

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

There has been a growing use of technology in the field of education. People use computer, mobile, tab and other electronic devices in teaching learning activities. The current trend of mobile learning is influence of mobile technology in teaching learning process. Mobile learning is learning practices with mobile devices, which is young and rapidly changing field. It has drawn attention of many researchers, educators, teachers, students, and technologists. Nowadays, mobile device has been an indispensable device in our everyday life. We can see it on every peoples' hand. It has helped magically for communication. Besides communication, it is used for a number of other purposes such as for taking photograph, calculating, surfing online materials, recording voices and many other. Mobile phones are pocket size and lightweight portable wireless devices with a wide range of useful features. Some of these features are voice call, text messaging, multimedia messaging, GPRS, 3G connection, Wi Fi, camera, voice recording, blue tooth wireless connection, data storage, light, FM radio, television, Mp3 player, multimedia player, video recorder, and several other features. Therefore, mobile phones have become very useful. El-Hussein and Cronje (2013) believe that mobile phones are "reshaping" our daily activities (p.12).

Indeed, mobile phones are increasingly used for communication, information, entertainment, education, language learning, gaming, and social networking, browsing the Internet, data collection, and data storage. This report focuses on uses of mobile devices, especially mobile phones, for educational purposes.

Mobile learning can be beneficial for language learning. Reinders (2010) argued that mobile learning enhances "authentic communication and collaboration" among learners (p.20.) Similarly, mobile learning provides more exposure to target language learning content as students spend more time on task. Likewise, it promotes learner autonomy by placing more power on students to control their own learning. Bishowkarma (2011) reported some advantages of mobile phones perceived by Nepali students in their daily life. These include making phone calls, playing games, listen to the radio, watching videos, taking photos, browsing the internet for entertainment and knowledge, for

sending email, chatting, making new friends( p.20). The advantages suggested by Nepalese students reflect their way of using mobile phones in their daily life. This report showed that students used mobile very little for learning.

Mobile phones offer flexible learning opportunities both inside and outside the classroom. Number of mobile learning strategies have been suggested the scholars (Reinders, 2010 ;Shrestha ;2011; and Sikshak, 2011).

Students can take pictures of text using the camera. Moreover, they can bring photos from outside the class. Students can take note of vocabulary and share each other with text message to reinforce vocabulary learning. The teacher can send them text messages of useful vocabulary in advance as surprise list and students come with meaning next day. They can play vocabulary games and practice grammar. They can use offline or online dictionary in class to check the meaning, spelling, and pronunciation of new vocabulary. They can search ideas, fact, and sample writing, etc using the web search feature of mobile phones to generate ideas for writing practice. Likewise, they can record their own class performance and monitor later. They can record class discussion. Similarly, they can do listening practice individually with their own pace, inside, or outside of the class, converting CD track into PM3 files for listening in the mobile phones. Furthermore, they can bring photo of outside world, write captions or description and exchange with blue tooth. Moreover, they can read e book and other reading text stored in memory card or download digital content and use in classroom use. They can e-mail their work to their teachers.

The uses of mobile phones do not end here. There are several other ways of using them. They can ask questions to their teacher which they might not ask in the class. They can use mobile phone for social networking to share and comment each other's work. For example, they can use mobile phones for blogging, which provides them to practice writing skills. They can collect data for their project-based learning. Likewise, Mobile phones are useful to bring mass media in classroom for discussion. Similarly, voice-recording feature can be used for learning speaking practice. They can record their own pronunciation and compare with others. The students can record their conversation and transcribe or compare their own pronunciation with native speakers or some other model of pronunciation. The teacher can conduct poll in class using text message features i.e. correct vs. incorrect use, their choice of particular style.

As mentioned earlier, mobile phones have already been indispensable part of our daily life. Students are using them and it will be unwise to ignore their potentialities for teaching learning process. Meanwhile, we have to explore possibilities of integrating mobile learning in our higher education system since students are informally using them for their learning. It is time to explore students' financial, psychological, technological readiness to adopt mobile phones in higher education. Teachers and policy makers also need to understand students' attitudes toward mobile learning.

### **1.2 Statement of Problem**

The access of mobile phones among 11 and 12 grade students is rapidly growing. They have become necessary gadgets for daily life. Mobile phones have been widely used in various sectors including learning. Sikshak monthly (2011) carried out survey on students mobile use in the Nepalese schools and found that large number students carried mobile phones with extremely limited use for learning. The survey found the negative impacts of mobile phone in students learning. There is still dearth of research in this area. The technology has become ubiquitous now and we can expect some changes in use pattern since there have been a lot changes in available features (including learning application). However, students' current mobile uses for learning are not fully understood. Rapid change of field and lack of research highlighted the need of this research.

### **1.3 Objectives**

The study had the following objectives:

- a. To find out mobile learning practices among 11 and 12 grade students of Sunsari District.
- b. To explore students' perceptions toward mobile learning practices.
- c. To suggest some pedagogical implications for teaching and learning.

### **1.4 Research Questions**

The following were the research questions of the study.

- a. What are the practices of mobile learning among 11 and 12 grade students
- b. For what purpose, do the students use the mobile phone?

- c. Do they use mobile for study purpose?
- d. What are the students' perceptions regarding the use of mobile in learning.

### **1.5 Significance of the Study**

The findings of the study is expected to be beneficial to all the stakeholders in pedagogy i.e. students and teachers for their academic journey being familiar with modern technologies, textbook writer, trainers, language planner, policy makers, other concerned authorities, curriculum and syllabus designers as a pathfinder to design the textbook to the secondary level e-devices oriented and searching for recent trends in pedagogy. So, there is no doubt that it will have a global significance. Besides, it will pave the way for the further study to other researchers in the similar area.

### **1.6 Delimitations of the Study**

The study was based on students' mobile learning practices. The study only collected data from the three schools of Sunsari district, 20 from each school. The students were selected randomly. Only students studying education and management in grade 11 and 12 were included in the study. Similarly, the study adopted mixed research design. For quantitative data close-ended questionnaires (Liker scale and yes-no questions) were used as research tools and for qualitative data interviewed was conducted with 6 students.

### **1.7 Operational Definition of the Terms**

- ) **Mobile phone:** It refers to an electronic device which is used to call and receive phone.
- ) **Digital learning:** It is a modern practice of learning with digital technology. It includes e-learning and m learning
- ) **E learning:** It refers to modern way of learning using computer technology.
- ) **Mobile devices:** Mobile technology based gadgets, for example, mobile phone, laptop computer, tablet computer, i-pad, MP3 player, etc
- ) **Mobile learning practices:** Various forms of learning practices with mobile devices.

- ) **Mobile learning (or m learning):** Mobile learning refers to learning that takes place both inside and outside of the classroom, using mobile devices, which includes basic mobile phones, smart phones , i pad and other mobile learning devices
- ) **Mobile technology:** It is modern technology, which are more flexible which ensures portability and unbroken connectivity.
- ) **Smart phone:** It refers to new a generation of mobile phones with touch screen. Smart phones generally have wider screen and more advanced features with better storage capacity than basic mobile phones.

**CHAPTER TWO**  
**REVIEW OF THE RELATED LITERATURE**  
**AND CONCEPTUAL FRAMEWORK**

**2.1 Review of the Theoretical Literature**

Under this, theoretical part of the study has been reviewed.

**2.1.1 Mobile for Learning and Teaching**

Mobile technologies, particularly mobile phones, for English language teaching and learning are still an emerging field in developing countries. But, studies in developing and developed countries do offer evidence of mobile phones' impact across various global contexts in regards to the aforementioned fields as well as other areas of development. There are many remarkable case studies outside education that highlight the efficacy of mobile phones for young peoples' participation in a radio discussion in Nepal(Ulbricht, 2010);entrepreneurial activity among women in Bangladesh (Sullivan, 2007); economic development in relation to microenterprises in Rwanda (Donner, 2007); and activism (see [www.mobileactive.org](http://www.mobileactive.org)) in developing countries. Of key importance to the Nepalese ELT community is leveraging the power of mobile phones, in similar ways, to provide opportunities to English language learners and potentially enhance English language teachers' professional development.

The use of mobile devices for learning is a new phenomenon. We do not have long research history on mobile learning. However, mobile learning has been able to attract the attention of several researchers from different parts of the world, especially in the developed countries.The growing number of mobile learning conferences, seminar and journal articles also proves growing concern on mobile learning (Traxler, 2007). Gamble (2005), while writing the preface of the research report for Attewell (2005), stated that when M learning project began in 2001, few people had an idea of mobile learning and questioned about the potentialities of mobile phones' uses in learning. This report was one of earlier research, on which Gamble made following remark.

Mobile devices can be used successfully to involve some of the hardest to reach and most disadvantaged young adults in learning. As a result and especially as part of a

blended learning strategy, mobile learning has the potential to help these young people to improve both their skills and their self-confidence and, therefore, their life chances (Attewell, 2005, p. 5).

Attewell's research clearly pointed out potentialities of mobile learning. As technology grew more mature, it started to draw attention of more teachers, students, and researchers. The concept of mobile learning has come out of research projects and become part of day-to-day life for many learners and teachers although it has not been regarded as integral part of mainstream education yet (Traxler, 2007).

Mobile learning is non-traditional mode of learning, where 'mobility' and 'flexibility' of learning experienced are recognized. The dominant view on mobile learning is often taken as updated form of E-learning. However, there are other views too. For example, Mehdipour and Zerehkaf (2013) viewed that there is the whole part relation of e learning and M- learning in relation to wider context of digital learning. The concept of "M-Learning is often described as occupying a sub space within the e-learning space, which is in turn a sub set of digital learning".

Sometimes, E learning is equated with internet connected desktop computer based learning experiences before and even after the advent of mobile technology. Mehdipour and Zerehkaf (2013) drew distinction between E learning and M- learning:

E- Learning can be real-time or self-paced, also known as "synchronous" or "asynchronous" learning. Additionally, E-Learning is considered to be -tethered (connected to something) and presented in a formal and structured manner. In contrast, mobile learning is often self-paced, un-tethered, and informal in its presentation (p.9).

Traxler (2007) argues that the distinction between E – learning and M- learning are blurred because mobile technology has largely overcome previous barriers of effective mobile learning. i. e connectivity, screen size, storage, and processing power. Now it does not matter whether mobile learning is continuation of e learning or distinct mode of learning for Nepalese students since M- learning has shown strong presence before e-learning has been integrated in Nepalese education system. Most of Nepalese students get opportunities to use mobile phones long before they can see computer, especially in rural areas.

The term mobile learning, which is also called M learning, has multiple interpretations. Sometimes, it is viewed as an updated form of e-learning. However, this concept is not sufficient to illustrate the complexity of mobile learning. Kukulska-Hulme (2009) argues that “mobile learning is a tricky term as mobility refers to mobility of technology, content and learners in the context of learning” (cited in Shrestha, 2011, p.108).

Mobile learning has been defined both in broad and narrow sense (Malley et al. 2005; Traxler, 2007). In the broad sense mobile learning is “any sort of learning that happens when the learner is not at a fixed, predetermined location learning that happens when the learner takes advantage of opportunities offered by mobile technology” (Malley et al. 2005). The narrow sense of mobile learning includes only “the learning that takes place with the help of mobile devices such as PDA, mobile phones and laptop computers” (Malley et al. 2005). Similarly, Shohel and Power (2010) cite the narrow sense of mobile learning in the following paragraph.

Mobile learning can be defined as ‘any educational provision where the sole or dominant technologies are handheld or palmtop devices’ (Traxler, 2005, p.262), which is available ‘anywhere, anytime’ (Geddes, 2004). In other words, learning mediated through any mobile device that is accessible anywhere, anytime is mobile learning (Kukulska-Hulme & Shield, 2008).

Therefore, mobility of the learner and technology are important considerations in the definition of mobile learning. This research was based on the narrow sense of mobile learning defined by Malley et al. (2005).

### **2.1.2 Popularity and Usability of Mobile Technology**

There have been both qualitative and quantitative growths in mobile technology in the last few years. Consequently, the mobile technology has been adopted in different fields apart from telephone service. For example, they are used in banking, media, learning, etc. The usability of the mobile gadgets has increased because of advanced technology. Recent mobile phones appear with larger screen size, a long battery backup, faster processor, better storage capacity, and many applications (especially designed for learning) with high-speed connection. The technology has been affordable now, which was only in the hands of few elites a decade ago (Shrestha, 2011). This is clearly the result of the availability of cheaper and more powerful handsets on one hand and

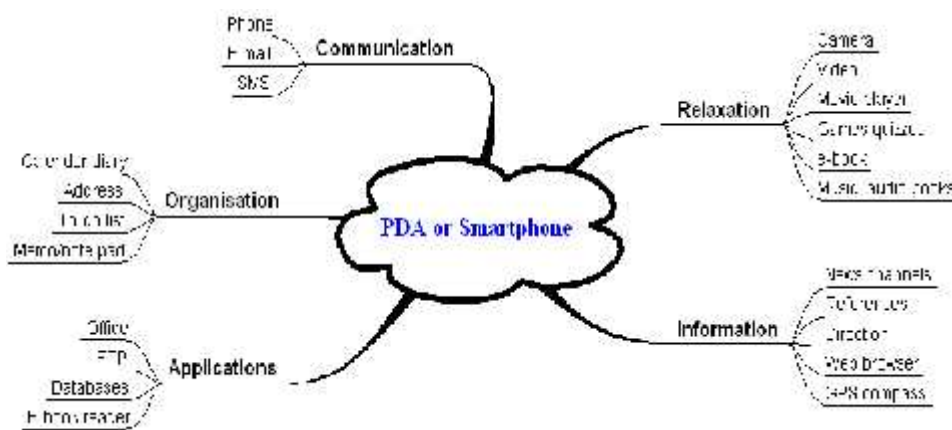


growing competition among the service providers to attract subscribers on the other hand. For instance, Nepal Telecom and NCELL, the major players of the telecommunication market in Nepal, frequently offer aggressive tariff to attract subscribers. Similarly, Nepali employees in foreign countries send good mobile sets to their family members for convenient communication options. We can find other reasons for their popularity. El-Hussein and Cronje (2013) stated that mobile manufacturers' competition, mobile phones ability to function at multiple levels, being wireless and portable device have ascertained their popularity with their following remark.

Similarly, Reinders (2010) also believed that the popularity of mobile devices has assured by “relatively cheap and increasingly powerful” functionalities (p. 20). They have become further useful. Many of the usability issues of Personal Digital Assistant raised by Kukulska –Hulmes (2007), for instance, screen size, battery life, weight, portability, processer speed, data storage , display clarity(p,11) have been overcome by the present generation of smart phones and i-pad. Even though most of mobile devices are designed for general users, i-pad is claimed to have been especially designed for teachers and students. The following diagram shows how mobile phones support individual in the modern age.

Figure 1

*Multiple Platforms Offered in Smart Phones*



*Trinder, 2005 cited in El-Hussein and Cronje, 2013 p. 19*

We should be aware of the fact each edition of these technologies offers new features with better functionalities. However, the basic concept of PDA/ smart phones remains same to serve people on the move with more specialized applications.

### **2.1.3 Mobile Technology and Mobile Learning**

Technology directly or indirectly influences how we learn. The example of scroll book, Codex, printed book and e book shows how technology affect teaching learning process. Similarly, technology of dust board to Interactive White Board also shows technological influence in our classes. Mobile technology is the latest technology with powerful influence in our life. Rapid access of wireless mobile technology has offered new paradigm in teaching learning process. As a result, teaching learning process no longer needs to be fixed inside the four wall of class. Mobile phones can be used to access the content, interact with the fellow learners and instructors, to receive feedback. The uses of mobile phone in education are growing as they offer alternative and/or supplementary to e- learning. As noted earlier, reduction of cost and availability of more useful features have made them more useful tools for teaching and learning practices.

Mobile learning (M learning) is creative use of mobile technology for educational purposes. Mobile learning has not taken definite shape yet, it is still 'immature' (Traxler, 2007). However, mobile learning is largely successful as mobile learning projects (Mehdipour&Zerehkafi, 2013). It is still not integrated in mainstream education system and it is in the domain of informal learning (Traxler, 2007; El-Hussein & Cronje, 2013).

Most of researchers are hopeful on potentialities of mobile learning in immediate or remote future (Traxler, 2007; El-Hussein & Cronje, 2013). Mobile learning as young and rapidly changing field needs to develop acceptable technological, pedagogical and policy related standard for its integration in mainstream education.

While mobile technology is promising for shifting paradigm of learning, Nepal is lagging behind. When developed countries are researching in effective technological and pedagogical models for mobile learning, Nepal government is against using mobile phones at school level. For instance, mobile phones are banned at higher secondary school in Nepal (HSEB, 2013,). Department of Education also banned mobile phone in schools (Shrestha, 2011). The overtly given reasons behind such restriction are lack of judicious use of mobile phones by the students, similar to reported in Sikshak (2011).

However, Merchants (2012) advised to understand the phenomena in the light of strongly established formal norms of school culture and the unwillingness of people to accept the change. In many formal educational contexts, mobile use is heavily restricted, more often than not, simply banned. Mobiles, like other technologies, can easily disturb what I have called the 'fragile ecology' of classroom life (Merchant, 2009). Partly this is because new digital practices can have a destabilizing effect, in that they begin to open up the possibilities for different kinds of learning relationship, different kinds of interaction and different genres and communicative purposes. From a practice perspective, the world of the classroom is a social site composed of 'a bundle of practices and material arrangements' (Schatzki, 2005, p. 474). It is a social site patterned by established relationships, mediated by sets of accepted school practices and instructional routines. This bundle of practices is, of course, powerfully shaped by curriculum discourses (Crook, 2012). Practice theory implies that organizational change is a complex undertaking and that routines and continuities are part of the fabric of institutional life.

There are some positive signs as the government of Nepal has formulated a Master Plan for ICT integration in education. The vision of the master plan is to “ensure extensive use of ICT in education sector and contribute for access to and quality education for all” (ICT in Education: Master plan, 2013, p. 4). It has a policy to abridge existing digital divide by providing ICT integrated teaching learning environment.

#### **2.1.4 Mobile Technologies in Nepal**

The use of mobile technologies has phenomenally increased in Nepal over the last ten years. Until about a decade ago, mobile devices such as laptops and mobile phones were seen in the hands of the elite only. This is not the case any more. In particular, the penetration of mobile phones is remarkable. According to Nepal Telecommunication Authority (NTA, September 2011), of the total 13.513 million fixed and mobile telephony subscribers, mobile phone users constituted 11.919 million (88%) in August 2011. This is a strong indication of the tremendous popularity of mobile phone use. Such high penetration of mobile phones certainly means more opportunities for mobile learning. Mobile learning is a tricky term (Kukulka-Hulme, 2009). In this paper, it refers to the mobility of technology, content, and learners in the context of learning. There have already been calls for tapping into mobile phones for educational use in Nepal (e.g., Ghimire, 2011). Mobile technologies seem to have already been employed for various purposes in Nepal. For example, in April 2010, UNICEF Nepal launched a programme called Voices of Youth in collaboration with a popular Nepali radio programme called 'SathiSangaManka Kura' which targets young listeners aged 13 – 26 throughout the country (Ulbricht, 2010). This programme allows listeners to participate in the discussion on important topics related to them and express their views via text messages (i.e., SMS) in English. A most recent topic for discussion (25 October 2011) was 'Can Love and education go hand in hand? If yes, how? If no, why?' (see <http://www.unicef.org.np/voy/can-love-education-go-hand-hand-if-yes-howif-no-why> for real responses). This is an excellent example of the use of mobile phones that enabled those who had no say until recently. Likewise, given the growing market of the mobile phone use including mobile data (e.g., General Packet Radio Service, GPRS in short), the development of mobile applications (also known as apps in short) seems to be growing as indicated by recent conferences such as Mobile Shrestha Journal of NELTA, Vol. 16 No. 1-2, December 2011 109 apps development in Nepal, in September 2011 (see <http://mobilenepal.net/events/mobile-appsdevelopment-nepal-0>).

## **2.1. 5 Mobile Learning Practices**

Mobile phones offer flexible learning opportunities both inside and outside the classroom. Number of mobile learning strategies have been suggested the scholars (Reinders, 2010 ;Shrestha ;2011; and Sikshak, 2011). Their ideas of mobile learning are more or less similar; they are summarized in the next few paragraphs.

Students can take pictures of text using the camera. Moreover, they can bring photos from outside the class. Students can take note of vocabulary and share each other with text message to reinforce vocabulary learning. The teacher can send them text messages of useful vocabulary in advance as surprise list and students come with meaning next day. They can play vocabulary games and practice grammar. They can use offline or online dictionary in class to check the meaning, spelling, and pronunciation of new vocabulary. They can search ideas, fact, and sample writing, etc using the web search feature of mobile phones to generate ideas for writing practice. Likewise, they can record their own class performance and monitor later. They can record class discussion. Similarly, they can do listening practice individually with their own pace, inside, or outside of the class, converting CD track into PM3 files for listening in the mobile phones. Furthermore, they can bring photo of outside world, write captions or description and exchange with blue tooth. Moreover, they can read e book and other reading text stored in memory card or download digital content and use in classroom use. They can e-mail their work to their teachers.

The uses of mobile phones do not end here. There are several other ways of using them. They can ask questions to their teacher which they might not ask in the class. They can use mobile phone for social networking to share and comment each other's work. For example, they can use mobile phones for blogging, which provides them to practice writing skills. They can collect data for their project-based learning. Likewise, Mobile phones are useful to bring mass media in classroom for discussion. Similarly, voice-recording feature can be used for learning speaking practice. They can record their own pronunciation and compare with others. The students can record their conversation and transcribe or compare their own pronunciation with native speakers or some other model of pronunciation. The teacher can conduct poll in class using text message features i.e. correct vs. incorrect use, their choice of particular style. There are countless possibilities because newer applications are launched in mobile markets every month. Furthermore,

teachers, students, and researchers are working to find alternative ways to use mobile devices in teaching learning processes.

As mentioned earlier, mobile phones have already been indispensable part of our daily life. Students are using them and it will be unwise to ignore their potentialities for teaching learning process. Meanwhile, we have to explore possibilities of integrating mobile learning in our higher education system since students are informally using them for their learning. It is time to explore students' financial, psychological, technological readiness to adopt mobile phones in higher education. Teachers and policy makers also need to understand students' attitudes toward mobile learning.

### **2.1.6 English Language Teachers**

Like learners, teachers too benefit from mobile language learning in similar ways. Shrestha (2011, p.110-11) has mentioned the following benefits for the teachers.

#### **Text Messaging**

Text messaging has been used effectively for teacher professional development elsewhere (e.g., Walsh, et al., 2011). For example, it has been used to build an English language teachers' network, to remind teachers of forthcoming teachers' cluster meetings and to send questions for discussion in the EIA project in Bangladesh. Teacher mentors could use a similar method on a regular basis, which may have already been happening. Likewise, English teachers can use text messaging to remind their students of homework, vocabulary, etc. This may make learning less formal and more meaningful as using mobile phones is part of everyday life unlike learning in the classroom.

#### **Voice response**

Voice calls provide another opportunity to English teachers to develop professionally. For instance, they can make calls to any other English teacher or mentor to discuss any issues related to their teaching. They can also share their good practice (e.g., a good lesson) with others, thus helping others to develop. In the past, it was not possible unless teachers were prepared to meet physically Shrestha Journal of NELTA, Vol. 16 No. 1-2, December 2011 111 or called from a landline. This would, nevertheless, have lost the immediacy provided by the mobile phone. Likewise, mobile phones with the recording

facility offer teachers to record their own or their learners' voice in English. This could offer new learning materials. Furthermore, many basic mobile phones tend to have cameras (both photo and video) which could be used to develop authentic materials for classroom use.

### **Mobile content**

Teacher development materials for mobile devices including mobile phones have successfully been developed and used in developing contexts (Shrestha, et al., 2011; Walsh, et al., 2011). For example, Bangladeshi primary and secondary English language teachers are provided with audio and video materials for professional development and classroom use via Nokia C1 – 01 mobile phones through the EIA project. Therefore, it is timely that Nepalese English language teachers have access to such materials. As noted earlier, even a cheap mobile phone supports audio and video content, and thus this capacity of mobile phones empowers teachers as they can access really good quality materials at a fraction of the cost that often incurs in traditional teacher training programmes. These days, such materials are often available as Open Educational Resources on the website. Teachers having access to the data service could easily download them. Of course, any mobile data usage has cost implications.

## **2. 2 Review of Empirical Study**

I found very little literature on mobile learning in underdeveloped countries. However, it has drawn attention of many researchers recently.

Kumar, Tiwari, Shroff, Chittamuru ,Kam, and Canny ( 2010) conducted a research on 'Effectiveness of Unsupervised Informal Mobile Learning among Young Children'. The aim of this research was to find effectiveness of unsupervised informal mobile learning among young children. The research was conducted in two phases. In the first phase, they explored the possibility to conduct the research in two weeks field visit. The second phase was divided in to two parts. The researchers loaned the participants mobile phone, which were programmed with English language learning games. During the first 10 weeks, they oriented the participants to play the games to learn English language on their mobile phones as well as basic trouble shooting skills for the smooth operation of their devices. The participants were left unsupervised from 11th week onward to ensure their natural and flexible mobile use. They used their mobile flexibly. The data

were collected from in depth interview of the participation, field observation, and built in user data log analysis in their mobile phones. Eighteen children (12 years average age) participated in the second phase of study. They represented both upper and lower caste, boys and girl from the community. The preinstalled vocabulary games on their mobile targeted to teach 180 word families. The finding showed that the participants covered 46 new word families on average over the span of 16 weeks. The researchers hoped the result could be better than that, if participants' elder brothers had not monopolized the participants' mobile phones on one hand and they had regular charging facilities on the other hand. The result of this research showed potentialities of game feature of mobile phones in language learning.

Saeidi and Mozaheb (2012) conducted a study on 'Comparing vocabulary learning of EFL learners by using two different strategies (mobile learning vs. flashcards)'. The study compared the use of two strategies for vocabulary learning (i.e. flashcards and m-learning) among 80 students studying English Literature and Translation at BA level in a non-profit, non-governmental university in the city of Tehran, the capital of Iran. The findings showed that the use of mobile phones for language learning and vocabulary learning would be a better strategy compared to the use of other paramount techniques, such as flashcards.

Shrestha (2012) conducted a research 'Low-cos Open Source Mobile Devices'. The study was carried out to find out the situation of schools in the Chitwan district in Nepal with low-cost open-source mobile devices, (Ben Nanonote and Wikireader) to access offline sources. This study showed that learning with mobile devices promoted student centered learning. However, there is scarcity of appropriate content customized for Nepali learner. This study showed the possibilities of mobile learning to abridge the existing digital divide as computers are still beyond the reach of common students. However, his study was based on offline devices at school level and excluding wide range of mobile application. Shrestha suggested that learning with live mobile content needs further considerations of connection stability, speed, and cost in the Nepalese context.

Tamang(2015) conducted a survey research entitled, " Beliefs of English Teachers on the Use of Electronic Media for Professional Development." The main objective of this study was to explore the beliefs of English teachers on the Use of electronic



media. The research was limited to Bhaktapur district and questionnaire was used as the research tool. She selected thirty ELT teachers as the sample through non random sampling process. In her study, she found that all the respondents were positive towards the use of electronic media for their professional development.

Zhelezovskaia (2016) accomplished “A Case Study of the English Language Teachers, Attitudes towards the use of ICT in Finland.” It was a qualitative study in its nature. It aimed to investigate language teachers’ attitudes towards the use of ICT in English language teaching. Fifty teachers were interviewed through face-to-face approach. It found that they have positive attitudes towards the integration in their teaching. They shared their positive attitudes on both teaching and learning process. On the other hand, they also pointed out the drawbacks of using ICT in teaching learning process as; technical problems caused time and again and frustration to the teachers.

Hazaea and Alzubi (2016) carried out a research ‘The Effectiveness of Using Mobile on EFL Learners’ Reading Practices in Najran University’. The study investigates the efficiency of using mobile technology in English as a Foreign Language (EFL) reading classroom of 30 male students at Preparatory Year, Najran University. Specifically, the study aims to explore the role of this new integrated method in enhancing the EFL learners’ reading practices. Integrating Freebody and Luke’s (1990) four resources model of reading practices within Mobile Assisted Language Learning (MALL), a mix-method research design was used in this study. The reading class was allowed and encouraged to implement specific mobile features and applications. A pretest was employed to construct the baseline data. During the treatment, WhatsApp group, self-reflection journals, posttest, and semi-structured interviews were used. The findings revealed that using mobile WhatsApp, online and offline dictionaries, mobile camera, online resources, and memos remarkably improved the participants’ code breaking practices and text participation practices; text using and text analyzing practices were slightly improved. Participants used the aforementioned tools and features to share images, photos of summaries and mind maps and to look up for new vocabulary, pronunciations and parts of speech. The study recommends further investigation on the effect of WhatsApp on writing practices.

The result of this research clearly proved the efficiency of SMS feature mobile phones for learning English Idiom.

Above discussion shows positive result of the research on using different features for learning. However, I did not find any research on how different features of mobile are used by individual learners. I found one recent study carried out in Malaysia in higher education context to survey students' readiness for mobile learning.

### **2.3 Implications of the Review for the Study**

The review of available literature shows mobile learning has caught interest of many researchers, teachers, educationists, and technology expert. It is regarded one of most useful modern educational technology. However, these research studies on mobile learning are not adequate to draw the holistic picture of the complex phenomena.

Researches on mobile learning have been conducted in both controlled as well as natural context. Most of the researches carried out both in natural and controlled setting have proved potentialities of mobile learning as technology, pedagogy, and social attitude towards mobile learning change. However, being rapidly evolving and expanding field, current researches not sufficient. “The diversity and multi- functionalities of mobile wireless devices still have left out various domains unexplored in the m learning environment” (Hayati, Jalifer&Mashhadi, 2013,p.68).

The review of the literature showed that mobile learning was virtually neglected field in Nepal. Students were often seen using dictionary function in an English language class. However, other uses of mobile phones for learning were not explored. No research has been undertaken to explore the mobile learning modalities at grade 11 and 12 in Nepal. Therefore, the review of literature highlighted the need of research to identify students' uses of mobile devices for learning. Based on the lack of related literature, this research sought to explore current mobile learning practices, and students' perceptions towards mobile learning.

## CHAPTER THREE

### METHODS AND PROCEDURE OF THE STUDY

#### 3.1 Research Design and Method

This study was based on a mix-method design (concave): quantitative and qualitative techniques. For quantitative data survey design was used. Closed ended questionnaires were used to obtain the required data .All the informants were selected randomly.

Survey research was conducted to achieve the objectives of this study. Tull& Hawkins (1973, as cited in Pant 2009, p.123) define survey research as “the systematic gathering of information from respondents for the purpose of understanding and predicting some aspects of the behavior of the population of interest”. The main purpose of a survey is generally is to obtain a snapshot of conditions, attitudes and or events at a single point of time. This research was carried out in natural setting and data were collected at a single time through the help of questionnaire from primary sources i.e. thirty (40) secondary teachers.

I strongly maintained the following eight step procedure suggested by Nunan (2010, p.141) while carrying out this research work.

Step 1: Define objectives

Step 2: Identification of the target population

Step 3: Literature review

Step 4: Determine sample

Step 5: Identifying survey instruments

Step 6: Design survey procedure

Step 7: Identify analytical procedure

Step 8: Determine reporting procedure

Similarly, for qualitative data, interviewed was conducted to collect the data.

#### 3.2 Sources of Data

Both primary and secondary sources were used for obtaining required data.

- a. Primary Sources: Primary data were collected 60 students from three schools, 20 from each school. The informants were 11 and 12 grader students.
- b. Secondary Sources: Secondary sources were taken from various reports, magazine, books, journal articles, and web pages.

### **3.3 Population and Sampling Procedure**

The population of this study were all the 11 and 12 grade students of Sunsari district. I selected three schools of the district purposively. But, I selected 60 students using randomly sampling procedure. I used fishbowl sampling procedures. However, for the interview, I purposively selected 6 students.

### **3.4 Tools for Data Collection**

Both Close-ended questionnaires and interview were used for collecting data. Close-ended questionnaires were used as the research tools for quantitative data. To get pre-defined responses and to know students' perceptions on mobile learning practices, yes/no questions and likert scale questions were used. Likert type attitudinal scale, for list of statements with five levels of agreement to select ranging from Strongly agree (SA) to Strongly disagree (SD). For obtaining qualitative data, interview was conducted with 6 students.

### **3.5 Data Collection Procedure**

I contacted to the authorities of respective schools and fixed the date for data collection. I visited the schools and got permission to collect data from the authorities in their schools. With their permission, I randomly selected some students and gathered in one class. After assuring the appropriate use of collected data for the research purpose, I distributed the questionnaire to them with the help some teachers of respective schools and collected them after the completion. The randomly selected students had freedom to participate or discard the survey. The questionnaire were administered in-group/ class with target students in the target schools.

### **3.7 Data Analysis and Interpretation**

The collected data were analyzed using Microsoft Excel program, using simple descriptive statistical methods: number and percentage. The quantitative data

were represented in table and figure. And qualitative data were interpreted descriptively.

**CHAPTER FOUR**  
**ANALYSIS AND INTERPRETATION OF RESULTS**

In this chapter, the obtained data were analyzed. At the end of this chapter, based on the data and analysis, findings were drawn.

#### 4.1 Analysis and Interpretation of Mobile Learning Practices

This chapter describes how respondents use their mobile phones for learning both for general and academic purpose.

##### 4.1.1 Uses of Mobile for General Purpose

Under this, the use of mobile for general purpose by the informants have been presented.

**Table -1**

S.N	Features	Yes			No	
		Number	Percentage		Number	Percentage
1	SMS	60	100%		0	0 %
2	Phone call	60	100%		0	0 %
3	Email	15	25%		45	75%
4	Entertainment	60	100%		0	0%
5	Browsing internet	30	50%		30	50%
6	Playing games	50	90%		6	10%
7	Social network	60	100%		0	0%
8	Reading online news	60	60%		0	0%
9	Taking photo	60	100%		0	0%

Table 1.shows how respondents use their mobile phones.The table shows that all the informants (100%) use mobile phone for SMS, phone call, entertainment social network, reading online news and taking photos. However, it is found that only 25 % informants use mobile phone for email, 50% use for browsing internet, 10% use playing games. By the table, it can be understood that mobile phone is increasing used in the informant day life activities and entertainment.

#### 4.1. 2 Uses of Mobile for Learning in the Class and Outside the Class

This section presents respondents mobile learning practices both inside and outside their class.

**Figure 1**

*Provision of Mobile Using in the Class*

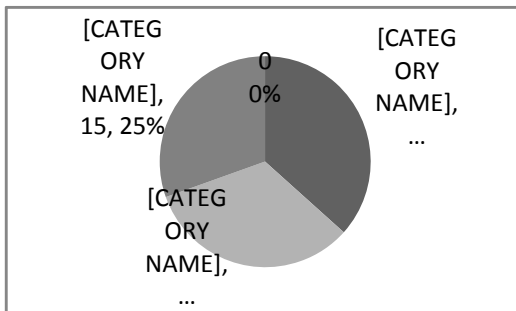
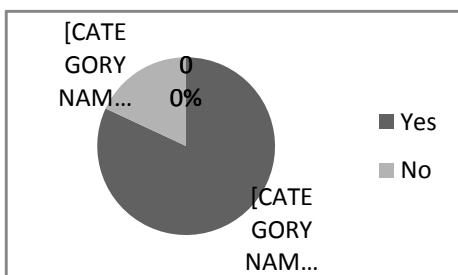


Figure 1 indicates that 30 (50%) respondents reported that they were allowed to use mobile phone for learning in the class and 15(25%) were not allowed to use mobile phones in the class. 15 (25%) respondents were not sure if they could use mobile for learning or not in their class. The data indicates that school administrations lack policies regarding mobile uses for learning inside the class.

**Figure 2**

*Mobile Learning Practice Inside*



Although, mobile learning practice inside the class is weak, it has strong presence outside. Figure2 shows that majority of respondents use their mobile for learning outside their class. Out of 60 respondents, 48 (80%) use their mobile for learning purposes. They use dictionary for finding word meaning, browse course content, take photos of

textbook, record class lecture, use calculators etc. The figure also shows that about one-fifth (20%) informant do not use their mobile for learning. Some of them argued that reading on mobile is bad for eyes. It kills their creativity, encourages plagiarism and passivity in learning process.

#### **4.1.3 Supports for Mobile learning from Teacher**

The following table presents whether teacher supports for learning English through mobile learning.

**Table-2**

	<b>Yes</b>	<b>No</b>
<b>No. of informants</b>	<b>15 (25%)</b>	<b>45 (75%)</b>

Table no 2 indicates that majority of respondents do not get support from their teachers. The table shows 45 (75%) of the respondents were not supported for mobile learning; only 15 (25%) reported that they get support to use mobile phone in English language learning.

#### **4.1.4 Academic Use of Mobile**

Under this sub-topic, mobile phone used for academic purpose have been presented.



**Table 3**

S.N	Features	Yes		No	
		Number	Percentage	Number	Percentage
1	Listening to podcast(downloaded audio file)	54	90%	6	10%
2	Recording speaking for pronunciation	45	75%	15	25%
3	Recording class room discussion/lecture	6	10%	54	90%
4	Using online dictionary/references	54	90%	6	10%
5	Using downloaded dictionary	57	95%	3	5%
6	Listening media broadcast	48	80%	12	20%
7.	Taking picture of text from board/textbook	57	95%	3	5%

The table 3 shows that 90% the informants use mobile for listening to podcast (download audio file whereas 10% respondents do not use the podcast. Similarly, it is seen that 75% informants use mobile phone for recording speaking for pronunciation while the remaining of them do not. Likewise, it is found that only 10% use mobile phone for recording classroom discussion but majority of them 90 % do not use for the purpose. Similarly, 95% informants use mobile phone for using downloaded dictionary and taking picture of text from board/textbook while others do not use for the purpose. In the table, it is seen that 80% informants use mobile phone for listening media broadcast while 20% do not use. By the data, it can be inferred that the use of mobile for academic purpose is increasing.

#### **4.2 Students' Perceptions of Mobile Learning**

This section presents studentson perception on role of mobile on learning, permission to use mobile in campus, needs on training, teachers and parents' attitudes toward mobile learning practices, and usefulness of mobile learning. The students' response on

Likertscale with their frequency is given in appendix sections. Closer analyses of each of responses are presented below with separate table for each of these questions.

**Table 4**

*Attitude towards role of mobile in learning*

Items	Responses													
	Agree						Undecided		Disagree					
	SA (5)		A (4)		Total		NAND (3)		D(2)		SD (1)		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Mobile phone can facilitate English learning	15			50	45		3	5		10	6	10%	12	20%
		25%	30	%		75%		%	6	%				

Note: SA= Strongly Agree(5); A= Agree(4) NAND= Neither agree nor disagree(3); SD= disagree(2); Strongly disagree(1)

Table 4 shows that 75 % respondents agreed that mobile phone can facilitate learning. The table also exhibits that 5 % respondents are undecided regarding the role of mobile in learning. However, only 20% respondents rejected the possibilities of positive role of mobile in learning. By the table, it can be understood that a high majority of the informants believe that mobile facilitate English language learning.

**Table 5***Opinion towards allowing mobile learning in class*

Items	Responses													
	Agree						Undecided NAND (3)	Disagree						
	SA (5)		A (4)		Total			D(2)		SD (1)		Total		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
The school administration should allow students to use mobile in the class for learning purpose.	6	10%	2	44%	30	50%	12	20%	6	10%	1	20%	8	30%

Table 5 indicates that (50%) of students wanted to use their mobile in the class for learning while 30 % disagreed with the statement and 20% respondents not decided. By this table, we can see that half of students were affirmative towards allowing students to use mobile in their class for learning purpose.

**Table 6***Attitude towards banning mobile phones in class*

<i>Items</i>	<i>Responses</i>															
	Agree						Undec ided NAN D (3)	Disagree								
	SA (5)		A (4)		Total			D(2)		SD (1)		Total				
	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
The campus administrati on should ban on mobile phone use in the class	3	5 %	3	5 %	6	10 %	6	1 0 %	3	50 %	1	3 0 %	3	4 8 %	8	0 %

From the cross check of the students on banning the mobile phone in the class, the table 6 shows that 10% agreed with the statement, 10 % were undecided and a high majority of the students disagreed with the statement. By this, we can clearly understand that the informants were in favor of using mobile phone in the classroom.

**Table 7***Appropriate Use of Mobile Phone in the Class*

Items	Responses													
	Agree						Undeci ded NAND (3)	Disagree						
	SA (5)		A (4)		Total			D(2)		SD (1)		Total		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Students will use mobile appropriately in the class if they are allowed.	15	25	1	5	30	50	12	20	1	20	6	10	18	30

Table 7 presents respondents view on appropriate use of mobile phone in the class. The table indicates that 50% of the respondents agreed that they use their mobile phone appropriately if they are allowed to use in the class. 20 % of respondents were undecided and 30% respondents disagreed that they use mobile appropriately if they were allowed to use their mobile phones in the class. No definite patterns of positive and negative respondents were identified.

**Table 8***Demand on training and orientation for mobile learning*

Items	Responses													
	Agree						Undecided		Disagree					
	SA (5)		A (4)		Total		NAND (3)		D(2)		SD (1)		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Students need orientation/training for mobile learning	1	25	15	25	30	50	6	10	1	20	1	20	2	40%
	5	%		%		%		%	2	%	2	%	4	

Table 8 presents students demands on training and orientation for mobile learning. Half of the respondents (50%) agreed that they need training and orientation for mobile learning. 40% of the respondents disagreed that they needed training. However, 10% of them were undecided about the need of training and orientation program.

**Table 9***Negative effect of mobile in learning*

Items	Responses													
	Agree						Undecided		Disagree					
	SA (5)		A (4)		Total		NAND (3)		D(2)		SD (1)		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Mobile phone hampers study	3	5%	3	5%	6	10%	30	50%	12	20%	12	20%	24	40%
												0	%	
Mean score			3.16		Standard deviation								1.10	

shows that respondents have mix opinion about negative effect of mobile in their study. The table shows that 10% of the respondents agreed that mobile phone hampers study. Similarly, 50% of the respondents were undecided about negative role of mobile phones on study and 40% disagreed about negative effects of mobile phones on learning.

**Table 10**

*Mobile learning and digital divide*

Items	Responses													
	Agree						Undecided NAND (3)		Disagree					
	SA (5)		A (4)		Total				D(2)		SD (1)		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Mobile phone narrows down the digital divide existing in the country	12	20%	3	5%	42	70%	3	5%	1	2%	0	0%	1	25%

Table 10 shows 70% agreed that mobile phones can narrow down the existing digital divide in the country. However, 5% respondents were undecided on role of mobile phones on narrowing down the digital divide in the country. While 25% of the informants disagreed that mobile phone narrows down the digital divide existing in the country. By the table, it is inferred that a high majority of them believe that the use of mobile in learning reduce digital gap.

**Table 11***Parents and Mobile learning*

Item	Responses													
	Agree						Undecided		Disagree					
	SA (5)		A (4)		Total		ed NAND (3)		D(2)		SD (1)		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Parents have positive attitude towards mobile use for learning	3	5%	12	20%	15	25%	0	0%	3	50%	15	25%	45	75%

Table 11 shows that parents have mixed opinion about their parents' attitude towards mobile uses for learning. For instance, 25% respondents agreed that parents have positive attitude towards mobile uses for learning and 75% disagreed that their parent have positive attitude towards mobile use for learning. No one was undecided. So, it can be understood that parents were not positive towards the use of mobile phone in learning.



**Table 12***Teachers' attitude towards mobile learning*

Items	Responses													
	Agree						Undeci ded NAND (3)	Disagree						
	SA (5)		A (4)		Total			D(2)		SD (1)		Total		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Teachers have positive attitude towards mobile learning	15	25	1	16.7	3	50	0	0	3	50	0	0	3	50

Table 12 shows that students have mixed opinion regarding teachers' attitude towards mobile learning. It shows 50% respondents believe their teachers have positive attitude towards mobile learning while the equal percentage of respondents disagreed that their teachers have a positive attitude towards mobile learning.

#### **4.3 Mobile Learning Practices: Interview with the Students**

I purposively 6 students for in interview to get deeper insight in to mobile learning practices In the course of interview students revealed some additional of the theme, which were not covered in the questionnaire.

**Listening audio book:**From the interview with the students it was found that some students learn listening downloaded contents on their mobile phones. They reported that they download some audio poem, essay, novel or story and listen to them. Some of them listen to course related content. One of visually impaired participant told that regularly listen course related content on her mobile." I do not have books with Braille script. But nowadays, I found some audio books in Internet. I have downloaded them in memory card and I listen to them whenever I want. (participant 2)."

**Dictionary use:** With the availability of dictionary on mobile, the use of it is becoming popular function. Students use both on line and downloaded dictionary on their mobile phone. One of the participant said "Mobile dictionary is very comfortable to use as we can find easily the word meaning, for checking spelling, and listening pronunciation of words"(participant 5).

**Web search:** The informants expressed that they use mobile phone to surf learning materials by connecting wifi in their mobile. The study also shows that the respondents use the Internet function available in their mobile phone. Informants 4 says "I search summaries of poem, stories, essays and writer background via web search engines.

**Phone call:** Some participants reported that they called their teachers for learning. However, they reported that they called their friends and discussed about their course while preparing for exam." I had problem with one question. Then I called one of my friend she helped me to find answer "(participant 2).

**Chat:** The students reported that they chat with the friends and teachers regarding learning at the time of examination. The participant 1 say "I send question in chat box at the time of examination".

**Photographs:** Students use their camera function to learn they reported that they take photographs of different books or board and read. "I and my friend have different writers' book. When I find useful text on her book, I capture the text with my mobile phone. It saves my time to copy. I can easily collect text from different sources" (participant 2).

**Makes Autonomous:** From the interview with the students, it was found that all of them (6 students) unanimously agreed that the use of mobile can lead to be autonomous learners. They can use it for chatting with their friends and teachers regarding academic matters. Similarly, it can be used to search online materials such as finding summaries of poem, story and essay.

#### **4.4 Summary of the Findings**

The findings of the study were drawn from analysis and interpretation of data. The findings have been presented thematically below.

## Mobile Learning Practices

Analysis of questionnaires and interviews revealed that students used their mobile phone for English Language learning. Although the uses of these feature is not satisfactory, students have already found their way to use their mobile phones for learning. They listen to audio book, record class lecture, use dictionary, browse the Internet, call their friends to discuss about their learning issues, and use calculators for learning.

- ) The study showed that all the informants (100%) use mobile phone for SMS, phone call, entertainment social network, reading online news and taking photos. However, it is found that only 25 % informants use mobile phone for email, 50% use for browsing internet, 10% use playing games.
- ) Half of the respondents reported that they were allowed to use mobile phone for learning in the class and 15(25%) were not allowed to use mobile phones in the class. 15 (25%) respondents were not sure if they could use mobile for learning or not in their class.
- ) The study revealed that majority of respondents use their mobile for learning outside their class. Out of 60 respondents, 48 (80%) use their mobile for learning purposes. They use dictionary for finding word meaning, browse course content, take photos of textbook, record class lecture, use calculators etc. The figure also shows that about one-fifth, 12 (20%) informant do not use their mobile for learning.
- ) The findings showed that majority of respondents do not get support from their teachers. The table shows 45 (75%) of the respondents were not supported for mobile learning; only 15 (25%) reported that they get support to use mobile phone in English language learning.
- ) It was found that 90% the informants use mobile for listening to podcast (download audio file whereas 10% respondents do not use the podcast. Similarly, it is seen that 75% informants use mobile phone for recording speaking for pronunciation while the remaining of them do not. Likewise, it is found that only 10% use mobile phone for recording classroom discussion but

majority of them 90 % do not use for the purpose. Similarly, 95% informants use mobile phone for using downloaded dictionary and taking picture of text from board/textbook while others do not use for the purpose. In the table, it is seen that 80% informants use mobile phone for listening media broadcast while 20% do not use.

### **Students' Perceptions of Mobile Learning**

The data showed that students had positive attitudes towards mobile learning. They sought teachers' guidance for effective mobile learning practice.

- ) It was found that 75 % respondents agreed that mobile phone can facilitate learning. The table also exhibits that 5 % respondents are undecided regarding the role of mobile in learning. However, only 20% respondents rejected the possibilities of positive role of mobile in learning.
- ) The study indicated that (50%) of students wanted to use their mobile in the class for learning while 30 % disagreed with the statement and 20% respondents not decided.
- ) From the cross check of the students on banning the mobile phone in the class, the findings showed that 10% agreed with the statement, 10 % were undecided and a high majority of the students (80%) disagreed with the statement.
- ) The study indicated that 50% of the respondents agreed that they use their mobile phone appropriately if they are allowed to use in the class. 20 % of respondents were undecided and 30% respondents disagreed that they use mobile appropriately if they were allowed to use their mobile phones in the class.
- ) The findings revealed that half of the respondents (50%) agreed that they need training and orientation for mobile learning. 40% of the respondents disagreed that they needed training. However, 10% of them were undecided about the need of training and orientation program.

- ) The study showed that 10% of the respondents agreed that mobile phone hampers study. Similarly, 50% of the respondents were undecided about negative role of mobile phones on study and 40% disagreed about negative effects of mobile phones on learning.
- ) The findings indicated that 70% agreed that mobile phones can narrow down the existing digital divide in the country. However, 5% respondents were undecided on role of mobile phones on narrowing down the digital divide in the country. While 25% of the informants disagreed that mobile phone narrows down the digital divide existing in the country.
- ) The study revealed that 25% respondents agreed that parents have positive attitude towards mobile uses for learning and 75% disagreed that their parent have positive attitude towards mobile use for learning. No one was undecided.
- ) The findings showed that 50% respondents believe their teachers have positive attitude towards mobile learning while the equal percentage of respondents disagreed that their teachers have a positive attitude towards mobile learning.

### **Findings of the Interview Regarding the Mobile Learning Practices**

**From the interview, it was found that mobile phone can be used for listening audio book, looking meaning into the downloaded dictionary on the mobile,** searching materials through internet, chatting for academic matters, asking through phone call and taking photographs of learning materials. Further, the informants expressed the mobile learning leads the students to be autonomous learners as through the use of mobile phone they search online materials and find words meaning of unfamiliar words.

## CHAPTER FIVE

### CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Conclusions

Reflecting over the findings and the discussion above, I have concluded that mobile phones are readily available technology even in the rural areas of the country. Students have already started to use their mobile phones for learning. However, their mobile learning practices are weak because of absence of clear mobile learning policies of higher educational institutes on one hand and absence of teacher guidance on the other hand. They expect teachers support for effective mobile learning. Students have positive attitudes toward mobile learning and clearly against banning them in higher educational institutes. It will be unwise to underestimate the new learning paradigm started by mobile technology in learning. In this context, mobile phones can be feasible devices to integrate ICT in higher education in Nepal as blended learning mode, enhancing the current face to face mode of higher education.

#### 5.2 Recommendation

The three layer recommendations have been made based on the data.

##### 5.2.1 Policy Related Recommendations

I did not find any policy to guide mobile learning practice in higher education. Policies provide guidelines for directing efforts unidirectional to achieve goal. Here are some policy related recommendations.

- ) The Ministry of education should formulate policy to recognize mobile learning as supplementary mode of learning as part of blended learning in higher education.
- ) The schools should develop resource and support center for mobile learning practices.
- ) The Nepal government, province government, local level government should make a policy to conduct training and orientation for ICT integration and mobile learning practices in wider scale.

### **5.2.2 Practice Related Recommendations**

The practice causes real changes. Each school should create appropriate environment for effective mobile learning practices.

- ) The school should formulate code of conduct for mobile learning practices in the schools.
- ) Teachers and students should set ground rules for judicious mobile learning practices in the class and outside the class for pleasant learning experience.
- ) They should organize seminars, workshops for effective mobile learning practices.
- ) They should develop culture of information and resources sharing.
- ) They should develop mobile learning resources and share with the students.
- ) Schools administration should train teachers for running newer functions on their mobile.
- ) Schools should encourage the teachers to buy latest mobile devices and use them in teaching learning activities.
- ) Teachers should use mobile in their teaching and encourage students to use mobile for academic purpose.
- ) Teachers should devise appropriate teaching methods which demands use of their mobile learning. For example, a project based learning in which, mobiles can be used for communication, collaboration, data collection, etc.
- ) Teachers should send assignment, feedback, etc on mobile phone.

### **5.2.3 Further Research Related Recommendations**

For the further research on mobile learning, I have suggested the following areas:

- ) Teachers perspectives towards Mobile Learning.
- ) Experimental research on mobile learning in campuses in rural areas and major cities of the country
- ) Experimental research on the effectiveness of guided and unsupervised mobile learning practices among undergraduates.

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## Questionnaire

**Dear Informant,**

I am conducting a mini research on "Mobile Learning Practices among Eleven and Twelve Grade Students ". This research aims to identify current pattern of mobile learning.

The research is conducted for the partial fulfillment of M. Ed English. I am conducting this research under the supervision of **Mr. JagadishPaudel**, Lecturer, Department of English Education at Central Department of Education, T.U. Kirtipur, Kathmandu. I would greatly appreciate your contribution. Please provide truthful information to complete the research work. Your information will help the schools to understand possible framework to support for your productive use of mobile phones for educational use. Your answers and personal details will be used only for research purpose. Please answer all the questions.

Thank you.

Researcher

**YubrajKaphle**

### **General Instruction:**

The purpose of this questionnaire is to survey mobile learning practices. 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 provide your responses candidly in the format requested.

### **Appendix 1: General Use**

1. Tick ( ) the purpose for which you use your mobile phone?
  - a. SMS [ ]
  - b. Phone call [ ]
  - c. E mail [ ]
  - d. Entertainment [ ]
  - e. Browsing internet [ ]

- f. Playing games [ ]
- g. Accessing social media (Facebook, Twitter) [ ]
- h. Taking photos [ ]

**Appendix 2: Academic Use**

2. Would you like to use mobile in the class?  
Yes [ ] No [ ]
3. Are you allowed to use mobile for learning in the class?  
Yes [ ] No [ ] I am not sure [ ]
4. Have you ever used mobile for learning?  
Yes [ ] No [ ]
5. Which of the following ways do you use for learning?
  - a. Listening to podcast(downloaded audio file) [ ]
  - b. Recording speaking for pronunciation [ ]
  - c. Recording class room discussion/lecture [ ]
  - d. Using online dictionary/references [ ]
  - e. Using downloaded dictionary [ ]
  - f. Listening media broadcast [ ]
  - g. Accessing content online (web pages) [ ]
  - h. Accessing content offline [ ]
  - i. Taking picture of text from board/textbook [ ]
  - j. others ( please
6. Do you have any supports from your teachers to use mobile phone in learning?  
Yes [ ] No [ ]
7. If your teacher supports you for mobile learning, are you satisfied with the support?  
Yes [ ] No [ ]

### Appendix 3: Perception on Mobile learning

What is your opinion about the following statements? Please give your response by ticking ( ) to the option which best suits your opinion.

<i>S.No</i>	<i>Statements</i>	<i>Strongly agree</i>	<i>Agree</i>	<i>Undecided</i>	<i>Disagree</i>	<i>Strongly disagree</i>
1.	Mobile phone can facilitate learning.					
2	The school administration should allow students to use mobile in the class for learning purpose.					
3	Students need orientation/ training for mobile learning.					
4	The school administration should ban on mobile phone use in the class					
5	Students will use mobile appropriately in the class if they are allowed to use					
6	Teachers should guide students for effective mobile learning.					
7	Mobile phone hampers study.					
8	Mobile phone narrows down the digital divide existing in the country.					
9	Parents have positive attitude towards mobile use for learning.					
10	Teachers have positive attitude towards mobile learning.					

**Please check if you have answered all the relevant questions or not, before you return the questionnaire.**

**Thank you for contribution to this research work.**

#### **Appendix 4: Questions for Semi Structured Interview**

1. What type of mobile devices do you have?
2. Do you think mobile helps to learn English Language? If does, how?
3. What do you learn with mobile devices?
4. How do you learn with mobile devices? Can you tell me some of examples mobile learning?
5. Why do you use mobile for learning?
6. Can you tell me some instances of your effective mobile learning experiences?