents were female. As the sampling population was restricted inside Kathmandu Valley only, all schools' locations have been included among them eight point two percent (8.2%, n-7) respondents teach in rural area, twenty percent (20%, n-17) teaches in Suburban region and seventy one point eight (71.8%, n-61) teachers teach in urban region. More than fifty percent (54.1%, n-46) of teachers were with in the age range of 31-35 and the least age range was 46-50 where one point two percent (1.2%, n-1) respondents responded the query. The highest academic

degree received by the respondents was as three point five (3.5%, n-3) teaching in +2 level are from bachelor degree where ninety point six percent (90.6%, n-77) were from Master degree and rest five point nine (5.9%, n-5) responded as they are achieving higher degree (M.Phil). None of the participants were form Ph.D program. The highest range years of teaching experience is 6-10 in which 54.1%, n-46 respondents have responded, the least range year is 1-5 in which 9.4%, n-8 respondents have responded. Twenty five point nine (25.9%, n-22) were in the range of 11-15 years. Ten point six percent (10.6%, n-9) respondents have range of 16-20 years of teaching experience. None were above 20 years of teaching experience

Table no - 6

Variable	Category	Frequency	Percentage
Gender	Female	16	18.8
	Male	69	81.2
School Location	Rural	7	8.2
	Suburban	17	20.0
	Urban	61	71.8
Age (Years)	25-30	10	11.8
	31-35	46	54.1
	36-40	21	24.7
	41-45	7	8.2
	46-50	1	1.2
Highest Academic Degree Received	Bachelor Degree	3	3.5
	Master Degree	77	90.6
	M.Phil	5	5.9
Years of Teaching Experience	1-5	8	9.4
	6-10	46	54.1
	11-15	22	25.9
	16-20	9	10.6
	20 over	0	0
Yearly Income (NRs)	50000-100000	14	16.47
`	101000-150000	47	55.29
	151000-200000	10	11.76
	201000-250000	8	9.41
	251000-350000	6	7.05
Computer in School Education	No	76	89.41
	Yes	9	10.59
Computer Training (in Hours)	50	28	
(Missing = 17)	100	1	
	150	26	
	200	10	
	>=250	1	
Teaching Methods most Used.	Lecture	50	58.82
	Demonstration	0	0
	Discussion	8	9.41
	Experiment	0	0
	Role playing	3	3.53
	Communicative	20	23.53
	CA I*	0	0
*CAI Computer Assisted Instruction	Others	4	4.71

Frequency distribution of teachers' personal characteristics

#### 3.2.2 General Attitudes towards Computer and the Internet

Participants were asked to respond to 12 Likert-type statements dealing with their attitudes towards computer and the Internet in education. Table 7 illustrates the frequency of participants' responses to the 12-item Attitude Scale. The first three and the fifth statements were designed to measure the affective domain of computer attitude. The fourth, sixth, seventh and eleventh statements were designed to measure the cognitive domain. Rests of the four items were designed to measure the behavioral domain. Computer and the Internet attitudes of Higher Secondary English Language teachers of Katmandu Valley were represented by a mean score on a 5-point scale, where 5 (Strongly Agree) represents the maximum score of the scale and 1 (Strongly Disagree) represents the minimum score. Higher scores indicate more positive attitudes and lower scores indicate less positive attitudes.

Rlated to the score of affective domain the mean score of participants' response was 4.00 and Standard Deviation was 0.5 which indicates the positive effect towards the use of computer and the Internet in education. Majority of the participants agreed (62.35%) and strongly agreed (32.94%) that they enjoy doing the activities with computer. Only few teachers could not decide whether they were enjoyable with computer or not but none of them disagreed or strongly disagreed with the statement. Most of the participants were sure that computer can enhance student's learning, More than fifty percent (52.94%) participants strongly agreed with the statement and 47.06% agreed. Again more than fifty percent participants disagreed and strongly disagreed with the two negative statements under this domain. Majority of participants (52.94%) responded that they do not feel difficult to understand the computer and most of the participants felt comfortable learning things through the Internet.

Regarding the cognitive domain the mean score was 4.31(Standard Deviation = 0.4) showing the positive cognition of computer and the Internet. Most of the participant agreed and strongly agreed (69.41% and 30.59%) that they had keen interest in teaching with technology. Most of the English teachers of Kathmandu Valley agreed (43.53%) and strongly agreed (56.47%) that Computer and the Internet are the powerful interactive tools for teaching and learning purpose.

Table no. 7

Items	S A	A	U	D	SD
	Count (%)				
I enjoy doing things on a computer	28 (32.94%)	53 (62.35%)	4 (4.71%)	0 (0.00%)	0 (0.00%)
Computer can enhance students' learning.	45 (52.94%)	40 (47.06%)	(0.00%)	0 (0.00%)	0 (0.00%)
*Computers are difficult to understand.	0 (0.00%)	4 (4.71%)	32 (37.65%)	45 (52.94%)	4 (4.71%)
I would like to learn teaching with technology.	26 (30.59%)	59 (69.41%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
*Learning on the Internet is boring to me.	0 (0.00%)	0 (0.00%)	12 (14.12%)	58 (68.24%)	15 (17.65%)
Computer and the Internet are two powerful interactive tools for teaching purpose.	48 (56.47%)	37 (43.53%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
*I don't care the importance of computer in teaching	0 (0.00%)	0 (0.00%)	4 (4.71%)	55 (64.71%)	26 (30.59)
Use of the Internet increases my job performance.	32 (37.65%)	53 (62.35%)	0 (0.00)	0 (0.00)	0 (0.00)
*Computers do more harm than good.	0 (0.00%)	0 (0.00%)	7 (8.24%)	48 (56.47%)	30 (35.29%)
*Using a computer prevents me from being creative.	0 (0.00%)	0 (0.00%)	18 (21.18%)	57 (67.06%)	10 (11.76%)
Internet is a fast and effective means of getting information	36 (42.35%)	49 (57.65%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
*Computer will make the students passive learner.	0 (0.00%)	0 (0.00%)	5 (5.88%)	56 (65.88)	24 (28.24%)

Frequency distribution of teachers' attitudes towards the computer and the Internet in education

 $*SA = Strongly\ Agree,\ A = Agree,\ U = Undecided,\ D = Disagree\ and\ SD = Strongly\ Disagree$ 

Note: \*Polarities are reversed in these items

From the above table the teachers' attitudes towards the computer and the internet seem positive with an overall mean score of 3.45 and standard deviation of 0.45. Negative statements were reversed to measure the attitude scale. Least respondent seemed in neutral and none were highly negative towards the computer and the Internet.

Table no. 8

		Score in					
Domain	Highly Positive	Positive	Neutral	Negative	Highly Negative	Mean	S.D.
Affective	27.06	57.65	14.12	1.18	0.00	3.42	0.7
Cognitive	40.00	58.82	1.18	0.00	0.00	3.39	0.5
Behavior	28.24	62.94	8.82	0.00	0.00	3.54	0.6
Overall Score	31.77	59.80	8.04	0.39	0.00	3.45	0.45

Mean score distribution on the teachers' attitude towards the use of computer and the Internet.

# 3.2.3 Computer Imputes:

Participants were asked to respond to 13 Likert-type statements dealing with their perceptions about computer imputes. The following table illustrates the perceptions of over all advantages and importance of computer in education. The first 4 items (1-4) were designed for their response on the relative advantages of computer over the traditional methods of teaching and learning. Secondly, items fifth, sixth, eighth and twelfth were designed to measure their compatibility with teacher current practices. Item ninth and thirteenth were designed to measure their complexity and rest of other items (seventh, tenth and

eleventh) were designed to measure the over all teachers' observability of computer in present situation.

Participants had positive perception of the relative advantage of computer and the internet. Most of the respondents agreed (52.9%) and strongly agreed (47.1%) that computers improve the quality of education. One negative statement was strongly disagree and disagree by the majority of the respondents that they disagreed (58.8%) and (40.00%) strongly disagree against the statement computers are not useful for language learning. One participant was (1.2%) was not sure about the use of computer in language learning. Over fifty percentages (57.6%) agreed and (42.4%) strongly agreed that computers and the Internet offer real advantage over traditional methods of instructions. Respondents felt that computers are useful for doing practical things in learning and teaching. More than seventy percent respondents (72.9%) had agreed and over twenty percent (24.7%) respondents had strongly agreed for the statement that it is possible to do practical things with use of computers. Only (2.4%) 2 participants were not certain about the practical aspects of computers in teaching and learning field.

Teachers' perceptions on compatibility of computers with their current practices were more positive and neutral. They have an enthusiasm about the use of computers and the Internet in their profession as well as in their daily life. Most of the respondents agreed and strongly agreed (57.3% and 22.4%) that they like reading about computers and the Internet. Only 2.4 % teachers were undecided about it. None of them disagreed and strongly agreed on the statement. Majority of the participants (55.3%) disagreed that computer complicates their tasks in the classroom. From this response it is known that they had not thought that computers and the Internet brings the complexity in formatting classroom task. Three point five percent (3.5%) respondents strongly disagreed with the

negative statement and they feel comfortable using computer in classroom. Thirty six point five (36.5%) percent respondents were remained undecided about the use of computer in classroom and 4.7% agreed that they felt complexity of task setting with use of computer and the Internet in the classroom. Seventy six point five percent respondents had agreed and they had shown interest of using computer and the Internet in many ways of their life in future. Fifteen point three percent respondents had strong determination for using computer and the Internet in future and only eight point two percent respondents were neutral about it. None of them disagreed and strongly disagreed that they will avoid the use of computer and the Internet in their life. Majority of the respondents (70.6%) agreed and twenty nine point four (29.4) strongly agreed that they need more time to learn computer and the Internet. Respondents had both positive and negative perception about their observabilities of use of technology in education at present in Kathmandu Valley. More than fifty percent (51.8) percent of the respondent strongly agreed that use of computer and the Internet should have a strong place in educational activities as well as should have a priority in national goal of education. But in the developing country like Nepal people have not assimilated with technological culture. Majority of the respondents (52.9%) had disagreed that they had seen teachers/educators use technology (computers) as daily tools of teaching English and other social science subjects. But on the other hand forty seven point one (47.1 %) percent respondents had agreed they had experience and seen in some of the institutions of Kathmandu Valley that language teachers are using computers and the Internet in their classroom teaching. Eighty four point seven(80.07%) percent of respondent agreed that all students should have the opportunity of learning through computer and the Internet at school and fifteen point three (15.3%) were undecided for the statement.

Table no. 9

Items	S A	A	U	D	SD
	Count (%)				
Computer will improve the quality of education.	40 (47.1%)	45 (52.9%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
*Computers are not useful for language learning.	0 (0.00%)	0 (0.00%)	1 (1.2%)	50 (58.8%)	34 (40.00%)
Teaching with computers offer real advantages over traditional methods of instruction.	36 (42.4%)	49 (57.6%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
With computer it is possible to do practical things.	21 (24.7%)	62 (72.9%)	(2.4%)	0 (0.00%)	(0.00%)
I like reading about computers and the Internet.	19 (22.4%)	64 (75.3%)	(2.4%)	0 (0.00%)	(0.00%)
*Computer complicates my task in the classroom	0 (0.00%)	4 (4.7%)	31 (36.5%)	47 (55.3%)	3 (3.5%)
Computer should be priority in Education.	44 (51.8%)	40 (47.1%)	1 (1.2%)	0 (0.00%)	0 (0.00%)
I will use computers many ways in my life.	13 (15.3%)	65 (76.5%)	(8.2%)	0 (0.00%)	0 (0.00%)
*Learning about computer and the Internet is a waste of time.	0 (00.0%)	0 (0.00%)	2 (2.4%)	49 (57.6%)	34 (40.0%)
I have seen some language teachers use computer in teaching English in Kathmandu Valley.	0 (0.00%)	40 (47.1%)	0 (0.00%)	45 (52.9%)	0 (0.00%)
All students should have an opportunity to learn through computer at school.	0 (0.00%)	72 (84.7%)	13 (15.3%)	0 (0.00%)	0 (0.00%)
I need more time so I can learn to use computer and the Internet.	25 (29.4%)	60 (70.6%)	(0.00%)	0 (0.00%)	(0.00%)

Frequency distributions of the computer imputes scale

Note: \*Polarities are reversed on these items.

Table - 10 represents the teachers overall computer and the internet imputes were somehow positive with the mean 3.11 and a standard deviation of 0.71. After reversing the negative statements for the over all computers and the internet imputes seems "Agree". Respondents mostly supported on item 7 (mean = 4.51) and least on item 2 (mean = 1.61).

Table no. 10

		Score in Percentage (%)					
Scale	Highly Positive	Positive	Neutral	Negative	Highly Negative	Mean	S.D.
Relative Advantage	38.53	60.59	0.88	0.00	0.00	3.42	0.76
Compatibility	17.65	69.41	11.76	1.18	0.00	3.17	0.40
Complexity	20.00	56.74	21.18	2.35	0.00	2.97	0.68
Observability	27.06	54.90	0.39	17.65	0.00	2.90	1.00
Overall Computer Imputers	25.79	60.37	8.55	5.29	0.00	3.11	0.71

Mean score distribution of computer imputes scale.

## 3.2.4 Cultural Perception

English language teachers of Higher Secondary School of Kathmandu valley had mixed cultural perception on over all relevance to computers, Internet and the use of technology in education. Twelve Likert-type statements were designed to measure their cultural perception relevance to computers and the Internet use. The following table illustrates the frequency distribution of cultural perception. Majority of the respondents disagreed (74.1%) and strongly disagreed (8.2%) that they had used computer in their middle schooling

education. But their practice of communication with computer and the Internet seems satisfactory in the present context. More than fifty percent (54.1%) respondents agreed and eight point two (8.2%) percent strongly agreed that they use email service for remote communication. High percentage respondent were unaware about real statistics of the use of Internet in Nepal. Forty nine point four (49.4%) percent teachers were undecided for the use of Internet in chatting and entertainment purpose. Three negative statements were disagreed and strongly disagreed that computer and the Internet are against their religion value (45.9% and 47.1%), (63.5%) respondents were against of computers dehumanize and makes people isolated from the community. 61.2% participants noted that people do not forget their traditional values because of the use of computer and the Internet

Table no. 11

Items	S A	A	U	D	SD
	Count (%)				
I have been using computer since my middle schooling education.	3 (3.5%)	11 (12.9%)	1 (1.2%)	63 (74.1%)	7 (8.2%)
I use email rather than postal service for remote communication.	7 (8.2%)	46 (54.1%)	24 (28.2%)	8 (9.4%)	0 (0.00%)
*Use of computer and the Internet contradict with my religion	0 (0.00%)	0 (0.00%)	6 (7.1%)	39 (45.9%)	40 (47.1%)
*Computers dehumanize society by treating everyone as a number.	0 (0.00%)	2 (2.4%)	9 (10.6%)	54 (63.5%)	20 (23.5%)
Internet is used in Nepal only for chatting and entertainment purpose.	1 (1.2%)	24 (28.2%)	42 (49.4%)	17 (20.0%)	1 (1.2%)
Computer will improve our living standard.	23 (27.1%)	62 (72.9%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
We need computer programs and the Internet information that suit our culture and identity.	5 (5.9%)	16 (18.8%)	36 (42.4%)	23 (27.1%)	5 (5.9%)
I live in the community where people frequently use computer and the Internet.	(2.4%)	54 (63.5%)	16 (18.8%)	13 (15.3%)	0 (0.00%)
I browse news web sites daily to view the daily news and participate in discussion forum.	0 (0.00%)	28 (32.9%)	1 (1.2%)	53 (62.4%)	3 (3.5%)
*People will forget their tradition because of the use of computer and the Internet.	0 (0.00%)	0 (0.00%)	23 (27.1%)	52 (61.2%)	10 (11.8%)
I feel computers are necessary tools in both educational and work setting	15 (17.6%)	64 (75.3%)	6 (7.1%)	0 (0.00%)	0 (0.00%)
Now computers are used everywhere	10 (11.8%)	72 (84.7%)	3 (3.5%)	0 (0.00%)	0 (0.00%)

Frequency distributions of the cultural perception

Note- \*Polarities are reversed on these items.

Overall cultural perception of the participants seems positive. Table 12 Illustrates the majority of the respondents were not against in including the computer and the internet in their life as well as in education use. Participants seems more positive on item 6 (mean = 4.27) and least positive on item 3 (mean = 1.60)

Table no. 12

		Score in Percentage (%)					
Scale	Highly Positive	Positive	Neutral	Negative	Highly Negative	Mean	S.D.
Overall	14.74	53.38	13.40	17.15	1.61	2.61	0.99
Cultural							
Perception							

Mean score distribution on cultural perception scale.

## **3.2.5** Computer Competence

Teachers were asked 16 different items to rate their level of computer competence and the Internet skills. Clear instructions and rating scale was provided on each level of competence in the beginning of section (Appendix-2). 4 different scales were ranged by never use to advanced level of competence. Majority of the teachers responded that they were beginners in level computer and the Internet competence. But a high percentage of the respondents had a little more competence on operating Microsoft Office System; program including MS-Word, Powerpoint, Excel and handling files and folders of the operating system, which is generally used in daily works. Fewer participants had responded that they had advanced competence in operating software applications. The highest percentage on advanced competence was (21.2%) in creating files and folders and use of Internet for email and instant messenger.

The participants had least or no competence in animation, programming language, and graphics software and database application. Most of the participants had little competence or responded on as they were beginners in operating software as well as hardware of computer system. The following table shows the frequency distribution of level of computer competence of the participants in over all asked statements.

Table no.13

Items	Never Use	Beginner	Intermediate	Advanced	
	Count (%)	Count (%)	Count (%)	Count (%)	
Install new software on a computer.	18 (21.2%)	39 (45.9%)	22 (25.9%)	6 (7.1%)	
Use a printer.	9 (10.6%)	47 (55.3%)	23 (27.1%)	6 (7.1%)	
Use CD-ROM	0 (0.00%)	44 (51.8%)	26 (30.6%)	15 (17.6%)	
Use a multimedia projector	37 (43.5%)	29 (34.1%)	14 (16.5%)	5 (5.9%)	
Operate word processing program (e.g. MS Word).	0 (0.00%)	29 (34.1%)	43 (50.6%)	13 (15.3%)	
Operate a presentation program (e.g. MS PowerPoint)	1 (1.2%)	46 (45.1%)	29 (34.1%)	9 (10.6%)	
Operate a spreadsheet program (e.g. MS. Excel)	0 (0.00%)	59 (69.4%)	21 (24,7%)	5 (5.9%)	
Operate a multimedia program (e.g. DVD, Or Media Player)	2 (2.4%)	37 (43.5%)	35 (41.2%)	11 (12.9%)	
Operate an animation program (e.g. Flash)	66 (77.6%)	24 (28.2%)	4 (4.7%)	0 (0.00%)	
Operate a database program (e.g. MS Access)	57 (67.1%)	24 (28.2%)	4 (4.7%)	0 (0.00%)	
Operate a programming language (e.g. C, or C++)	76 (89.4%)	8 (9.4%)	1 (1.2%)	0 (0.00%)	
Operate a graphic program (e.g. Photoshop or CorelDraw)	42 (49.4%)	35 (41.2%)	8 (9.4%)	0 (0.00%)	
Create and manage computer files and folders.	3 (3.5%)	22 (25.9%)	42 (49.4%)	18 (21.2%)	
Use the internet for communication (e.g. E-mail and Instant messenger)	1 (1.2%)	21 (24.7%)	45 (52.9%)	18 (21.2%)	
Download the useful file from the internet	2 (2.4%)	46 (54.1%)	28 (32.9%)	9 (10.6%)	
Remove computer virus.	9 (10.6%)	54 (63.5%)	21 (24.7%)	1 (1.2%)	

Frequency distributions of the computer competence scale

Table no 14 figures out the overall computer competence of the participant is little. Participant had high competence on item 13 and 14 (mean = 2.88 and 2.94) and least competence on item 11(mean = 1.12).

Table no. 14

	Score in Percentage (%)					
Scale	High Competence	Moderate Competence	Little Competence	No Competence	Mean	S.D.
Overall Computer Competence	7.76	25.33	41.65	25.25	2.16	0.89

Mean score distribution of computer competence scale.

## 3.2.5 Availability of computer

Teachers were asked to respond their rate of computer access in different places including home, college, internet café, friend's home and others. Different five rating scales were provided to rate their availability of computers and the Internet. Majority of the participants had computer access in their own home that (54.1%) use computer at their home daily but they had no internet connection (62.4%). Highest percentage of the participants (57.6%) uses the Internet at cyber café and Internet house once a week. The following table illustrates the rate of their availability of computer in different places.

Table no. 15

	Never	Once a month	Once a week	Twice or Thrice a week	Daily
Items	Count (%)	Count (%)	Count (%)	Count (%)	Count (%)
I use computer at home.	28 (32.9%)	0 (0.00%)	2 (2.4%)	9 (10.6%)	46 (54.1%)
I use Internet at home	53 (62.4%)	2 (2.4%)	5 (5.9%)	0 (0.00%)	25 (29.4%)
I use computer at my college.	26 (30.6%)	13 (15.3%)	32(37.6%)	2 (2.4%)	12(14.1%)
I use the Internet at Cyber Café, or Internet house	8 (9.4%)	21 (24.7%)	49 (57.6%)	3 (3.5%)	4(4.7%)
I use computer at my friend's home	42 (49.4%)	35 (41.2%)	8 (9.4%)	0 (0.00%)	0 (0.00%)
Other, Please specify	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

Frequency distributions of the availability of computer and the Internet

Table no 16 illustrates the overall computer access of participants, in which home is the most usual place for their computer access. Majority of the participants use computer at home daily (mean = 3.53) and least participants use at friend's home (mean=1.60).

Table no. 16

		Score in Percentage (%)					
Scale	Daily	Twice or Thrice a week	Once a week	Once a month	Never	Mean	S.D.
Home	54.1	10.6	2.4	0.00	32.9	3.53	1.83
College	14.1	2.4	37.6	15.3	30.6	2.54	1.33
Friend's House/Others	0.00	0.00	9.4	41.2	49.4	1.60	0.65
Overall Computer Access	22.73	433	16.47	18.83	37.63	2.55	1.27

Mean score distribution of availability of computer scale

Table no 17 shows that participants had moderate use of Internet in cyber café and the Internet house. Majority of the participants had time frequency of once a week. Overall internet access seemed "Average'.

Table no. 17

		Score ii					
Scale	Daily	Twice or Thrice a week	Once a week	Once a month	Never	Mean	S.D.
Home	29.4	0.00	5.9	2.4	62.4	2.32	1.80
Cyber Café'/Internet House	4.47	3.5	57.6	24.7	9.4	2.69	0.87
Overall Internet Access	16.95	1.75	31.79	13.57	35.94	2.50	1.33

Mean score distribution of internet use scale

# 3.3 Relationship between the independent variables and teachers' characteristics:

In this section data are presented to address the relationship between the main independent variables of this study: computer and internet attitudes, computer imputes, cultural perception, computer competence and the availability of computer and teacher's demographic characteristics. (Gender, Age, Annual Income, School Location, Background Education and Computer Training)

To measure the relationship between these variables Bivariate Correlation was used in SPSS. Bivariate Correlation measures the degree of association between two variables (www.spss.com/tutorials) the correlation coefficient, which range from -1 to + is both a measure of the strength of the relationship and the direction of the relationship. A correlation coefficient of 1 describes a perfect relationship in which every change of +1 in one variable is associated with a change of +1 in the other variable. A correlation of -1 describe a perfect

relationship in which every change of +1 in one variable is associated with a change of -1 in the other variable. A correlation of 0 describes a situation in which a change in one variable is not associated with any particular change in the other variable. In other words knowing the value of one of the variables gives the information about the value of other.

Table no. 18

Pearson Corre	Pearson Correlation between dependent variables and independent variables							
Variables	Attitudes	Computer Imputes	Cultural Perception	Computer Competence	Computer Access			
Gender	082	.278*	.215*	.052	.365**			
School Location	.060	033	084	.253**	.300**			
Age	202	.075	.180	.089	054			
Highest Academic Degree Received	.101	.005	.135	.017	.061			
Years of Teaching Experience	219*	0.00	150	.035	.039			
Yearly Income	.271*	.041	.024	.253**	.211			
Computer in School Education	.103	.063	.102	.148	.085			
Computer Training	.050	.044	.179	.051	.250*			

Summary of correlation of independent variables and dependent variables

Table no 18 illustrates, there was very a strong positive relationship between school location, computer competence and yearly income. (r= .253 p<.05) There was least positive relationship between gender and computer competence. (r = .052 p <.01). Again there was a strong relationship between

<sup>\*</sup>Correlation is significant at the 0.05 level (2-tailed).

<sup>\*\*</sup>Correlation is significant at the 0.01 level (2-tailed).

gender and computer access (r= .365 p< .05). Another strong relationship between was school location and computer access (r=300 p<.05)

#### 3.4 Analysis form Qualitative Data

Qualitative data were very indispensable and important because the computer and internet attitudes are more clearly visible and reliable in some cases which were unanswered by the quantitative data. In pre survey stage 24 semi structured interview questions were asked for both access and non access group of the participants. A full freedom was given to the participants to make the trustworthiness in the study's findings. Questions were set relating to the research variables. Findings from qualitative data also presented on the following research topics (a) teacher's attitudes towards computer and the Internet for educational purpose (b) computer imputes (c) cultural perception (d) computer competence and (e) computer access. The interview also includes the descriptive data and real life situation of the Higher Secondary School in implementing the modern information technology in teaching and learning purpose.

## 3.4.1 Qualitative Data from Non Access Group

Although the participants have no access on computer and the internet they are aware and have some information about the importance of technology for educational purpose in developing country like Nepal. More than fifty percentage participants stated the wide used of computer and the Internet. Bishow Raj Sharma states that computer is used for "For many purpose e.g. academic, entertainment, profession etc." Less participants (20%) stated narrow use of computer, for example computer and the internet are used for specific field like providing information and data storage. Most of the participants are eager to use the modern methods and techniques in teaching and learning. Only

few were following the traditional methods but have the positive intention of using information technology in their professional life. Although the participants themselves place in Non Access Group more than fifty percent (58.26%) have some experience of learning through computer. Shila Bhandari states "Yes, I have learnt the basics but I didn't use frequently." to show her basic experience in computer. Most of the participants have the sense of importance of computer knowledge in their professional field as well as in daily life. They agree with the usefulness of computer and the internet in learning and teaching by saving times and making the classroom situation more effective than the using traditional methods. Bisma Bhattarai says "Yes they have made their work easy some how than who do not use computer in their personal and professional life." None of them rejected that computer and the internet are necessary tools in the field of language teaching and learning as well as other classroom use. Some of them have stressed the importance of computer and the internet from academic to personal life. Sajneev Shrestha stressed "Why not! It's an essential part of our life." Every non access participant accepts the spreading of use of computer and the internet for educational purpose in all level of schools and colleges of city area like Kathmandu. Bishow Raj Sharma states "Yes this decade has been most crucial. Mostly city life is depended on computer. Villages are still languished to be far from the access of computer. They even don't know what is it and what it does." Directly and indirectly they enjoyed the advantages of computer and the Internet. All the participants were interested to learn computer and the internet for the professional skill development as well as to enhance their day to day life.

The response from the participants blamed the concern authority for giving less emphasis in implementation of information technology in teaching and learning process. They want the concern authority should make the standard policy and implement the technology in school and college as a resource tool. All the participants have a plan to learn computer and the internet for applying in their life and in classroom. Majority of the participants stated that the main barrier of accessing computer and the internet is time as well as lack of information about the computer course for professional development. But they were eager to increase to their access on computer and the Internet by buying computer at their home, taking computer class, training, participating in seminars and workshops. In all above cases we can ensure that although the English teachers of higher secondary schools who have not joined their hands with computer and the internet directly their views and interest have justified that they have the positive attitude towards the information technology, computer and the internet and their use in educational purpose.

#### 3.4.2 Qualitative Data from Access Group

The data from field notes and the interviews provided the key understanding of participants in use of computer and the internet in general and in educational activities.

## 3.4.2.1 Attitudes towards Computer and the Internet:

In case of teacher's attitudes towards computer and the internet they were more positive as use of technology emerging in all fields. Statements like "Computer and the Internet play vital role in education", "Computer should be promoted in teaching and learning" were the typical comments form the 20 participants. They also compared our country with the developed countries that developing countries like Nepal are being backward due to the delay on policy making and implementing the technology in education. Rupak Adhikari noted "Computer and the internet have become the integral parts of our body. Try to locate them"

Such opinion can illustrate the participants' enthusiasm in applying the technology in their personal life as well. Most of the participants were aware about new fast growing Information Technology including Computer and the Internet is bounding all the fields of human activities. In this case teaching and learning activities can not be isolated from the information technology. Regarding the language teaching and learning 18 participants stated "All language skills can be enhanced by Computer Assisted Language Teaching". Bhimsen Bhatta noted "All four skills. Computer Assisted Language Teaching makes the learners participation active in classroom."

From the above cases and other views of participants there is no doubt of usefulness of computer and the internet in general as well as in education. But the participants were disappointed on the careless of schools, colleges' administration and the government for giving less priority in developing such policy and implementing them in educational sectors. They further stated that current education system in Nepal is being old and unable to compete with other countries.

Majority of the participants focused that concern bodies should take attention of implementing the new system in education so that education would be more productive and supportive in national building. Homa Devi noted "Everything is changing in the world and we also should not stay in as it is condition. We should change the education system to new and more practical that is common in the other developed country." In all cases participants have found that Information technology, computer and the internet are appealing to them and their views and opinion justified their positive attitudes towards the computer and the internet in general as well as for educational purpose.

#### 3.4.2.2 Computer Imputes:

Regarding the computers and internet attributes, majority of the participants were seemed some how away from its benefits. But their prior knowledgebase about the advantages of computer and the internet is remarkable. 47 participants found the internet was very useful to search the information and material they need. Uma Prasad Neupane noted "I have searched useful notes of different critics and authors, teaching novel, stories, poems and dramas etc. in internet." And Khum Prasad Sharma stated "Personal work, typing, playing game and sometime watching movies." Comparing in the above two statements it can be drawn that computer and the internet are advantageous from personal work to academic and other entertainment purpose.

Majority of the participants were theoretically known to the advantages of computer and the internet but practically they seemed to be out of reach. They had expected that they could felt the benefits of the computer and the internet if they were brought in educational activities (teaching and learning) and in their professional life. Although information technology has not been implemented widely in educational activities the participants indicates the attributes of computer and the internet in some cases (a) they save time and effort (b) more effective class (c) create interest and students' participation is active (d) get more information and new changes in teaching methods and techniques (e) communicate widely (f) share knowledge becomes easy and others direct and indirect benefits.

From language teaching point of view majority of the participants pointed that all four skills, reading, writing, listening and speaking, are useful through computer assisted language teaching including grammar. Few participants pointed out the specific skills and stressed on listening, speaking and

pronunciation. Only few participants have felt the direct experience of teaching through the computer assisted language teaching and others have read and heard about the benefits of use of computer and the Internet in language teaching.

## 3.4.2.3 Cultural perception:

Nepal is multi-cultural society and development of technology is in bud stage. In case of Kathmandu Valley it seems that English Language Teachers of Higher Secondary Schools were some how free from cultural and religious boundaries. They felt that Information Technology and Computer have opened the new way of life. Yogendra Bhattarai pointed with the statement "Every developing should adopt ICT in education to compete with global education." Two participants (Nabin and Govinda) expected computer programs and internet information should have developed that suits the cultural norms and values the country but still they are not against the present software and information in computer and in the Internet. All the respondents wanted the import of foreign technology in education would be "inevitable" and exporting the new thoughts and invention to other countries would bring access of us to the world.

Fewer participants had responded that they had interaction with the students via email and the internet. Majority of the participants were not habituated to communicate with the student. They used the words 'hardly', 'rarely', 'never' while asking the frequency of their interaction with the students via email and the Internet. All the cases in cultural perception of computer and the internet were not negative but due to availability of computer and the internet participants had no feelings of technology acculturated in their professional as well as in personal life.

## **3.4.2.4** Computer Competence:

Fewer interviewees responded that they have advanced computer competence for their professional activities. Majority of the participants had stated the reason behind the low level of computer and the internet competence is "Time" and absolute 'defined course' for professional skill development. Thirteen participants used such words "good" "satisfactory" and "average" to remark their level of computer competence. 47 participants used "basic" and 3 stated "advanced" and the rest of the participants stated "intermediate". 29 respondent had felt the problem while operating the computer but they had no idea to mention the problem. Statement like "I have not much information about it" "There are problems like 'hang' and others many ....." state the low level of computer competence. One participant pointed 'downloading' problem while the other one is completely unknown about the computer hardware. 78 participants were familiar about the Microsoft Office System eg MS word, MS excel and MS PowerPoint. 3 Participants also stated they themselves completed their master degree's dissertation with the help of computer and the Internet. Majority of the participants were eager to increase the present level of computer competence in the future if the school/college administrative would be supportive in implementing new technology. They further appealed the concern authority, education department, and policy maker to expand the access of computer and the Internet for teachers and student in all levels.

## 3.4.2.5 Availability of computer:

Computer access group had relatively some more access on computer and the Internet. Majority of the participant used computer at home for personal purpose. Fewer participants had access on colleges too. 9 participants stated that they most often visit websites on internet for information they required. Others

participants visit rarely (twice a week, once a week, twice a month etc.) more for their personal and general purpose rather than their professional activities. Most of the participants were interested to increase their access on computer by buying computer themselves and requesting to the administrative to connect the internet for teachers' use. They would go for computer training in the future and they would apply the knowledge in real life situation. It is stated that future would bring the situation where every teacher should have the access of computer and the internet to make the interaction with the students as well as with school and college administration.

#### **CHAPTER FOUR**

#### FINDINGS AND RECOMMENDATION

This section of the study presents the findings drawn from the study of the higher secondary English Language Teachers' attitudes towards the use of computer and the internet for educational purpose in Kathmandu valley. Findings were carried out on the basis of overall study on the subject matter, following all steps of research. Some pedagogical implications are also presented at the end of the section.

## 4.1 Findings

The proliferation of technology in the world has created global challenges in adopting the ICT for the most developing countries, included Nepal. Education, teaching, learning and information and communication technology are now interrelated each other viz the absence of one affects the other. Integral implementation of above components will lead the national development and links with other countries of the world. Probably this is the first study in the area of computer and the internet and the EFL Teachers' attitude towards their use in education. The study has been carried out from the Kathmandu Valley of Nepal where the bud of technology can be observed in the field of education. Before implementing the new tools in the certain sectors the attitudes of the end-users towards it should be understood. Following points can be listed out as the findings of the study.

1. Fast growing IT industry in the world has created an interest towards the use of it among the English Language Teachers of Higher Secondary in Kathmandu Valley.

- 2. Teachers' attitudes towards the use of computer and the internet have been recognized as an important factor for implementing the technology in teaching and learning activities.
- **3.** Computer and the internet are developing as resources tools of different private colleges and schools of Kathmandu Valley in educational activities
- 4. In comparison with the private, government schools and colleges have low access of computer and the internet in Kathmandu Valley.
- 5. Majority of the participants (75.7%) were found in the computer access group where less than twenty five percent (24.3%) participants grouped themselves in non access group although they have familiar about the computer and the internet. The primary study had shown that teachers' access on computer and the internet has been growing as they are spreading all area of daily activities of human life.
- 6. Non Access Group is also interested in learning teaching with new technologies. Few of them also had some experience of learning through of computer and the internet. Their response on prior knowledge on computer and the internet shows they had the positive attitudes on modern tools of information technology.
- 7. Majority of the respondents' major barrier in accessing computer and the internet is time and few participants reported lack of proper guidance and counseling on the computer courses and internet skills for their professional skills development were the key factors to draw their interest in learning the technology.
- 8. From the observation in few schools it comes to know that computer and the internets were the tools for attracting the students in the time of admission. They were not used as teaching resource tools by the teachers.

- 9. From the follow up stage of this study it has been carried out that the Higher Secondary English Language teachers had positive attitudes towards the use of computer and the internet. More than seventy percent respondents reported that they had taken the implementation of computer and the internet in educational activities will play a great role in national education system. The participants had accepted the wide spread of computer and the internet use in human life had brought the challenges in changing the education system, plans, curriculum development, teacher's training, which are the key factor of integral development of the nation. They like reading about the new methods and techniques of teaching and learning. Majority of the respondent reported that they like to visit the websites for their professional, personal skills development and get new information from the other educational institutions.
- 10. Teachers' perception on relative advantages of computer and the internet is highly positive. They responded that teaching with technology creates the interest in students, saves time and labor of the teacher and is useful for language teaching and learning.
- 11. In the primary survey stage teacher's responses were positive on the observability scale on the advantages of computer and the internet but in the follow up stage majority of the respondents reported that they had no real and direct experience of overall advantages of computer and the internet. They were aware on it by reading, listening about the use of computer and the internet technology in teaching and learning activities.
- 12. Respondents were more neutral on the compatibility of implementing new technology in the context of Nepal because they demanded that the traditional system of curriculum should be changed. It should be

- reformed from the policy maker to end user of teaching and learning activities.
- 13. Majority of the respondent were positive about the complexity of use of computer and the internet for educational and curricular activities if they were provided the sufficient access and trainings on computer and the internet.
- 14. English Language Teachers of Higher Secondary School in Kathmandu valley were not against on cultural values and social norms had the negative effect on borrowing and implementing the technology. They reported that some changes might bring in the traditional concepts but it had no negative impact on the society. Majority of the participants reported that they were neutral that they need the computer programs and the internet information that suites the cultural values and social identity.
- 15. Higher percentage of the respondents accepts that they were not in the habit of technology use but they seemed aware on the productive use of technology will increase the living standard of the people of Nepal.
- 16. Overall cultural perception of the majority of the respondents seemed positive. They were fully confident that technology practice was not against their religion and it would not dehumanize society.
- 17. Computer competence was the key factors on adopting the technology (computer and the Internet) for educational and curricular activities. Majority of the teachers had little and no competence on basics computer programs and the internet skills. Few participants seemed on moderate computer competence but they still had unknown about the major functionalities of computer skills that needed for teachers to handle the classroom activities.

- 18. They had no competence on basic software and hardware troubleshooting, handling graphic applications, educational software, database and educational websites which are the essential tools for teaching and learning activities.
- 19. Majority of the respondent reported in interview that the main barriers of their computer competence were time, financial factor and training opportunities and proper counseling of computer courses and internet skills but they were all interested to increase their computer competence in future by buying computer at home and requesting the school administration and concern authority for bringing the access on computer and the internet.
- 20. Teachers' access on computer seems moderate in Katmandu Valley. Majority of the respondents reported that the main place of their computer use if home. Few of them reported at college and other places.
- 21. Majority of the teachers visit internet at cyber café and internet house once a week for their personal interested. Least participant had interaction with the student and that was mostly communicative oriented rather than academic purpose.
- 22. The relationship between teacher's characteristics and the attitudes of computer and the internet was also remarkable factor in overall study. There was strong relation between school location and computer competence as well as gender and computer access. Pre education background and cultural perception was also considered to have the some relationship. Overall relationship between and teachers' attitude and their personal characteristics have been taken the important factor for future implementation of technology in educational and curricular activities.

#### 4.2 Recommendations and pedagogical implications

Based on the result of this study the following recommendations and pedagogical implications have been suggested below.

- 1. Since the present study is the first of its kind in the Department of English Language in Tribhuvan University, similar study should be carried out to get more intensive knowledge in this area.
- 2. Current spread of computer and the internet in overall activities of human life has created a challenge its impact on educational institutions, curricular activities and language teaching. The end users' attitude should be taken as an important factor before implementing them in this area.
- 3. Education planner, syllabus designer, material developers should take care about the modern tools of teaching and learning activities.
- 4. Special attention should be taken in IT for developing professional skills of the teachers to increase the quality of education so that new changes in the world can be adopted.
- 5. Concern authorities, policy makers should take care about trainings, orientation programs and the access of computer and internet for teachers' active participation in curricular activities.
- 6. Department of English Language should make the EFL teachers aware the importance of technology for applying the new methods and techniques of language teaching and learning.
- 7. All language teachers should have computer and internet access for their professional skills development as well as to transfer the technology culture to new generation.
- 8. Proper programs, opportunities, trainings, resources materials should be provided to all teachers to increase their level of computer competence

and internet skills for the further development of language teaching and other subjects of study.

Finally adaptation of technology in education is not end itself; proper implementation will play the vital role to sustain for long term educational development of the nation.

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## Appendix – 1

#### Pre survey interview questionnaires

(Please use next page if you do not have access in computer and the Internet)

Sheet-01

## Computer Access Group

#### Dear teacher,

This is the first primary survey of how the English Language Teachers of Higher Secondary School (+2) in Kathmandu valley perceive the use of computer and the Internet in education. Please provide very short answer of the following questions.

- 1. How old are you?
- 2. How long have you been teaching?
- 3. Are you using any new methods? If any?
- 4. Have you ever used computer for teaching purpose?
- 5. Which methods do you prefer (Old e.g. grammar translation, drills or new e.g. interactive, communicative etc.)?
- 6. What do you know about the spread of computer and the Internet in education in Kathmandu valley?
- 7. How long have you been using computer?
- 8. How long have you been using the Internet?
- 9. What kind of information do you want to get from the Internet?
- 10. How often do you visit the websites which are helpful for your professional development?

## Non Access Group

Sheet -02

#### Dear teacher,

This is the first primary survey of how the English Language Teachers of Higher Secondary School (+2) in Kathmandu valley perceive the use of computer and the Internet in education. Please provide very short answer of the following questions.

- 1. How old are you?
- 2. How long have you been teaching?
- 3. What do you think the computer is used for?
- 4. Which method do you use mostly in teaching (English) second language?
- 5. Have you ever experienced learning through computer?
- 6. Have you tried to learn computer?
- 7. Have you ever visited cyber for the Internet use?
- 8. Are you interested learning computer for your professional development?
- 9. Which methods do you prefer (Old e.g. grammar translation, drills or new e.g. interactive, communicative etc.)?
- 10.Do you think computer will help in your teaching profession?
- 11.Do you think you can get more information in the Internet?
- 12. What barriers do you have in learning computer and the Internet?

13.Do you think compute resource tool?	er should be available for teachers at every school as a
14.Are you planning to le	earn computer and the Internet?
15. How do you increase	your computer and the Internet access in future?
provide your name, a	lling to participate in the follow-up inquiry, please address, phone number and e-mail and other English want to invite in this survey.
Name:	Address:
Phone:	E-mail:
Teacher's Name:	
Phone :	E-mail:

Thank you very much for your kind co-operation!

## Appendix - 2

## Individually distributed questionnaires in follow up stage

Dear Teacher,

The diffusion of technological innovation in every field has created a burning pressure to implement the technology in teaching and learning field. We, the English Language Teachers of Nepal will not remain being untouched from the impact of the technology. This questionnaire is designed to assess your perceptions of the use of computer and the internet for educational purpose. The result of your response will help all the English Language Teacher in Nepal to develop a common view for the access to the computer and the Internet as well as for the benefit of your students' productivity. It should require about 15 minutes of your time. Usually it is best to respond with your first impression, without giving questions much thought. Your answer and personal details will be used for a true data for further research and will be published on web for your future use too.

**General Instruction:** The purpose of this questionnaire is to examine your attitudes towards the use of computer and the Internet for educational purpose in Kathmandu valley. The questionnaire consists of five sections. Each section begins with some directions pertaining to that part only. As you begin each section please read the instruction carefully and provides your responses candidly in the format requested.

General Background Information
Full Name: Male Female
Age:Address:
Phone: Email.
Highest academic degree received: (Please tick one)
(a) Bachelor Degree
(b) Master Degree
(c) Master of Philosophy (M.Phil.)
(d) Doctor of Philosophy (Ph. D.)
Years of teaching experience:Annual Income (Rs):

Learned throu	gh computer: Yes No
Computer Tra	ining (Months):
Teaching met	hods your use most often (Tick any two)
i.	Lecture
ii.	Demonstration
iii.	Discussion
iv.	Hand outs and explanation
v.	Experiment
vi.	Role playing
vii.	Communicative
viii.	Teacher Centered
ix.	Student Centered
х.	Computer Assisted instruction
xi.	Other (please specify)

Location: (please choose one)  $\_$  Urban,  $\_$  Suburban,  $\_$  Rural

## Section One: General Attitudes towards Computer and the Internet

**Instruction:** Please indicate your reaction to each of the following statements by using tick mark  $(\sqrt{})$  in the right cell that represent your level of agreement and disagreement with it. Every statement is to be check marked.

## \* SA= Strongly Agree, A= Agree, U = Undecided, D=Disagree and SD = Strongly Disagree

	SA	A	U	D	SD
1. I enjoy doing things on a computer					
2. Computer can enhance students' learning.					
3. Computers are difficult to understand.					
4. I would like to learn teaching with technology.					
5. Learning on the Internet is boring to me.					
6. Computer and the Internet are two powerful interactive tools for teaching purpose.					
7. I don't care the importance of computer in teaching					
8. Use of the Internet increases my job performance.					
9. Computers do more harm than good.					
10. Using a computer prevents me from being creative.					
11. Internet is a fast and effective means of getting information					
12. Computer will make the students passive learner.					

## Section Two: Computer Imputes

**Instruction:** Please indicate your reaction to each of the following statements by the tick mark  $(\sqrt{})$  in the right cell that represent your level of agreement and disagreement with the statement. Every statement is to be check marked.

## \* SA= $Strongly\ Agree,\ A$ = $Agree,\ U$ = $Undecided,\ D$ = $Disagree\ and\ SD$ = $Strongly\ Disagree$

		SA	A	U	D	SD
1.	Computer will improve the quality of education.					
2.	Computers are not useful for language learning.					
3.	Teaching with computers offer real advantages over traditional methods of instruction.					
4.	With computer it is possible to do practical things.					
5.	I like reading about computers and the Internet.					
6.	Computer complicates my task in the classroom					
7.	Computer should be priority in Education.					
8.	I will use computers many ways in my life.					
9.	Learning about computer and the Internet is a waste of time.					
10.	I have seen some language teachers use computer in teaching English in Kathmandu Valley.					
11.	All students should have an opportunity to learn through computer at school.					
12.	I need more time so I can learn to use computer and the Internet.					
13.	I have no difficulty in understanding the basic functions of computers					

## Section Three: Cultural Perception

**Instruction:** Please indicate your reaction to each of the following statements by the tick mark  $(\sqrt{})$  in the right cell that represent your response with the statement. Every statement is to be check marked.

## \* SA=Strongly Agree, A=Agree, U = Undecided, D=Disagree and SD = Strongly Disagree

	SA	A	U	D	SD
1. I have been using computer since my middle schooling education.					
2. I use email rather than postal service for remote communication.					
3. Use of computer and the Internet contradict with my religion					
4. Computers dehumanize society by treating everyone as a number.					
5. Internet is used in Nepal only for chatting and entertainment purpose.					
7. Computer will improve our living standard.					
8. We need computer programs and the Internet information that suit our culture and identity.					
9. I live in the community where people frequently use computer and the Internet.					
10. I browse news web sites daily to view the daily news and participate in discussion forum.					
11. People will forget their tradition because of the use of computer and the Internet.					
12. I feel computers are necessary tools in both educational and work setting					
13. Now computers are used everywhere					

#### Section Four: Level of Computer Competence

**General Instruction**: This section is designed for your level of proficiency in using computer and the internet applications. Please specify your level by checking ( $\sqrt{\ }$ ) the appropriate box. I would like to request to use the following scale for your understanding.

• **Beginner**: The less frequent computer and the Internet user who can slowly navigate through a computer operating system in order to open, edit and create files but does not know how to recognize and solve very simple problems.

Intermediate: The frequent computer and the Internet user who feels at ease with the keyboard and mouse. The intermediate user can quickly and easily navigate through the computer's operating system as well as open, edit and create files and he/she has very keen interest to explore the use of computer technology and recognize and solve very simple problems.

Advanced: The daily computer and the Internet user who can quickly and easily navigate through a computer's operating system. He/she can open, edit, create and manage files and has fairly good foundation in most computer and Internet applications and has relatively expertise in troubleshooting and solving common problems.

• **Never use:** One who is not familiar with computer and the Internet application.

**Instruction:** Please indicate your reaction to each of the following statements by the tick mark  $(\sqrt{})$  in the right cell that represent your response with the statement. Every statement is to be check marked.

#### Beginner, Intermediate, Advanced and Never use

You can handle the following applications and tasks	Beginner	Intermediate	Advanced	Never use
1, Install new software on a computer.				
2. Use a printer.				
3. Use CD-ROM				
4. Use a multimedia projector				
5. Operate word processing program (e.g. MS Word).				
5. Operate a presentation program (e.g. MS PowerPoint)				
6. Operate a spreadsheet program (e.g. MS. Excel)				_

7. Operate a multimedia program (e.g. DVD, Or Media Player)		
8 Operate an animation program (e.g. Flash)		
9. Operate a database program (e.g. MS Access)		
10. Operate a programming language (e.g. C, or C++)		
11. Operate a graphic program (e.g. Photoshop or CorelDraw)		
12. Create and manage computer files and folders.		
13. Use the internet for communication (e.g. E-mail and Instant messenger)		
14. Download the useful file from the internet		
15. Remove computer virus.		

## Section Five: Availability of Computer

General Instruction: This section is designed for your access on computer and the Internet.

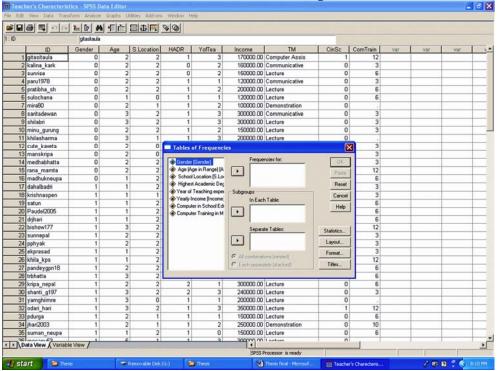
**Instruction:** Please indicate your reaction to each of the following statements by the tick mark  $(\sqrt{})$  in the right cell that represent your response with the statement. Every statement is to be check marked.

	Daily	2 or 3 times a week	Once a week	Once a month	Never
1. I use computer at home.					
2. I use Internet at home					
3. I use computer at my college.					
4. I use the Internet at Cyber Café, or Internet house					
5. I use computer at my friend's home					
6. Other, Please specify					

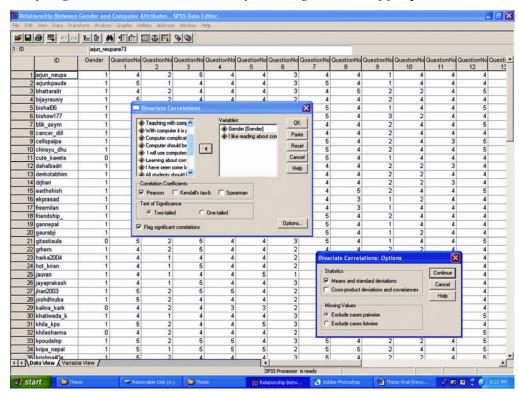
## Appendix - 3

Questionnaires at follow up stage through website

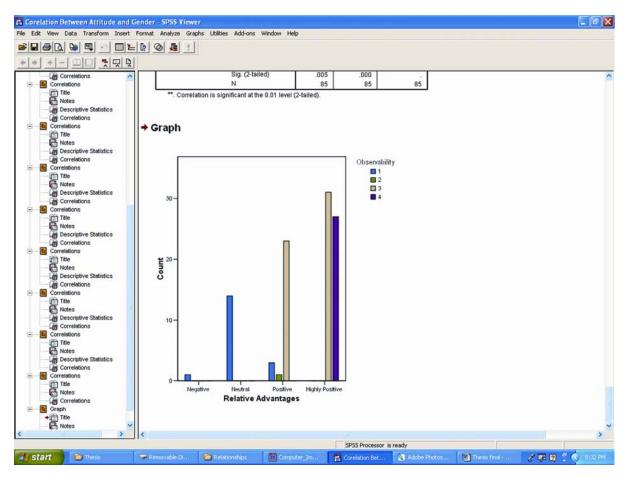
Appendix – 4 SPSS screenshots for descriptive data



Analyzing teachers' characteristics by creating the table of frequencies in SPSS



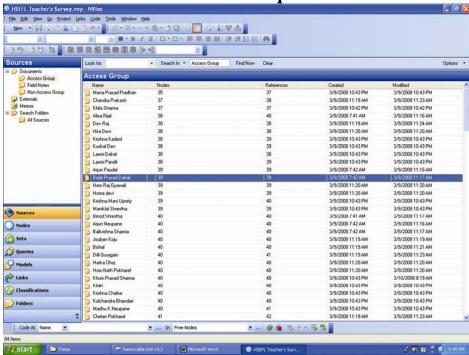
Analyzing correlation between gender and teacher's attitudes



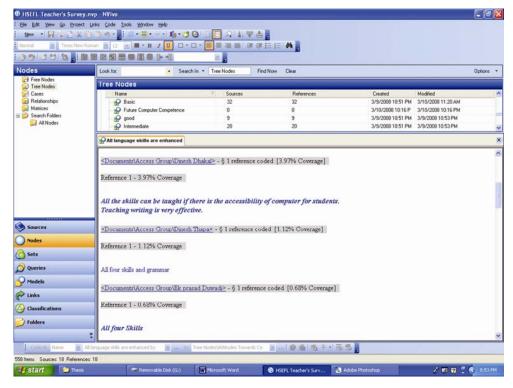
Bar diagram on Computer relative advantage and teachers' attitudes on observeability scale

Appendix - 5

NVivo-7 screenshots for qualitative data



Interview transcriptions for systematic coding in NVivo7 Data analysis software



Coded interview reference for **all language skills** systematic coding in NVivo7 Data analysis software

# Appendix - 6 Email response from the participants.

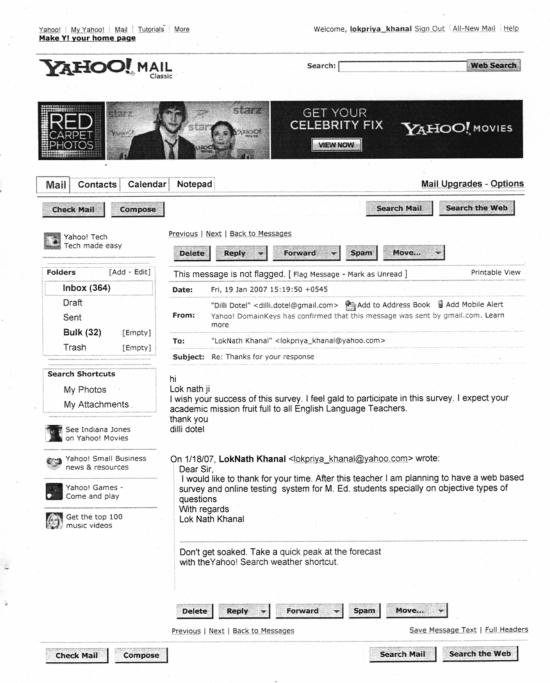
Gmail Calendar Documents Photos Reader Web more ▼ lokpriya@gmail.com | Settings | Older version | Help | Sign out Search Mail Search the Web Show search options Compose Mail ESPN.com - Arenas has MRI on knee - March 17 Web Clip < > « Back to Inbox Archive Report Spam Delete More Actions (Newer 576 of 594 Older) Inbox (353) addresees Inbox X New window Print all from Ignawali@wlink.com.np hide details 1/15/07 Reply Starred to lokpriya@gmail.com, date Mon, Jan 15, 2007 at 10:48 AM subject addresees
mailed-by wiink.com.pp

Dr. J. R. Awasthi <a href="mailto:right-substanding-substand subject addresees Chats mailed-by wlink.com.np Sent Mail Drafts (7) All Mail Spam (207) Trash Contacts Search, add, or invite Lokpriya Khanal Set status here AIM Chat with your AIM® buddles
Get started dghappy kiranti rapachalal Lekhnath Pathak Maahendra Thapa mayalu madhab shailendra.basnet free man Invited lekhnathsharmap. Options Add Contact Reply Forward Labels Edit labels Invite a friend Give Gmail to: « Back to Inbox Archive Report Spam Delete More Actions (Newer 576 of 594 Older) Send Invite 50 left Preview Invite Add your Gmail inbox to the Google homepage You are currently using 30 MB (0%) of your 6532 MB.

-

Gmail view: standard | turn off chat | basic HTML Learn more

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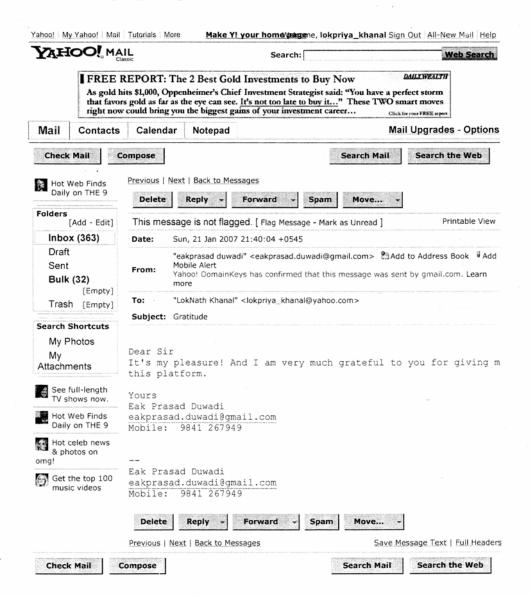
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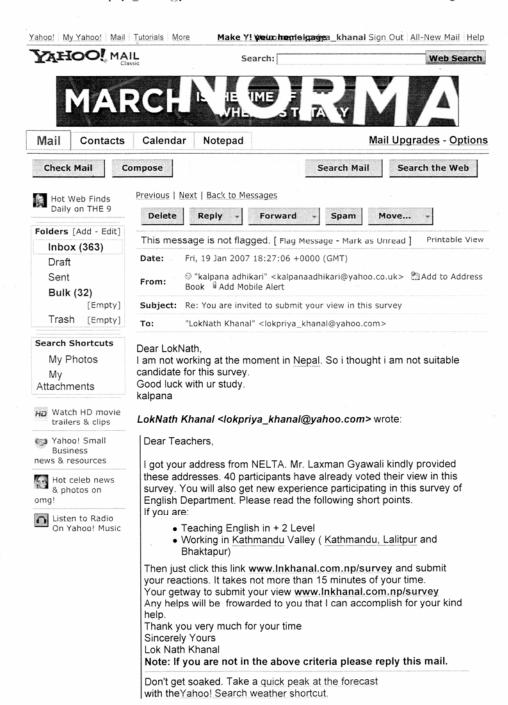
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To learn more about how we use your information, see our Privacy Policy



## Appendix - 7

Data acquired from the Website's Administration Control Panel, Interview and Questionnaires.

Survey # 1

1. Email: (Required) blik\_asym@hotmail.com 2. Gender: (Required)

Male

3. Age: (Required)

36-45

4. Highest academic degree received: (Required)

Master Degree

5. Years of teaching experience: (Required)

15-Oct

6. Annual Income (Rs): (Required)

150000

7. I had used computer and the Internet in my schooling education. (Required)

No

8. Teaching methods your use most often. (Required)

Lecture

9. School Location: (Required)

Suburban

Section One: General Attitudes towards Computer and the Internet

Instruction: Please indicate your reaction to each of the following statements:

10. I enjoy doing things on a computer (Required)

Agree

11. Computer can enhance students' learning. (Required)

Agree

12. Computers are difficult to understand. (Required)

Undecided

13. I would like to learn teaching with technology. (Required)

Agree

14. Learning on the Internet is boring to me. (Required)

Undecided

15. Computer and the Internet are two powerful interactive tools for teaching purpose.

(Required)

Strongly Agree

16. I don't care the importance of computer in teaching (Required)

Disagree

17. Use of the Internet increases my job performance. (Required)

Agree

18. Computers do more harm than good. (Required)

Disagree

19. Using a computer prevents me from being creative. (Required)

Undecided

Section Two: Computer Imputes

Instruction: Please indicate your reaction to each of the following statements:

20. Computer will improve the quality of education. (Required)

Agree

21. Computers are not useful for language learning. (Required)

Disagree

22. Teaching with computers offer real advantages over traditional methods of instruction.

(Required)

Strongly Agree

23. With computer it is possible to do practical things. (Required)

Strongly Agree

24. I like reading about computers and the Internet. (Required)

Agree

25. Computer complicates my task in the classroom (Required)

Disagree

26. Computer should be priority in Education. (Required)

Strongly Agree

27. I will use computers many ways in my life. (Required)

Agree

28. Learning about computer and the Internet is a waste of time. (Required)

Undecided

Section Three: Cultural Perception

Instruction: Please indicate your reaction to each of the following statements:

29. I have been using computer since my middle schooling education. (Required) Disagree

30. I use email rather than postal service for remote communication. (Required) Agree

31. Use of computer and the Internet contradict with my religion. (Required) Strongly Disagree

32. Computers dehumanize society by treating everyone as a number. (Required) Disagree

33. Internet is used in Nepal only for chatting and entertainment purpose. (Required) Agree

34. Computer will improve our living standard. (Required)

Strongly Agree

35. We need computer programs and the Internet information that suit our culture and identity. (Required)

Agree

36. I live in the community where people frequently use computer and the Internet. (Required)

Agree

Section Four: Level of Computer Competence

General Instruction: This section is designed for your level of proficiency in using computer and the internet applications.

Beginner: The less frequent computer and the Internet user who can slowly navigate through a computer operating system:

"Intermediate: The frequent computer and the Internet user who feels at ease with the keyboard and mouse. The intermediate user can quickly and easily navigate through the computer's operating system:"

Advanced: The daily computer and the Internet user who can quickly and easily navigate through a computer's operating system. He can solves common computer problems.

"Never use: One who is not familiar with computer and the Internet applications."

Instruction: Please indicate your reaction to each of the following statements:

37. Install new software on a computer. (Required)

Beginner

38. Use a printer. (Required)

Beginner

39. Use CD-ROM (Required)

Beginner

40. Use a multimedia projector (Required)

Never use

41. Operate word processing program (e.g. MS Word) (Required)

Intermediate

42. Operate a presentation program (e.g. MS PowerPoint) (Required)

Beginner

43. Operate a spreadsheet program (e.g. MS. Excel) (Required)

Beginner

44. Operate a multimedia program (e.g. DVD, Or Media Player) (Required)

Intermediate

45. Operate an animation program (e.g. Flash) (Required)

Never use

46. Operate a database program (e.g. MS Access) (Required)

Never use

47. Operate a programming language (e.g. C, or C++) (Required)

Never use

48. Operate a graphic program (e.g. Photoshop or CorelDraw) (Required)

Never use

49. Create and manage computer files and folders. (Required)

Intermediate

50. Use the internet for communication (e.g. E-mail and Instant messenger) (Required)

Intermediate

51. Download the useful file from the internet (Required)

**Beginner** 

52. Remove computer virus. (Required)

Beginner

Section Five: Availability of Computer

General Instruction: This section is designed for your access on computer and the Internet.

Instruction: Please indicate your reaction to each of the following statements:

53. I use computer at home. (Required)

Daily

54. I use Internet at home (Required)

Never

55. I use computer at my college. (Required)

Once a week

56. I use the Internet at Cyber Café, or Internet house (Required)

Once a week

57. Other please specify:

This Question was not Answered

58. Suggestions and comments:

This Ouestion was not Answered

Survey # 2

1. Email: (Required)

chirayu\_dhungel@hotmail.com

2. Gender: (Required)

Male

3. Age: (Required)

36-45

4. Highest academic degree received: (Required)

Master Degree

5. Years of teaching experience: (Required)

15-Oct

6. Annual Income (Rs): (Required)

150000

7. I had used computer and the Internet in my schooling education. (Required)

No

8. Teaching methods your use most often. (Required)

Lecture

9. School Location: (Required)

Suburban

Section One: General Attitudes towards Computer and the Internet

Instruction: Please indicate your reaction to each of the following statements:

10. I enjoy doing things on a computer (Required)

Agree

11. Computer can enhance students' learning. (Required)

Agree

12. Computers are difficult to understand. (Required)

Undecided

13. I would like to learn teaching with technology. (Required)

Agree

14. Learning on the Internet is boring to me. (Required)

Disagree

15. Computer and the Internet are two powerful interactive tools for teaching purpose.

(Required)

Strongly Agree

16. I don't care the importance of computer in teaching (Required)

Disagree

17. Use of the Internet increases my job performance. (Required)

Agree

18. Computers do more harm than good. (Required)

Disagree

19. Using a computer prevents me from being creative. (Required)

Undecided

Section Two: Computer Imputes

Instruction: Please indicate your reaction to each of the following statements:

20. Computer will improve the quality of education. (Required)

Strongly Agree

21. Computers are not useful for language learning. (Required)

Strongly Disagree

22. Teaching with computers offer real advantages over traditional methods of instruction.

(Required)

Agree

23. With computer it is possible to do practical things. (Required)

Strongly Agree

24. I like reading about computers and the Internet. (Required)

Agree

25. Computer complicates my task in the classroom (Required)

Disagree

26. Computer should be priority in Education. (Required)

Strongly Agree

27. I will use computers many ways in my life. (Required)

Agree

28. Learning about computer and the Internet is a waste of time. (Required)

Disagree

Section Three: Cultural Perception

Instruction: Please indicate your reaction to each of the following statements:

29. I have been using computer since my middle schooling education. (Required)

Undecided

30. I use email rather than postal service for remote communication. (Required)

Agree

31. Use of computer and the Internet contradict with my religion. (Required)

Disagree

32. Computers dehumanize society by treating everyone as a number. (Required)

Disagree

33. Internet is used in Nepal only for chatting and entertainment purpose. (Required)

Undecided

34. Computer will improve our living standard. (Required)

Agree

35. We need computer programs and the Internet information that suit our culture and identity. (Required)

Agree

36. I live in the community where people frequently use computer and the Internet.

(Required)

Agree

Section Four: Level of Computer Competence

General Instruction: This section is designed for your level of proficiency in using computer and the internet applications.

Beginner: The less frequent computer and the Internet user who can slowly navigate through a computer operating system:

"Intermediate: The frequent computer and the Internet user who feels at ease with the keyboard and mouse. The intermediate user can quickly and easily navigate through the computer's operating system:"

Advanced: The daily computer and the Internet user who can quickly and easily navigate through a computer's operating system. He can solves common computer problems.

"Never use: One who is not familiar with computer and the Internet applications."

Instruction: Please indicate your reaction to each of the following statements:

37. Install new software on a computer. (Required)

Beginner

38. Use a printer. (Required)

Beginner

39. Use CD-ROM (Required)

Beginner

40. Use a multimedia projector (Required)

Beginner

41. Operate word processing program (e.g. MS Word) (Required)

Intermediate

42. Operate a presentation program (e.g. MS PowerPoint) (Required)

Intermediate

43. Operate a spreadsheet program (e.g. MS. Excel) (Required)

Beginner

44. Operate a multimedia program (e.g. DVD, Or Media Player) (Required)

Beginner

45. Operate an animation program (e.g. Flash) (Required)

Never use

46. Operate a database program (e.g. MS Access) (Required)

Never use

47. Operate a programming language (e.g. C, or C++) (Required)

Never use

48. Operate a graphic program (e.g. Photoshop or CorelDraw) (Required)

Never use

49. Create and manage computer files and folders. (Required)

Intermediate

50. Use the internet for communication (e.g. E-mail and Instant messenger) (Required)

Intermediate

51. Download the useful file from the internet (Required)

Beginner

52. Remove computer virus. (Required)

Beginner

Section Five: Availability of Computer

General Instruction: This section is designed for your access on computer and the Internet.

Instruction: Please indicate your reaction to each of the following statements:

53. I use computer at home. (Required)

Daily

54. I use Internet at home (Required)

Never

55. I use computer at my college. (Required)

Once a week

56. I use the Internet at Cyber Café, or Internet house (Required)

Once a week

57. Other please specify:

This Question was not Answered

58. Suggestions and comments:

This Question was not Answered

Survey # 3

1. Email: (Required)

yourjustganesh

2. Gender: (Required)

Male

3. Age: (Required)

25-35

4. Highest academic degree received: (Required)

Master Degree

5. Years of teaching experience: (Required)

15-Oct

6. Annual Income (Rs): (Required)

120000

7. I had used computer and the Internet in my schooling education. (Required)

Nο

8. Teaching methods your use most often. (Required)

Lecture

9. School Location: (Required)

Suburban

Section One: General Attitudes towards Computer and the Internet

Instruction: Please indicate your reaction to each of the following statements:

10. I enjoy doing things on a computer (Required)

Strongly Agree

11. Computer can enhance students' learning. (Required)

Strongly Agree

12. Computers are difficult to understand. (Required)

Undecided

13. I would like to learn teaching with technology. (Required)

Agree

14. Learning on the Internet is boring to me. (Required)

Disagree

15. Computer and the Internet are two powerful interactive tools for teaching purpose.

(Required)

Strongly Agree

16. I don't care the importance of computer in teaching (Required)

Strongly Disagree

17. Use of the Internet increases my job performance. (Required)

Agree

18. Computers do more harm than good. (Required)

Agree

19. Using a computer prevents me from being creative. (Required)

Disagree

Section Two: Computer Imputes

Instruction: Please indicate your reaction to each of the following statements:

20. Computer will improve the quality of education. (Required)

Strongly Agree

21. Computers are not useful for language learning. (Required)

Disagree

22. Teaching with computers offer real advantages over traditional methods of instruction.

(Required)

Strongly Agree

23. With computer it is possible to do practical things. (Required)

Strongly Agree

24. I like reading about computers and the Internet. (Required)

Agree

25. Computer complicates my task in the classroom (Required)

Agree

26. Computer should be priority in Education. (Required)

Strongly Agree

27. I will use computers many ways in my life. (Required)

Agree

28. Learning about computer and the Internet is a waste of time. (Required)

Strongly Disagree

Section Three: Cultural Perception

Instruction: Please indicate your reaction to each of the following statements:

29. I have been using computer since my middle schooling education. (Required)

Disagree

30. I use email rather than postal service for remote communication. (Required)

Agree

31. Use of computer and the Internet contradict with my religion. (Required)

Strongly Disagree

32. Computers dehumanize society by treating everyone as a number. (Required)

Disagree

33. Internet is used in Nepal only for chatting and entertainment purpose. (Required)

Undecided

34. Computer will improve our living standard. (Required)

Agree

35. We need computer programs and the Internet information that suit our culture and identity. (Required)

Strongly Agree

36. I live in the community where people frequently use computer and the Internet.

(Required)

Agree

Section Four: Level of Computer Competence

General Instruction: This section is designed for your level of proficiency in using computer and the internet applications.

Beginner: The less frequent computer and the Internet user who can slowly navigate through a computer operating system:

"Intermediate: The frequent computer and the Internet user who feels at ease with the keyboard and mouse. The intermediate user can quickly and easily navigate through the computer's operating system:"

Advanced: The daily computer and the Internet user who can quickly and easily navigate through a computer's operating system. He can solves common computer problems.

"Never use: One who is not familiar with computer and the Internet applications."

Instruction: Please indicate your reaction to each of the following statements:

37. Install new software on a computer. (Required)

Beginner

38. Use a printer. (Required)

Beginner

39. Use CD-ROM (Required)

Intermediate

40. Use a multimedia projector (Required)

Intermediate

41. Operate word processing program (e.g. MS Word) (Required)

Intermediate

42. Operate a presentation program (e.g. MS PowerPoint) (Required)

Beginner

43. Operate a spreadsheet program (e.g. MS. Excel) (Required)

Beginner

44. Operate a multimedia program (e.g. DVD, Or Media Player) (Required)

Intermediate

45. Operate an animation program (e.g. Flash) (Required)

Never use

46. Operate a database program (e.g. MS Access) (Required)

Never use

47. Operate a programming language (e.g. C, or C++) (Required)

Never use

48. Operate a graphic program (e.g. Photoshop or CorelDraw) (Required)

Beginner

49. Create and manage computer files and folders. (Required)

Intermediate

50. Use the internet for communication (e.g. E-mail and Instant messenger) (Required)

Intermediate

51. Download the useful file from the internet (Required)

Beginner

52. Remove computer virus. (Required)

Beginner

Section Five: Availability of Computer

General Instruction: This section is designed for your access on computer and the Internet.

Instruction: Please indicate your reaction to each of the following statements:

53. I use computer at home. (Required)

Daily

54. I use Internet at home (Required)

Never

55. I use computer at my college. (Required)

Once a week

56. I use the Internet at Cyber Café, or Internet house (Required)

Once a week

57. Other please specify:

This Question was not Answered

58. Suggestions and comments:

This Question was not Answered

#### (Please use sheet no 2 if you do not have access in computer and the Internet)

Computer Access Group

Sheet-01

Dear teacher.

This is the first primary survey of how the English Language Teachers of Higher Secondary School (+2) in Kathmandu valley perceive the use of computer and the Internet in education. Please provide very short answer of the following questions.

- How old are you? 1.
  - +9 m 29 yrs old.
- How long have you been teaching?
  - -> 9've been teaching since 2058 B.S. (in Intermediate level)
- Which methods do you prefer (Old e.g. grammar translation, drills or new e.g. interactive, communicative etc.)?
- -> 9 use basically the communicative & interactive methols but depending upon topic, drills and translation too
- 4. What new methods, if any, are you using in teaching?
  - -> Group work, presentation (individual & group) with facilitation.
- 5. How long have you been using computer?
  - → g've been using it for about 8 years.
- 6. What is your level of computer proficiency?
- -> 9've recently completed designing package, GIS/Remote sensing, Account package training too.
- 7. How often do you use computer for teaching purpose?
- To you long have you been using the Internet?
- 8. How long have you been using the Internet?
  - -) give been using the Internet for 6 years.
- What do you know about the spread of computer and the Internet in education in Kathmandu valley?
- -> Most of the educational institutions have considered computer and
- 10. What kind of information do you want to get from the Internet?
- 3'd like to browse the websites containing literary works for achieving knowledge related
  11. Can you give any examples that you have used computer for educational purpose? English literat
- - -> g've searched websites for note-making, definitions of arbitar
- 12. Can you mention any benefits that you got after learning the Internet in your professional life?
- -> Yes, Knowledge about various fields is the result of internet surf
- 13. How often do you visit the websites which are helpful for your professional development?
  - -> 9+ depends upon need. About six eight hours a Week.

14. Can you name any sites that you think most useful?
→ Usually g search things using www.google.com or other Search engines. So g think it's useful 15. What software do you use most often?
15. What software do you use most often?
>) Microsoft Encarta Encyclopaedia, Microsoft Office 2003, 0x ford Advanced Dictionary etc.
16. Do you think computer has eased your work at school and outside school?
→ To a great extent. It has really assisted in teaching.
17. What kind of problem do you face most often while operating the software?
of the problem is mail or internet related. Downloading consumes a lot of cost & time consuming to
18. Mention any simple hardware problems you have solved yourself? Viruses often disturb we
J Solve most of the hardware problems myself kneh as repairing CD drives, upgrading computer, replacing moderns and other physical ( 19. How often do you interact with students using E-mail?  Parts with new one
parts with read one
-) Ravely but 9've enclosed the essential data in my personal well site from which they can downlade data using that address.  20. What purpose do you use computer and the Internet mostly?
I for question setting, question collection, note making (preparing)
reference for the text, searching meanings 4 phrasal vertes etc.
21. What language aspects and skills do you think is effective by using Computer Assisted Language Teaching?
-) So und and Speech (Correct pronunciation) / Grammatical Corrected Spelling errors reduction
22. Is the school administration supportive in your endeavor to utilize and integrate computer and the Internet tools in teaching and learning activities? If yes how?
-> Yes. The facility of internet is provided by College for teacher willing to use computer in teaching.
willing to use computer in teaching
<i>y</i> .
23. Have your say on implementation of computer and the Internet in education.
+ Yes. I talked to chief/ principal for renewal and ets
advantages for education end he agreed. As a result, teacher
23. Have your say on implementation of computer and the Internet in education.  + Yes. I talked to chief / principal for renewal and els advantages for education end he agreed. As a result, teacher are facilitates.
I'The questionnaire is really appreciable since I came to know
The questionnaire is really appreciable since I came to know the how offen we use the insportance of internet & computer in teaching/learning which I was following unknowingly before
Note: If you will be willing to participate in the follow-up inquiry, please provide your name, address, phone number and e-mail and other English Language Teacher you want to invite in this survey.
Name: Jouban Kojiy Address: Bhaktapur Industrial Areg-18,
Phone: 985(056626 E-mail: Januar ) yahoo com jaman koji ah
Phone: 9851056626 E-mail: Jauran Dyahoo. Com jauran koju Ol Teacher's Name: Radhishyam Basakala Address: Yalichlen by 201 - 10, 156t.
Phone: 6618481 E-mail: prabhathss@ntc.net.np. Coffice)
Thank you very much for your kind co-operation!

#### Dear teacher.

This is the first primary survey of how the English Language Teachers of Higher Secondary School (+2) in Kathmandu valley perceive the use of computer and the Internet in education. Please provide very short answer of the following questions.

1. How old are you?

I'm 33 years old.

2. How long have you been teaching?

I have been teaching for B years De + 2 & College love.

3. What do you think the computer is used for?

Computer is used for getting the current information &

Yellivit data.

4. Which method do you use mostly in teaching English as a second language?

Communicative interactive & discussion

5. Have you ever experienced learning through computer?

No, not yet.

6. Have you tried to learn computer?

yes, g've tried to learn

\* 7. What do you want computer and the Internet do for you?

I want them for providingus collectional materials

8. Have you ever felt that computer users have made their work easy and more effective in both personal and professional life?

Yes, they have made their work easy & more effective

4. Is computer necessary for you? Or, is it just the matter of luxury?

At present, in the field of education, It is necessary for us.

19. Do you think computers and the Internet are spreading in every aspects of life?

Yes, it is obvious hat they are spreading in every aspects of 1,

11. How do you take advantages of computer and the Internet?

I haven't learnt much trais why 9 haven't taken much advantage of computer & internet out 9 m trying to do so.

12. Are you interested in learning computer for your professional development?

yes, of course.

13. Which methods do you prefer (Old e.g. grammar translation, drills or new e.g. interactive, communicative etc.)?

According to the level to subject matter different methods

14. Do you think computer will help in your teaching profession?

I teink so

15. Do you think you can get more information in the Internet?
yes, Certainly.
16. Do you think computer and the Internet are expensive today?
Not so expansive for the 19 teachers.
17. What barriers do you have in learning computer and the Internet?
Because of the time & own comprover at home.
18. If there is online vacancy announcement that suits for you, how do you approach it?
I'm not so bring in computer that's why I can try it myself with
Little Suggestions 19. Do you think computer should be available for teachers at every school as a resource tool?
It is not possible to provide the computers everywherebut 16's
Service have to be expanded stilly & gradually. 20. Are you planning to learn computer and the Internet?
yes, 9 havebeen learning at present
21. 'Computer can save your time and energy'. How do you agree with the statement?
It can save but spous the creativity of the 19 learners.
22. If computer and the Internet facilities are improved at your school, how will you carry out more computer assisted teaching and learning activities?
g'will try to take help of these means as possible as far,
23. How do you increase your computer and the Internet access in future?
First 9 have to learn well of there have to think outout it.
24. Suggestions and comments:
Completer is only mean but not an end that's why in the
we have to use them in proper way.
Note: If you will be willing to participate in the follow-up inquiry, please provide your name, address, phone number and e-mail and other English Language Teacher you want to invite in this survey.
Name: SLANA DLAKAL Address: Kamalvirayak-3.BXt.
Phone:
Teacher's Name:
Phone:£-mail:
Thank you very much for your kind co-operation!

#### Tribhuvan University Central Department of English Language Education Kirtipur, Kathmandu

Dear Teacher,

General Background Information

The diffusion of technological innovation in every field has created a burning pressure to implement the technology in teaching and learning field. We, the English Language Teachers of Nepal will not remain being untouched from the impact of the technology. This questionnaire is designed to assess your perceptions of the use of computer and the internet for educational purpose. The result of your response will help all the English Language Teacher in Nepal to develop a common view for the access to the computer and the Internet as well as for the benefit of your students' productivity. It should require about 15 minutes of your time. Usually it is best to respond with your first impression, without giving questions much thought. Your answer and personal details will be used for a true data for further research and will be published on web for your future use too.

**General Instruction:** The purpose of this questionnaire is to examine your attitudes towards the use of computer and the Internet for educational purpose in Kathmandu valley. The questionnaire consists of five sections. Each section begins with some directions pertaining to that part only. As you begin each section please read the instruction carefully and provides your responses candidly in the format requested.

Full Name: D.R. Gautam Gender: ✓ Male ☐ Female
Age: 28 Address: Balaju, Kathmandu
Phone: 9841316109 Email dyhari @hotmail.com
Highest academic degree received: (Please tick one)
(a) Bachelor Degree
(b) Master Degree
(c) Master of Philosophy (M.Phil.)
(d) Doctor of Philosophy (Ph. D.)
Years of teaching experience:5 Annual Income (Rs): .2,00,000
Learned through computer: Yes No
Computer Training (Months):6Mo.nths

i.,	Lecture
ii.	Demonstration
iii.	Discussion
iv.	Hand outs and explanation
v.	Experiment
vi.	Role playing
, yii.	Communicative
viii.	Teacher Centered
ix.	Student Centered
x.	Computer Assisted instruction
xi.	Other (please specify)
ocation: (pl	ease choose one) 📈 Urban 🔲 Suburban 🖂 Rural

Teaching methods your use most often (Tick any two)

#### Section One: General Attitudes towards Computer and the Internet

**Instruction:** Please indicate your reaction to each of the following statements by using tick mark  $(\sqrt{})$  in the right cell that represent your level of agreement and disagreement with it. Every statement is to be check marked.

#### $*SA = Strongly\ Agree,\ A = Agree,\ U = Undecided\ D = Disagree\ and\ SD = Strongly\ Disagree$

(A) (1996年)。 1997年) 1997年 - 19	SA	A	U	D	SD
1. I enjoy doing things on a computer		/			
2. Computer can enhance students' learning.		<b>/</b>			
3. Computers are difficult to understand.	-			~	
4. I would like to learn teaching with technology.		$\checkmark$			
5. Learning on the Internet is boring to me.				~	
<ol> <li>Computer and the Internet are two powerful interactive tools for teaching purpose.</li> </ol>	~				/
7. I don't care the importance of computer in teaching				/	
8. Use of the Internet increases my job performance.		<b>/</b>			
9. Computers do more harm than good.					<b>~</b>

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10. Using a computer prevents me from being creative.		~	
11. Internet is a fast and effective means of getting information	~		
12. Computer will make the students passive learner.			

#### Section Two: Computer Imputes

**Instruction:** Please indicate your reaction to each of the following statements by the tick mark  $(\sqrt{})$  in the right cell that represent your level of agreement and disagreement with the statement. Every statement is to be check marked.

#### $*SA = Strongly\ Agree,\ A = Agree,\ U = Undecided\ D = Disagree\ and\ SD = Strongly\ Disagree$

	SA	A	U	D	SD
Computer will improve the quality of education.	<b>/</b>				
*Computers are not useful for language learning.				<b>/</b>	
Teaching with computers offer real advantages over traditional methods of instruction.	<b>/</b>				
With computer it is possible to do practical things.	V		* *		
I like reading about computers and the Internet.		<b>/</b>			
*Computer complicates my task in the classroom				<b>/</b>	
Computer should be priority in Education.	/				
I will use computers many ways in my life.			<b>/</b>		
*Learning about computer and the Internet is a waste of time.				<b>/</b>	
I have seen some language teachers use computer in teaching English in Kathmandu Valley.		/			
All students should have an opportunity to learn through computer at school.					
I need more time so I can learn to use computer and the Internet.	/				
I have no difficulty in understanding the basic functions of computers		<b>/</b>	1		

D. + . O

#### Section Three: Cultural Perception

**Instruction:** Please indicate your reaction to each of the following statements by the tick mark  $(\sqrt{})$  in the right cell that represent your response with the statement. Every statement is to be check marked.

 $*SA = Strongly\ Agree,\ A = Agree,\ U = Undecided\ D = Disagree\ and\ SD = Strongly\ Disagree$ 

	SA	A	U	D	SD
I have been using computer since my middle schooling education.				~	
2. I use email rather than postal service for remote communication.			/		
3. Use of computer and the Internet contradict with my religion	112				~
Computers dehumanize society by treating everyone as a number.					~
5. Internet is used in Nepal only for chatting and entertainment purpose.			/		
6. Computer will improve our living standard.		V			
7. We need computer programs and the Internet information that suit our culture and identity.		~			
8. I live in the community where people frequently use computer and the Internet.				~	
I browse news web sites daily to view the daily news and participate in discussion forum.				~	
10. People will forget their tradition because of the use of computer and the Internet.				~	
11. I feel computers are necessary tools in both educational and work setting		~			
12. Now computers are used everywhere		V			

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#### Section Four: Level of Computer Competence

General Instruction: This section is designed for your level of proficiency in using computer and the internet applications. Please specify your level by checking ( $\sqrt{\ }$ ) the appropriate box. I would like to request to use the following scale for your understanding.

- Beginner: The less frequent computer and the Internet user who can slowly navigate through a computer operating system in order to open, edit and create files but does not know how to recognize and solve very simple problems.
- Intermediate: The frequent computer and the Internet user who feels at ease with the keyboard and mouse. The intermediate user can quickly and easily navigate through the computer's operating system as well as open, edit and create files and he/she has very keen interest to explore the use of computer technology and recognize and solve very simple problems.
- Advanced: The daily computer and the Internet user who can quickly and easily navigate through a computer's operating system. He/she can open, edit, create and manage files and has fairly good foundation in most computer and Internet applications and has relatively expertise in troubleshooting and solving common problems.
- Never use: One who is not familiar with computer and the Internet application.

**Instruction:** Please indicate your reaction to each of the following statements by the tick mark  $(\sqrt{})$  in the right cell that represent your response with the statement. Every statement is to be check marked.

#### Beginner, Intermediate, Advanced and Never use

You can handle the following applications and tasks	Beginner	Intermediate	Advanced	Never use
1, Install new software on a computer.				~
2. Use a printer.				V
3. Use CD-ROM	V			
4. Use a multimedia projector				V
5. Operate word processing program (e.g. MS Word).	~			
6. Operate a presentation program (e.g. MS PowerPoint)	V			
7. Operate a spreadsheet program (e.g. MS. Excel)	· V			

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8. Operate a multimedia program (e.g. DVD, Or Media Player)	V		
9 Operate an animation program (e.g. Flash)		-	~
10. Operate a database program (e.g. MS Access)			V
11. Operate a programming language (e.g. C, or C++)			V
12. Operate a graphic program (e.g. Photoshop or CorelDraw)			V
13. Create and manage computer files and folders.	~		
14. Use the internet for communication (e.g. E-mail and Instant messenger)	V		
15. Download the useful file from the internet	V		
16. Remove computer virus.	V		

### Section Five: Availability of Computer

General Instruction: This section is designed for your access on computer and the Internet.

**Instruction:** Please indicate your reaction to each of the following statements by the tick mark  $(\sqrt{})$  in the right cell that represent your response with the statement. Every statement is to be check marked.

	Daily	2 or 3 times a week	Once a week	Once a month	Never
1. I use computer at home.	V				
2. I use Internet at home					~
3. I use computer at my college.			~		
4. I use the Internet at Cyber Café, or Internet house			1		
5. I use computer at my friend's home					V
6. Other. Please specify					

10.4.0

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Appendix - 8 List of Participants (HSS English Teachers)

Akhileshwor Jha

Alisa Rijal (Dahal)

Anita Dhungel

Arjun Neupane

Arjun Paudel

Babar Dhungana

Badri Prasad Dahal

Balkrishna Sharma

Besh Raj Sharma

Bhagawati Sharma

Bhimsen Bhatta

Bhisma Bhattarai

Bimal Das

Bimal Gautam

Binod Shrestha

Bishal Sharma

Bishwo Raj Sharma

Chandra Karki

Chandra Pd. Luitel

Chetan Pokharel

Chetan Niraula

D. R Gautam

Deepak Ayer

Devi Gautam

Devi Rai

Dhruba Bhandari

Dil Bahadur Niroula

Dilli Bhattarai

Dinesh Sharma

Dinesh Thapa

Dipanka Shakya

Dipendra K.C.

Diwakar Sharma

Ek Prasad Duwadi

Ganesh P Shiwakoti

Gita Sitaula

Gokul Dotel

Gopal Adhikari

Gopi Lal Neupane

Govinda K.C.

Hari Prasad Kafle

Hari Ghimire

Hari Odari

Harka Dhoj

Hem Raj Gyawali

Himal Adhikari

Hira Devi Dhungana

Homa Devi

Indra Prasad Osti

Ishawari Sharma

Jayaprakash Koirala

Joban Koju

Kalina Karki

Kamal Paudel

Kamal Raj Pathak

Kamal Subba

Kedar Bhattarai

Kedar Rimal

Keshab Kafle

Khum Prasad Sharma

Krishna Chalise

Krishna Mani Upereti

Krishna Niraula

Laxmi Dahal

Laxmi Pandit

Lila Nath Paudel

Madhu Neupane

Mana Prasad Pradhan

Mangal Jha

Maniklal Shrestha

Nabin Shrestha

Namrata Karki

Narayan Sharma

Navaraj Dhungana

Nira Regmi

Parbata Chapangain

Prakash Koirala

Pratibha Shrestha

Prem Phyak

Rabindra Sapkota

Rabindra Sapnga

Radheshyam Baskota

Radheshyam Baskota

Raj Narayan Yadav

Rajendra Giri

Rajendra Limbu

Rajendra Rijal

Rajesh Chapagain

Raju Shakya

Rambabu Paudel

Ramesh khanal

Rita Basnet

Rudra Prasad Paudel

Rupak Adhikari

S.K Dutta

Sangita Rayamajhi

Sanjeev Shrestha

Sarita Dewan

Shankar Yadav

Shanta Dhakura

Shantosh Acharya

Shila Bhandari

Shiva Dhakal

Subash Acharya

Sudhir Kumar Jha

Sulochana Neupane

Suman Neupane

Sunil Sen Gupta

Suvadra Siwakoti

Tika Mainali

Tirtha Bhattarai

Tulish Prasad Joshi

Tulsi Niraula

Uma Neupane

Vijaya Kharel

Vikas Lamsal

Yagya Pandey

Yam Nath Ghimire

Yogendra Bhattarai

Appendix – 9

Personal Website