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# Information and Communication Technology in Foreign Language Classes in English: Roles and Practices

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# Information and Communication Technology in Foreign Language Classes in English: Roles and Practices

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#### **Abstract**

Teaching and learning process in 21st century has been embedded with technology. Use of ICTs plays crucial role in ameliorating knowledge acquisition in general and enhancing English Language mastering in particular. The government of Nepal has made provision of integrating ICTs in school education with the aim of enhancing quality education and make both teachers and learners confidence and competitive in the present global world. In this context, this research intended to investigate roles and practices of ICTs at English as Foreign language classes (EFL) of Nepal. To achieve the objective, explanatory sequential mixed research design was adopted. Survey questionnaire, unstructured interview and non-participant observation were used to as the tools of data collection and forty secondary English teachers (20 from public schools & 20 from private schools) were the sample population. Two datasets; quantitative and qualitative were collected and analyzed sequentially. The findings of the research reveal that majority of the teachers were positive towards roles of ICTs in language teaching even they were doubt if ICTs could develop creative and critical abilities of the students. Though the teachers practiced ICTs in their classes, they felt discomfort in using new ICT tools and applications. The findings imply that teachers should be given training on ICT use for building up their skills; knowledge and confidence to achieve optimum advantages form it.

#### Introduction

The advent of Information and Communication Technology (ICT) and its easy accessibility globally and locally has become mainstream in present education system throughout the world. The Internet and its use through several devices like personal computers, smartphones and other devices have become commonplace both for teachers and students. Computer integrated ICTs now are no more static, standalone but have become personal devices that play a decisive role on the way we get knowledge, the process we teach and learn, and the way we do. Information and communication technologies (ICTs) are currently being used in education to assist students to learn more effectively by providing teachers with access to a wide range of new pedagogy and their use in the field of language education has been a priority throughout the world during the last decade, but progress has been uneven (Pelgrum & law 2003). ICT has made the process and style of language teaching and learning ever changing. Today's language classrooms are drastically different from that of the mid to late 20<sup>th</sup> century (Eaton,

2010). The focus of language teaching is an integration of cultural, content and linguistic knowledge for making global communication effective and more comprehensive rather than teaching grammar, memorizing and learning rules and vocabulary in isolation from rote. UNESCO (2005) reiterates that most of the countries in the world have integrated ICT into their education system because of its profound implications in several domains of education. It enables both teachers and students for creating and constructing rich interactive and multisensory contexts with almost unlimited teaching and learning potential.

Using ICT in language teaching and learning gives the learners a huge exposure to the cultures of the people and countries where new language is spoken. The American Council on the Teaching Foreign Language [ACTFL] (2013) notes that language teaching and learning has been assisted and enhanced with the use of ICT. It is quite difficult to get any English language curricula at any level of education that do not make any provision of ICT and its use. ICTs have necessitated a change in the whole education system. ICTs can make some valuable contributions in the development of various aspects of education and learning through improving quality of learning, enhancing teaching quality, expanding the access of resources and improving management system (Haddad & Draxler, 2005). ICTs have potentials tools for both teaching and learning. Jayanthi and Kumar (2015) believe that ICTs create innovation and motivation for teachers and learners which brings good performance in the quality education. The 21st century academia has been rooted and guided by the technological advancement and the present day pedagogy is integrated with the use of ICTs. ICT integrated language teaching is interactive, updated and relevant for global connection and communication. Neumeier's (2005) study shows that the combination of ICTs with conventional mode in terms of subjects, contexts and objectives enhances better teaching and learning. In this sense, ICT enhances learning communicatively with both online and offline techno-based devices and it can be a potential educational tool for both teaching and learning. This is also a form of blended learning. In the same vein, Esch and Zahner (2000) point out that to make ICTs relevant to language teaching, a language teacher should be sure of accessibility, autonomy, interactivity and reflectivity of them.

During the last two decades, the use of ICT in language education has become a topic of interest and discussion in language educational realm. Its use gives the teachers and learners a real life contact with and exposure of people and countries where diverse languages are spoken and taught, and cultures are practiced. The use of ICT in language classroom focuses on obtaining, analyzing and organizing information to expose students with huge and authentic resources in the context like Nepal where teachers and students have very limited physical resources.

In this realm, the ICT master plan (2013-17) takes use of ICT in education as the strategy of reaching the goals of education in Nepal (MOE, 2013). Similarly, the recent SSDP (2017-2023) aims to use ICT as a significant tool to improve classroom delivery, maximizes access to teaching and learning materials, and enhance the effectiveness and efficiency of educational governance and management (MOE, 2016). Despite the need and relevance of ICT in teaching, Doff's (2015) study shows that e-learning devices have reached too high in developed countries language classes while they are in emerging phase in developing countries. Likewise, Shrestha (2018) points out that lack of teachers' confidence in ICTs and knowledge of using them is crucial

barrier in the context of Nepal. Moreover, Maski Rana's (2018) study concludes that ICTs implementation in language education has a number of problems and the government strategies to overcome these problems are inadequate and potentially unsustainable. In one side, the world is being digitized and in the next side, our teachers' motivation, skills, knowledge and attitudes are in questions. In this rationale, this study is an attempt to answer the following research questions:

- What is the attitude to teachers' towards the role of ICTs in teaching English at secondary level?
- What ICT tools are used in teaching English and what is their intensity?
- How the ICTs have been practicing in teaching English?

#### **Review of Literature**

Nepal is a country representing a complex cross section of linguistic and cultural diversities. It is multilingual, multicultural, multiracial and multi religious country. Nepal is defined as an independent, democratic, sovereign, secular, inclusive, democratic and federal country having seven provinces include rural municipalities, municipalities, sub-metropolitan and metropolitan cities composite (Constitution of Nepal, 2015). Central Bureau of Statistics [CBS] (2011) records that about 80% of total population of Nepal resides in village area. It also reports that 125 castes and 123 languages are spoken in the country where a number of indistinct languages are merged under others due to the lack of complete information. However, Awasthi (2020) mentions that the number of languages spoken in Nepal has reached 129.

Showing the growing literacy rate, CBS (2011) reports that the literacy rate has been increased from 54.1% in 2001 to 65.9% in 2011 where male literacy rate is 75.1% and female literacy rate is 57.4%. The census also shows that 23.66% of the population in urban and only 3.77% of the rural population has access to computer technology. However, Pokharel (2016) states that 12.11% of people in urban and 1.24% people in rural areas have internet access connection. However, ministry of communication and information technology [MOCIT] (2018) reports that mobile penetration exceeding 100% and internet penetration reaches to 60%. This shows that digital technology has been increasing every year in Nepal. The increased usage of grows in technology has made its education policy to be directed towards integrating digital technology in education. As implementation part of it, Nepal government is trying to enhance smart classrooms, Open Learning Exchange Nepal (OLE) 2.0, online learning platform, rent a laptop program, GSM mapping, mobile learning centers in rural areas, centralized admission system, biometric attendance, and fitting CCTV cameras programs in school education of Nepal (MOCIT, 2018). Despite these efforts, the issues explored in this study are what, why and how the ICT is used by English language teachers in teaching English at secondary level.

#### **ICT Policies in Nepal**

ICT in education is a new phenomenon in Nepal science the ICT education policy has been introduced in the last two decades. The IT policy of 2000 introduced information technology for the first time in Nepal and was revised in 2010 with the provision of expanding the access of internet to all schools with collaboration and coordination of both governmental and non-governmental organizations so that skilled human resources can be

produced for quality and relevant education (Joshi, 2017; Karki, 2019). In that time, very few awareness programs on the usefulness of ICT were conducted and some schools were given NPRs 50,000 for purchasing computer by the government and some NGOs and INGOs supported some schools with few set of computers (MOE, 2009). With the implementation of secondary sector reform plan [SSRP] (2009-2015), ICT associated teaching/learning strategies in all schools were expanded and Department of Education (DOE) provided 140,000 amount for each secondary school for purchasing 3 computer and a printer, and at the same time, some schools were supported with computers by some non-governmental organizations (MOE, 2009). The three year plan (2011-13) focuses on encouragement of ICT use in school education with the goals of increasing access to relevant and quality education in rural areas, to reduce digital divide and integration of ICT in all aspects of education (Joshi, 2017). It was the first government strategy to encourage ICT in education basically at school education level.

The first ICT education policy was ICT master plan (2013-2017) which aims to equal and equitable access for enhancing quality education by improving service delivery system and increasing digital device in education (MOE, 2013). The development and integration of ICT in education system, e-learning, ICT based teacher training, use of computer technology in classroom teaching and learning process, electronic based distance education and teacher training using ICT were highly prioritized in the national ICT policy 2015 (Joshi, 2017). ICT has been made not only a tool of teaching but also a part of teachers' professional growth and development.

The School Sector Development Plan [SSDP] (2016-2023) presents ICT as an integral part of school education where each subject curriculum is supposed to have been supported with ICT. More specifically, SSDP (2016-2023) focuses on (i) the adequate use of ICT to improve pedagogical practices like classroom delivery, increasing interaction, (ii) development of skilled human resources; instructional materials, (iii) integrating and incorporating ICT in the secondary curriculum through professional development guidelines and packages, (iv) the use of ICT for improvement and enhancement of overall educational governance and management effectively and efficiently, and (v) prepare ICT teaching and training materials both online and offline focusing on English, science and math (MOE, 2016). This policy intends to implement ICT in school to full extent for developing relevance skill and quality of education.

All these strategic policies are silent about ICT based classroom, buildings, furniture, internet connectivity, and technicians to monitor it, and subject related tools and software. This aspect shows that ICT education policy is still restricted to computer subject teaching and centralized to the central government and its policies. Despite these limitations at policy level, DOE and some INGOs and NGOs have been funding public schools with computers, laptops, printers and many more ICT tools and trainings for teachers to implement ICTs in their subjects with the aim of expanding education suitable to the modern global world by utilizing computer technologies (Maski Rana, 2018). Computer is kept as an optional subject in the secondary level from class 6 to 10 in public schools and as obligatory from class 3 to 8 and optional in 9 and 10 in private schools. Private schools are funding themselves and implementing ICT related activities with the aim of preparing the students who can compete in the global market in this digitized world.

#### **Teachers' Role in ICT Implementation**

Teachers are the key of classroom teaching learning context and the impact of ICT on their roles and the strategies they employ to facilitate learning environment is crucial and critical. An assumption appear in teaching learning context where using ICT to support learning requires significant change for all while there are number of evidences of appropriate learning environment without using ICT. The implementation of ICT in teaching and learning brings pervasive changes in professional practices of teachers where teachers are being changed from instructors to facilitators and dictators to prompters. Yunus (2007) argues that to implement ICTs for effective language teaching, it is important to understand the factors that are rooted behind teachers' decision regarding ICTs. These discourses reveal that teachers' role is shifting from teachers to learners in the sense that they require new competencies to be able to integrate ICT in teaching and learning English language. They are supposed to upgrade their professional skills and knowledge in their pedagogical practices and curriculum design, development and implementation to be able to integrate ICTs in teaching and learning language effectively, efficiently and successfully.

The use of ICT has brought a paradigm shift in the relationship between teachers and students. Erstad (2010b) from his study in Norway emphasizes on the role of teacher as being more advisor, critical dialogue partner of the students and leader for specific subject domains. This means to state that teacher is promoting greater independence of learning. Teachers use ICT to change the way that they interact with the students. In this vein, Scardamalia (2002) states that the teachers' role in using ICT in language teaching should be for promoting learning outcomes of the learners. In this sense, teachers use ICT to enhance their personal work, professional development and for developing and creating new strategies, thinking, reflecting on practice and engaging the students in several meaningful activities and tasks for better learning outcomes.

Studies made on ICT and education have reflected that it is essential to learn and use ICT for entrancing teaching and learning effectively, efficiently, informatively and successfully. In this context, Hennessy, Deaney, Ruthen and Winterbottom (2007) argue that teachers will be benefitted from the ICTs in supporting students to build link between scientific theory and empirical evidences. But Greene's (2008) from his study concludes that ICT in language education is burden in the developing countries where there is no proper ICT friendly classroom and curriculum and subject specific ICT resources. Moreover, Pravin and Salam (2015) in their research declare that learners can get chance to increase their exposure to language and skill in a meaningful context and can construct their own knowledge.

Very few researches related to ICT in language education have been carried out in Nepal. Poudel's (2018) study concedes that teachers integrate ICTs in ELT by using effective strategies though they have been facing resources, access, cost, skill and expertise to operate and manipulate related challenges. Moreover, Rana, Greenwood and Fox-Turnbull (2019) carried a research in implementation of Nepal's education policy in ICT: Examining current practice through ecological model as a part of qualitative case study and report that NGOs and government have symbiotic roles in ICT provision to rural schools in Nepal. Further, Rana and Rana (2020) from their study on ICT integration in teaching and learning activities in higher education conclude that there is

lack of clear strategy to implement ICT education policy, manage fund for ICT infrastructures and professional development of university staffs to integrate ICT in teacher education.

All these studies reveal the significant of ICT in language education. They are helpful to some extent to form ICT policy in education system. However, no research reveals how the teachers have perceived and practiced ICTs to meet the goals of education in Nepal. In this sense, this study is an attempt to explore secondary level English teachers' perspectives on the role of ICTs in teaching English and the practices in using ICTs. Thus, this research is different from previous studies in its problems, objectives, methodologies, contexts and findings.

#### Theoretical Stand of the Study

Behaviorism, cognitivism, and constructionism are the frequently used theories in technology. Lou (2005) notes that the rapid growth and development of ICTs in teaching and learning has given birth to several methods like problem based learning, case based learning, task based learning that are based on constructivist theory. Constructivist theory based methodologies and approaches are more student centered, promote group works, pair works and project works that can promote communicative ability, and they are process based focusing on inferring meaning, forming opinions and developing critical thoughts (Lou,2005). Unlike the teachers centered model in which teachers transfer and impose knowledge to students, knowledge is neither imposed nor transferred intact from one knower to other in constructivism (Karagiorgi & Symeou, 2005). In these literary backgrounds and theoretical aspects, this study employed constructivist approach as its theoretical framework to explore the teachers' skill and motivation in using ICT while teaching English at secondary level.

### Methodology

The philosophical and theoretical standpoint in this research is informed by the pragmatic paradigm and social constructivist theory which aims to explore roles and practices of ITCs in the phenomenon which the secondary level English teachers in Nepal have been experiencing and working in their socio-political context. For achieving the objective, Explanatory sequential mixed method design was used. Mixed methods research is a procedure for collecting, analyzing and mixing both quantitative and qualitative methods in a single study to understand a research problem (Creswell, 2014). In this design, first quantitative data were collected by using survey questionnaire. Based on the results of quantitative data, the researcher collected qualitative data with unstructured interview and nonparticipant class observation. The study employed both the primary and secondary sources of data because only one type of data alone could not fulfill the total requirement of the research. The primary data were collected by using questionnaire, interview and observation to the secondary level school teachers teaching English. The secondary data were collected from references, textbooks, journals, and other archive resources. The data and methodology have been triangulated to ensure validity and reliability of the findings.

Involving all the secondary level school teachers in this study was not possible due to constraints like time and scope of the study. In this context, it was essential to ensure that the study is representative. Thus, 40 secondary

level schools (20 public and 20 private) and 40 English teaching teachers (1 from each school) were selected, where schools were purposively selected and teachers were selected randomly. Further, only 6 teachers and their classes, who (three from public and three from private schools) were randomly selected for interview and class observation. The tools for collecting data were survey questionnaire, unstructured interview, and non-participant observation (see Appendix A, B, and C). The responses on survey questionnaire were analyzed by using simple statistical tools like tables and percentage and the responses collected from interview and observation were analyzed by means of content analysis. Both the quantitative and qualitative data analyses were integrated and interpreted in discussion. To maintain anonymity of the respondents, alphanumeric symbols, like T1, T2, T3... and T6 have been used.

#### **Results and Discussion**

This section of the research deals with the results and analysis on the information collected through survey questionnaire. The presentation and analysis of the results have been divided into two parts. The first one deals with quantitative analysis and the second qualitative.

#### **Quantitative Data Analysis**

This sub-section delineates the results obtained from the survey questionnaire into three different headings, prepared on the basis of questionnaire asked to the respondents.

#### Anticipating the Roles of ICTs

Respondents were asked to indicate their viewpoints on a five-point scale ranging from strongly agree to strongly disagree on the role of ICT in their teaching and learning contexts. Table 1 reveals teachers' perception towards the role of ICT in English language teaching. Results from Table 1 indicate that all 40(100%) teachers strongly agreed that ICT can help them learn thing easily, it can enhance opportunities of resources and it can improve their general satisfaction if it is available to them. Moreover, 38(95%) teachers strongly agreed and 2(5%) agreed that ICTs can improve teaching and learning process. Again, 36(90%) teachers strongly agreed and 4(10%) agreed that ICTs enhance collaboration and interaction. Similarly, 25(62.5%) strongly agreed and 15(37.5%) agreed that use of ICTs can increase students' participation in learning. Likewise, 20 (50%) strongly agreed and 20 (50%) agreed that knowledge of using ICTs help them do well in their career. Further, 20 (50%) strongly agreed, 10 (25%) were undecided and 10(25%) were strongly disagreed that ICTs can enhance students' critical thinking skills. Only 1 (2.5%) strongly agreed, 38 (95%) agreed and 1 (2.5%) disagreed that ICTs increase students' learning motivation. The results exhibit that 28 (70%) teachers agreed and 12(30%) disagreed that ICT enhances students' language skills and encourage the teachers to be creative. Moreover, 29(72.5%) teachers agreed, 5(12.5%) disagreed and 6(15%) strongly disagreed that ICTs relieve their routine duties. Finally, the results display that all teacher respondents (40/100%) strongly disagreed that ICTs are difficult to understand.

Table 1. Teachers' Perception on Roles of ICT in Teaching English Language

Variables	Responses				
	SA	A	U	D	SD
ICT can help me learn things more	40 (100%)	-	-	-	-
easily					
ICTs are difficult to understand	-	-	-	-	40 (100%)
Knowing how to use ICTs will help	20 (50%)	20 (50%)	-	-	-
me do well in my career					
ICT can improve teaching and learning	38 (95%)	2 (5%)	-	-	-
processes					
ICT can enhance students' critical	20 (50%)	-	10 (25%)	-	10 (25%)
thinking skills					
ICT can enhance students'	25 (62.5%)	15 (37.5%)	-	-	-
participation					
ICT can enhance collaboration	36 (90%)	4 (10%)	-	-	-
ICT can enhance interaction	36 (90%)	4 (10%)	-	-	-
ICT can enhance opportunities of	40 (100%)	-	-	-	-
resources					
ICT tends to increase students'	1 (2.5%)	38 (95%)	-	1 (2.5%)	-
learning motivation					
ICT can enhance students' language	-	28 (70%)	-	12 (30%)	-
skills					
Using ICT would encourage me to be	-	28 (70%)	-	12 (30%)	-
creative					
ICTs will relieve teachers of routine	-	29 (72.5%)	-	5 (12.5%)	6 (15%)
duties					
Having ICT available to me would	40 (100%)	-	-	-	-
improve my general satisfaction					

Scale: SA: strongly agree, A: agree, U: undecided, D: disagree, SD: strongly disagree

#### ICT Tools Used in Teaching English

To find out the ICT tools that teacher have been using in teaching English, they were asked to respond what ICT tools and at what ratio they used in their teaching into four point Likert scale ranging from most, often, sometimes to never. Table 2 presents the ICT tools and the frequency of their use by English teachers. Table 2 displays the results that tape recorder was mostly used by teachers (62.5%) and this was followed by the use of computer (52.5%), internet (45%), and mobile phone (27.5%). The never used ICT tools by teachers were radio and telephone. Mobile phone was very often used ICT tool by the teachers (67.5%) which was followed by internet (50%). Projector and printers were sometimes used by 40% of the teachers while TV set was sometimes used by 12.5% teachers and never used by 87.5%. The results shows that tape recorder was mostly used ICT

tool, mobile phone was often used, projector and printer were sometimes used, and radio, Skype, iPod and interactive white board, telephone were never used ICT tools by the teachers while teaching English.

Table 2. ICT Tools Used in Teaching

ICT tools	Most	Often	Sometimes	Never
Internet	18 (45%)	20 (50%)	2 (5%)	0
Radio	0	0	0	40 (100%)
Mobile phone	11 (27.5%)	27 (67.5%)	2 (5%)	0
Telephone	0	0	0	40 (100%)
Tape recorder	25 (62.5%)	10 (25%)	5 (12.5%)	0
Projector	2 (5%)	10 (25%)	16 (40%)	12 (30%)
Printer	3 (7.5%)	5 (12.5%)	16 (40%)	16 (40%)
TV set	0	0	5 (12.5%)	35 (87.5%)
Computer	21 (52.5%)	12 (30%)	5 (12.5%)	2 (5%)
Skype	0	0	0	40 (100%)
IPod	0	0	0	40 (100%)
Interactive white	0	0	0	40 (100%)
board				

Teachers' Practices of Using ICTs

With the aim of finding out the ways that teachers have used ICTs in teaching English, they were asked an open-ended question to share their experiences. Almost all the respondents used ICTs to teach language skills (listening, speaking, reading & writing), language aspects (vocabulary, grammar & language function) and literary genres (poetry). Videos and language games were used by 39 (i.e. 97.5%) teachers to motivate the students engaging them in solo work and group work. Similarly, 15(37.5%) teachers used online dictionary for teaching pronunciation and vocabulary in which they gave the words and asked the students to pronounce it and tell the meaning listening and reading online dictionary. Similarly, 10(25%) teachers involved the students in power-point presentation for developing their confidence and creativity. Very few teachers (2/5%) used Google hangout, Google classroom, zoom and Google docs for teaching listening, speaking, reading and writing along with grammar and vocabulary engaging students in question answer, discussion, interaction and doing home assignment. Moreover, only 5(12.5%) teachers teach poetry, dialogue practice and writing skills taking their students Google classroom. Further, 35(87.5%) teachers used ICTs as collaborative technique for teaching English language.

#### **Qualitative Data Analysis**

Unstructured interview and non-participant observation were employed to gain deeper understanding and elaborate on the results of the quantitative analysis where the collected qualitative data have been coded into two themes for elaboration and corroboration;, ICTs change the face and pace of teaching, and teachers and ICTs.

#### ICTs Change the Face and Pace of Teaching

In this theme, the researcher investigated teachers' perception towards the role of ICTs in English language teaching. The teachers were interviewed based on the results obtained in the theme of quantitative phase of further elaboration, corroboration and understanding. All the respondents saw ICTs as helpful aspect that make teaching and learning more effective, interesting, lively and successful. They told that the use of ICT in their day-to-day class facilitates them to learn the things easily. One of the respondents (T5) conceded that ICTs have made her up to date to the newly developed and innovative methods, techniques and activities in the world, which she could employ in her class and keep teaching student oriented. She felt that use of ICTs in teaching English boosts up her professional career. In the same context, next respondent T1 added that If a language teacher understands the value of ICTs and integrates them in language teaching, his teaching can be innovative, standard, updated and he/she can establish himself/herself as a competent and confidence teacher.

ICT provides exposure of new and sufficient knowledge so that teacher can be well prepared in both subject matter as well as techniques of presentation. One of the respondents (T3) shared his experience that two years back he was unknown about ICTs and their use so his colleagues and students could not show proper respect because he did not know what students have known. With regular training and his devotion, he can use ICTs in todays' classes so that he needs not to feel handicap in preparing and presenting the materials. In the question of what things are taught integrating ICTs, all the respondents reported that they frequently taught vocabulary, listening and reading practice and sometimes speaking, writing, grammar and poetry were also taught using such technologies. They claimed that any component of language could be facilitated with ICTs. All of them agreed that ICTs can modulate their teaching style. In this vein, T2 asserted, "Use of ICT promotes group work, pair work where learners can learn through interaction, collaboration and sharing." Teachers' satisfaction on their knowledge, skill and practices is another factor required for effective language teaching which in the words of respondents is achieved with ICTs in English classes. They were also asked if ICTs can develop students' creativity and critical ability. In response to this, almost all the respondents were doubt on this aspect. One of the respondents (T1) asserted that students are very cunning in using ICTs. They copy and paste the things rather than creating, elaborating or explaining by themselves. The habit of copying and doing the work does not support critical and creative abilities of both teachers and students. T2 stated that the readymade available resources in web pages have made both teachers and students less critical, analytical and lazier. All the respondents claimed that the use of ICTs really changed their ways and behavior of teaching. However, they argued that they are conscious about plagiarism and its impact in language learning.

#### Teachers and ICTs

Under this theme, the researcher investigated teachers' practices in using ICTs in their EFL classes. Teachers have potentiality of interpreting new trends and applications both positively and negatively. Success of implementation of any programme or policy lies in the hand of teachers since they can adopt or resist to new approaches, parameters and techniques. The responses of the teachers in the question whether they are motivated in implementing it and what their roles could be, revealed that they are no doubt the most responsible

and fundamental agents who determine and shape the implementation of ICTs in teaching and learning and develop the environment accordingly. All the respondents highlighted that though there are numerous ICTs based problems and contextual difficulties, they can succeed in effective use of ICTs. They are well motivated and they realize their roles for the development of their language teaching practice and quality education. When they were asked if the current secondary level English curriculum was compatible with the implementation of ICTs, all the teachers conceded that curriculum encourages us to make use of education based ICTs but the availability of ICT infrastructures and our motives and skills are in question. The teachers do not see curriculum as an obstacle for using ICTs. In this sphere, (T5) shared her experience and states, "we are guided by our tradition, which is deeply rooted in our mind, and neglect ICT use in instruction". Teachers are the key for implementing ICTs in classroom instruction.

Regarding the teachers' role in ICTs use, they are themselves decisive of their teaching. During the interview and class observation, some teachers were found to be very active and showed their desirable will to do whatever is needed to improve their language teaching and produce better output. At the same time, some others were found to be just showing their activities not from core of their own motivation but as a compulsion made by the administrations or students and were trying to escape from ICT use.

Teachers' role is significant not only for personal professional growth and development but also for students' betterment using ICT as a tool. In the questions, the ways that the teachers have used ICTs in their classes, the interviewees told that they mostly used Microsoft words and internet based materials more than others. They used them engaging the students mostly in group work since they have limited ICT resources in their schools. During class observation, it was observed that one of the teachers wrote some questions on the white board, and displayed a text using computer and projector and asked the students to read the text and answer the questions. Next teacher was engaging the students in picto-word game for teaching vocabulary. Moreover, T4 told that he taught them using zoom sometimes in which they discuss, interact and share each other's ideas among themselves and with their teachers. Most of the teachers told as well as found that they made use of Microsoft office programs word and power point and were unable to use modern computer based applications. Most of the teachers reported that they use tape recorder for teaching listening in which they give question first and play the recorder at least three times with a certain time gap. One of the teachers was using online dictionary in which students were given words and asked to find out pronunciations, word classes, meanings and contexts of the words given and students were busy working in pair in the computer lab.

#### **Discussion**

Based on the analysis of both the quantitative and qualitative datasets, this section delineates the possible interpretation of the results integrating both the analyses. The results of the both quantitative and qualitative data analyses yielded invaluable findings regarding the roles and practices of ICTs in teaching English at secondary schools in Nepal. Both quantitative and qualitative results analyses yield that almost all the teachers agreed that ICTs play positive and beneficial roles in English language teaching. They reported that use of ICTs make teaching and learning more effective, interesting, lively, motivating and successful. The results also show that

all the teachers agreed that ICTs make them easy to learn providing a huge resource of knowledge both old and new, and improve their teaching learning process with innovative methods and techniques. These findings agree with Patel's (2013) study which claims that application of technology provides so many alternatives so that it brings considerably change in English teaching methods. They expressed that students' participation, collaboration, interaction and, sharing and learning cultures have been enhanced with the use of ICTs in language classroom. These findings corroborate with Keser, Huseyin and Ozdamli's (2012) study who claim that learners' cooperation and collaborative work create task and learn from each other through reading their peers' work. However, all the teachers' doubt that if the use of ICT in language teaching increases students' creative and critical abilities because both students and teachers get access of resources which leads them less reading and more copying and pasting. This finding does not validate the findings of the previous research work of Alsaleem (2014) which claims that technology improves learners reading habit, creative writing and critical thinking abilities.

Both the datasets and their results (quantitative and qualitative) reveal that teachers' agreed the successful implementation of ICT depends upon teacher's techniques and attitudes since they can adapt or resist to any new parameters or approaches. Majority of the teachers used ICTs for teaching language skills, aspects and literary genre; poetry. They used videos, language games and power point presentation engaging students in solo work, group work and pair work since they have limited ICT resources in their schools. They also used question-answer, discussion and interaction strategies as well. Teachers must understand their roles and functions as resources and catalysts for selecting suitable teaching and learning activities (Copriady, 2014). Teachers can play decisive role in selecting and using suitable activities for teaching English language at secondary level.

Concerning to the ICT tools used by English teachers in their teaching process, the results demonstrate that the majority of the teachers (i.e. 62.5%) used tape recorder followed by computer (52.5%) and internet (45%) whereas radio, telephone, Skype, IPod and interactive whiteboard were not used by all the teachers. The teachers used tape recorder mostly for teaching listening and computer for word processors and internet for Google search and e-mail, which the teachers exhibited during interviews and class observation. These results indicate that teachers use technologies for searching materials and for e-mailing which are supposed to be "Lower level application of technological use" (Karakaya, 2010, p. 108). Although the teachers stated that they use ICTs effectively and confidently, the class observation data revealed that they were not capable of handling other tools efficiently and expertly than tape recorder. Only few teachers shared that they use some modern applications in teaching English. This reveals the fact that low use in tools such as zoom, interactive whiteboard and mobile applications is considerably surprising in this globalized and digitalized world and pedagogy; especially in relation to existing education system. This finding assimilates with Zaylie's (2007) study that describes the use of ICTs as embedded is common in English language teaching practices throughout the world (as cited in Alharbi, 2014, p. 181). Similarly, the finding of this study contradicts Teo (2008) who argues that if a school wants to be a superior school, it is important to ensure that its teachers are able to integrate various tools of ICT into the curriculum and its teaching.

The results also show that majority of the teachers are unable to search and evaluate appropriate resources for

their class which might be due to lack of training for them. All teachers wanted training on ICT use. The teachers' expressions reflect that they are the most responsible, motivated and dedicated agents of implementing ICTs at secondary school education. The teachers themselves were found to be engaged in different online courses and encouraged and involved their students in such courses, and encouraged for slide presentation and using online dictionary. All these facts reveals teachers attempts and practices for improving their teaching practices which corroborates Catarina (2012), who affirms teachers self -motivation of using ICT in education will have direct effect on teaching and learning. It also leads shift in teaching from only chalk and talk to more innovative ways with ICTs (Susikaran, 2013). The scaffolding of integrating ICT in education is being started but its complete blending required for quality education.

## **Conclusions and Implications**

This study intended to figure out the roles and practices of ICTs in Teaching English at secondary schools of Nepal. The participants' views in both quantitative and qualitative results and discussion reveal positive and optimistic perception of the teachers towards beneficial roles of ICTs in language teaching even they question about the development of creative and critical abilities of the students through use of ICT in teaching and learning process. Moreover, the results and discussion reveal that teachers are more skillful and comfort in using traditional mode of computer based technology; word processor and tape recorder than new means and applications of ICT. However, the use of internet, search engine, zoom, and Google doc. by some of the teachers implies their gradual shift and progress in skills of using ICT in English language teaching. Only the use of traditional ICT tools implies teachers' insufficiency to handle modern and effective education based tools indicate that teachers need to be ensured in their efficiency, confidence and skill to integrate various ICT tools in their teaching. Further, the research shows that among the limited ICT infrastructures, tools and teachers' knowledge and skills, the teachers realize their responsibilities as active agents of using ICTs, they engage their students in solo, pair, group works, discussion, presentation, interaction and sharing while teaching language aspects, skills and literary genres using ICTs though it is not sufficient. They are unable to transfer the knowledge that they have due to poor availability of resources and their confidence. The gap between teachers' perception on the roles of ICTs and their skill and confidence requires them adequate and appropriate training on ICT use in language teaching and learning. The teachers are less familiar and confidence with new ICTs, which insist that they need to adopt a paradigm shift from old traditional methods of teaching to new methods of teaching in order to implement ICTs effectively which will enable them to cater for the needs of 21st century. To use technology in the classroom, they should be competent on technology knowledge, pedagogic knowledge and content knowledge, which should be intersect and interact to each other both theoretically as well as practically in their contexts.

Though this study has opened new wave and avenues in the field of ICTs in school education, it has a number of limitations in its scope and methodology. It is limited only to 40 secondary level English teachers teaching at public and private schools of Kaski district. Thus, it can be reiterated for more teachers, of more schools even from throughout the country or across country. Its further limitation is that the study only observed ICT's role and practices. Thus, succeeding studies can be carried out to see policy makers', curriculum designers',

administrators', students' and parents' perspectives and practices on ICT use as well. These perspectives can be crucial for decision making at policy level. Moreover, it has used only explanatory sequential mixed research design, which has opened up avenues to apply other research designs too. Only survey questions, interview and class observation have been used as tools in this study. Therefore, the succeeding studies can make use of more other tools like focus group discussion, document analysis and so on. Despite the limited objectives and scope, this study provides feedback to the teachers, administrators, students, curriculum designers and policy makers and opens up avenues for further studies, and therefore is significant.

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# Appendix A - Survey Questionnaire

## 1. Teachers' Perception on Roles of ICT in Teaching

Variables	Responses				
	SA	A	U	D	SD
ICT can help me learn things more easily					
ICTs are difficult to understand					
Knowing how to use ICTs will help me do well in my career					
ICT can improve teaching and learning processes					
ICT can enhance students' critical thinking skills					
ICT can enhance students' participation					
ICT can enhance collaboration					
ICT can enhance interaction					
ICT can enhance opportunities of resources					
ICT tends to increase students' learning motivation					
ICT can enhance students' language skills					
Using ICT would encourage me to be creative					
ICTs will relieve teachers of routine duties					
Having ICT available to me would improve my general satisfaction					

Scale: SA: strongly agree, A: agree, U: undecided, D: disagree, SD: strongly disagree

## 2. ICT Tools Used in the Classroom Teaching

ICT tools	Most	Often	Sometimes	Never
Internet				
Radio				
Mobile phone				
Telephone				
Tape recorder				
Projector				
Printer				
TV set				
Computer				
Skype				
Ipod				
Interactive white				
board				

interactive write
board
3. Would you mind sharing the ways that you have been practicing in using ICT in teaching English?

# Appendix B - Interview Guidelines Questions (only for researcher)

- 1. To what extent are you known to ICTs and their use in ELT?
- 2. Do you use ICT in classroom teaching?
- 3. How do you perceive the role of ICT in language teaching?
- 4. What are the mostly used tools in teaching English?
- 5. How do you use ICTs in English language teaching?

# **Appendix C - Observation Checklist**

1	Tools used in classroom
2	Teachers skill and confidence
3	Strategies employed while using ICTs
4	ICTs applications used
5	ICTs applications used
6	Selection of tools appropriately in appropriate time or
	through the class