

CHAPTER ONE

INTRODUCTION

The present study has been prepared to study the use of smart phone dictionaries in learning vocabularies. It intends to show the use of smart phone dictionaries by the campus going students of the major campuses of Chitwan district in learning vocabularies. This study consists of following topics: background of the study, statement of the problem, objectives of the study, significance of the study and delimitations of the study, review of empirical literature, implication of the review for the study, conceptual framework, appropriate methodology and tools. Finally, it presents findings and recommends appropriate pedagogical implications by analyzing the collected data.

1.1. General Background

English is the international language. Pandey (1999, p. 244) states it is spoken by nearly 400 million people as the first language and nearly 300 million people as the second language. It is used in diverse fields like science and technology, education, computer and mobile phone and so on. It is the lingua franca for a considerable number of people around the globe. Nepal being an under developed country, it has to depend upon English for different purposes. The government of Nepal has introduced English as the compulsory subject from the primary level to bachelor level. So in our community all the school going children are exposed to English language from their preliminary stage of education. They use English knowingly or unknowingly. They commit different kinds of errors in using vocabularies. The government has rendered textbooks in English so that the students have more exposure to English to have better

knowledge of it with the allocation of huge budget every year, the result is not satisfactory. The correct use of vocabularies has remained one of the most challenging issues among the students in Nepal. There are many reasons behind it, but the lack of the use of dictionaries among most of the students is one of them.

1.2 Statement of Problem

The use of smart phone has become very common among the students nowadays. It is being used to make calls, playing games, browsing internet, reading emails, calculating mathematical operations. It is hardly used for educational purposes. There are a number of good dictionaries, thesauruses, reference materials for using them for educational purposes. Most of the students are not well aware of them. They face a lot of troubles in using such handy smart phone dictionaries whenever and wherever they like. Most of Nepali medium students state that they do not understand the technical terms given in the dictionary. Even the students are found to be using dictionaries very less frequently. A good number of them have no dictionaries installed in their smart phones. Some of smart phone dictionaries are so small that they do not find the word they are searching for. Although there a good number of good smart phone dictionaries in the internet, they do not know about them. The students even do not tend to consult dictionary when they have doubts of a certain aspect of a word. They do not have habit of using dictionary in a regular basis either. Moreover, some of them are so confident about the certain aspect of a word that they do not like consulting dictionaries. While looking up a word from a dictionary, they do not do through study of the whole word entry. They give meanings of a word more important than other aspects of a word.

1.3 Objectives of the Study

The present study had the following objectives:

- a) To find out the extent of use of smart phone dictionaries to facilitate learning English vocabularies
- b) To find out opinions of students on using smart phone dictionaries
- c) To suggest some pedagogical implications for the use of smart phone dictionaries in learning vocabularies

1.4 Research Questions

The following research questions were used in the study:

- a) How much do the students know about smart phone dictionaries?
- b) How much do they use them?
- c) What are their opinions about the usefulness of smart phone dictionaries?

1.5 Significance of the Study

Dictionaries are rich repertoire of learning different aspects of words. They tell us the correct meanings, pronunciations, spellings, parts of speech, uses, and so on. Smart phone dictionaries are much easier, cheaper and comfortable than paper dictionaries, but most of the students are not well aware of rich dictionaries which are available in the internet. The aim of this research paper will be to find out the extent of use of smart phone dictionaries which will facilitate the students about learning the different aspects of words.

1.6 Delimitations of the Study

The proposed study had the following delimitations:

- a) This research study was limited to six campuses within Chitwan district.
- b) This research was confined to 120 students of Bachelor level first year.
- c) This research used questionnaire only as a research tool.
- d) This study was limited to only those students who have smart phone dictionaries.

1.7 Operational Definitions of Key terms

The following operational definitions of key terms in this study are explained as follows:

Survey- an investigation of the opinion, behavior of a particular group of people which are done by asking them questions

Smart phone - a mobile phone with the facility of a computer like email, internet

Smart phone dictionary- a dictionary which is installed in a smart phone

Vocabulary- The sum of words used by, understood by, or at the command of a particular person or group

CHAPTER TWO

REVIEW OF THE RELATED LITERATURE AND CONCEPTUAL FRAMEWORK

2.1 Review of Theoretical Literature

One of the essential preliminary tasks for undertaking a research study is to go through the existing literature in order to acquaint the researcher with the available body of knowledge of interest. Reviewing the literature is time consuming task but it helps us to bring clarity and focus to our methodology and broadens our knowledge in the research area. Related books and articles by different authors, previous research work such as thesis and reports have been consulted in this study.

2.1.1 Vocabulary Learning

A dictionary is of great help for vocabulary learning. Cambridge Dictionary of International English (1995) defines vocabulary ‘as all the words known and used by a particular person’. Knowing a word, however, is not as simple as merely being able to recognize or use it. There are several aspects of word knowledge that are used to measure word knowledge. A person's vocabulary is the set of words within a language that are familiar to that person. A vocabulary usually develops with age, and serves as a useful and fundamental tool for communication and acquiring knowledge. Acquiring an extensive vocabulary is one of the largest challenges in learning a second language. The types of vocabulary are described as follows:

Productive and Receptive Vocabulary

The first major distinction that must be made when evaluating word knowledge is whether the knowledge is productive or receptive; even within those opposing categories; there is often no clear distinction.

Words that are generally understood when heard or read or seen constitute a person's receptive vocabulary. These words may range from well-known to barely known. A person's receptive vocabulary is the larger of the two. For example, although a young child may not yet be able to speak, write, or sign, he or she may be able to follow simple commands and appear to understand a good portion of the language to which he or she is exposed. In this case, the child's receptive vocabulary is likely tens, if not hundreds of words, but his or her active vocabulary is zero. When that child learns to speak or sign, however, the child's active vocabulary begins to increase. It is also possible for the productive vocabulary to be larger than the receptive vocabulary, for example in a second-language learner who has learned words through study rather than exposure, and can produce them, but has difficulty recognizing them in conversation.

Productive vocabulary, therefore, generally refers to words that can be produced within an appropriate context and match the intended meaning of the speaker or signer. As with receptive vocabulary, however, there are many degrees at which a particular word may be considered part of an active vocabulary. Knowing how to pronounce, sign, or write a word does not necessarily mean that the word that has been used correctly or accurately reflects the intended message; but it does reflect a minimal amount of productive knowledge.

According to Montgomery (2007) there are four types of vocabulary: They are listening vocabulary, speaking vocabulary, reading vocabulary and writing vocabulary. Children begin to acquire listening and speaking vocabularies many years before they start to build reading and writing vocabularies. Spoken language forms the basis for written language. Each type has a different purpose and, luckily, vocabulary development in one type facilitates growth in another. Reading vocabulary is all the words a reader can recognize when reading. This is generally the largest type of vocabulary simply because a reader tends to be exposed to more words by reading than by listening. Listening vocabulary is the words he can recognize when listening to speech. People may still understand words they were not exposed to before using cues such as tone, gestures, the topic of discussion and the social context of the conversation. Speaking Vocabulary is all the words he uses in speech. It is likely to be a subset of the listening vocabulary. Due to the spontaneous nature of speech, words are often misused. This misuse – though slight and unintentional – may be compensated by facial expressions, tone of voice. Writing vocabulary is all words which are used in various forms of writing from formal essays to social media feeds. Many written words do not commonly appear in speech. Writers generally use a limited set of words when communicating: for example

Degree of Knowledge

Within the receptive–productive distinction lies a range of abilities that are often referred to as *degree of knowledge*. This simply indicates that a word gradually enters a person's vocabulary over a period of time as more aspects of word knowledge are learnt. Rebecca (2003) opines these stages could be roughly described as:

1. Never encountered the word.
2. Heard the word, but cannot define it.
3. Recognize the word due to context or tone of voice.
4. Able to use the word and understand the general and/or intended meaning, but cannot clearly explain it.
5. Fluent with the word – its use and definition.

Depth of Knowledge

The differing degrees of word knowledge imply a greater *depth of knowledge*, but the process is more complex than that. There are many facets to knowing a word, some of which are not hierarchical so their acquisition does not necessarily follow a linear progression suggested by *degree of knowledge*. Several frameworks of word knowledge have been proposed to better operationalise this concept. According to Nassaji (2004) vocabulary learning includes nine facets:

1. orthography – written form
2. phonology – spoken form
3. reference – meaning
4. semantics – concept and reference
5. register – appropriacy of use
6. collocation – lexical neighbours
7. word associations
8. syntax – grammatical function
9. morphology – word parts

Celce-Murcia and Freeman (1999, p. 30) state that a student needs to know the following features of a word:

1. Spelling (orthography)
2. Phonetic representation (pronunciation, syllabification, and stress (if multisyllabic))
3. Morphological irregularities (where applicable)
4. Syntactic features and restrictions (including part of speech)
5. Common derivation and collocation (i.e. words with which it co-occurs)
6. Semantic features and restrictions
7. Pragmatic features and restrictions

Harmer (2013) states a learner need to know the context in which a word is used. He says that though ‘costly’ and ‘expensive’ are synonyms but they are subtly different. The first one is used for larger projects whereas the second one is used in broader sense. Beside this, one has to keep in mind the metaphorical and idiomatic uses, collocations, grammatical information of a word (noun, adjective, preposition) and paralinguistic features like tone of voice, gestures and postures.

The Effects of Vocabulary Size on Language Comprehension

Another issue to be elaborated is how much vocabulary and what vocabulary should be learnt by the students to facilitate their reading comprehension. Zhang and Anual (2008) reported that knowing 2000-3000 words in a foreign language was correlated to reading comprehension for short answer tasks. Nassaji (2004) states comprehension of a text depends more on the depth of vocabulary rather than the number of words a reader knows in a text.

Second Language Vocabulary Acquisition

Learning vocabulary is one of the first steps in learning a second language, but a learner never finishes vocabulary acquisition. Whether in

one's native language or a second language, the acquisition of new vocabulary is an ongoing process. There are many techniques that help one acquire new vocabulary

2.1.2 E-Learning

The use of smart phone dictionaries for vocabulary learning is a part of e-learning. E-learning refers to the use of information and communication technologies to enable the access to online learning/teaching resources. In its broadest sense, Abbad et al (2009), defined E-learning to mean any learning that is enabled electronically. They however narrowed this definition down to mean learning that is empowered by the use of digital technologies. This definition is further narrowed by some researchers as any learning that is internet-enabled or web-based.

Types of E-Learning

There are diverse ways of classifying the types of e-learning. According to Algahtani (2011), there have been some classifications based on the extent of their engagement in education. He divided e-learning into two basic types, consisting of computer-based and the internet based e-learning. According to Algahtani (2011), the computer-based learning comprises the use of a full range of hardware and software generally that are available for the use of Information and Communication Technology and also each component can be used in either of two ways: computer managed instruction and computer-assisted-learning. In computer assisted- learning, to him, computers are used instead of the traditional methods by providing interactive software as a support tool within the class or as a tool for self-learning outside the class. In the computer-managed instruction, however, computers are employed for the purpose

of storing and retrieving information to aid in the management of education.

The internet-based learning according to Almosa (2001) is a further improvement of the computer-based learning, and it makes the content available on the internet, with the readiness of links to related knowledge sources, for examples e-mail services and references which could be used by learners at any time and place as well as the availability or absence of teachers or instructors (Almosa, 2001). Zeitoun (2008) classified this by the extent of such features use in education, mixed or blended more, assistant mode, and completely online mode. The assistant mode supplements the traditional method as needed. Mixed or blended mode offers a short-term degree for a partly traditional method. The completely online mode, which is the most complete improvement, involves the exclusive use of the network for learning (Zeitoun, 2008).

The development of multimedia and information technologies, as well as the use internet as a new technique of teaching, has made radical changes in the traditional process of teaching (Wang et al. 2007). Development in information technology, According to Yang and Arjomand (1999), has generated more choices for today's education. Agendas of schools and educational institutions have recognized e-Learning as having the prospect to transform people, knowledge, skills and performance.

2.1.3 Some of the Good Smart Phone Dictionaries

This research is based upon the use smart phone dictionaries for vocabulary learning. There are a number of good smart phone dictionaries of android operating system (OS). They are of two types. The first ones are free dictionaries which can be installed in any smart phones

free of cost. The second ones are to-be- purchased dictionaries which cannot be installed without online payment. Generally, to-be-purchased dictionaries are far better than the free ones. In terms of wordlist, coverage, interfaces, illustrations, and preference of users the following dictionaries are supposed to be much better ones than others:

a) WordWeb 3.2

WordWeb is a comprehensive international English thesaurus and dictionary, with definitions, synonyms and many related words. It is an international English dictionary and thesaurus program for Android. Available for download online, the program is partly based on the WordNet database. It includes pronunciations and usage examples, and has helpful spelling and sounds-like links. The website of the dictionary (play.google.com/store/apps/details?id=com.wordwebsoftware.android.wordweb) states WordWeb is truly a Word Web - each definition is linked to sets other related words. Users can just click on a word to explore the network of meanings. Its standard version is free of cost but audio version is to be purchased one. The thesaurus is integrated into the dictionary; synonyms, as well as detailed categorization of the relationship between words, are shown under the definition. The program shows, synonyms, antonyms, type of ('daisy' is listed as a type of 'flower'), types ('play' lists several sub-types of play, including 'passion play'), parts (under 'forest', listed parts include 'tree' and 'underbrush') part of ('bumper' is a part of a 'car', 'truck', or 'machine'), similar (words that are not synonyms, but nearby; 'big' is listed as similar to 'huge'). WordWeb is regionalized, with specific dictionaries for Australian, British, Canadian, American, Irish, New Zealand, South African, and Indian English. It can be easily installed from play store.

According to the website of the dictionary the salient features of Wordweb dictionary are as follows:

- a) Up-to-date international English dictionary, based on WordWeb
- b) 70,000 professionally-recorded offline audio pronunciations (Audio Edition only)
- c) Fuzzy lookup with spelling and sounds-like suggestions
- d) Synonyms, similar words and many usage examples
- e) 285 000 words, phrases and derived forms
- f) 225 000 word sense definitions
- g) 85 000 easy-to-understand text pronunciations
- h) Fast pattern-matching search (*, ?, vowel, consonant, select word types)
- i) Includes many proper nouns, compounds and phrases
- j) Bookmarks, recent and random words
- k) Full coverage of American, British, Canadian, Australasian and Asian English
- l) Works offline, one app for phones and tablets

Fig. 1

The Screenshot of WordWeb Dictionary



The screenshot of WordWeb dictionary shows synonyms, uses, pronunciation, and meanings of the word ‘fantastic.’ Even the interface looks attractive with more functions. (From the website of the dictionary)

b) The Chambers Dictionary 3.2 (13th Edition, 2016)

The Chambers Dictionary is single-volume British and international English dictionary with the widest coverage of all the riches of the English language. It is clear, accurate and occasionally witty definitions, with the latest new words from science, technology and contemporary culture. The website of the dictionary

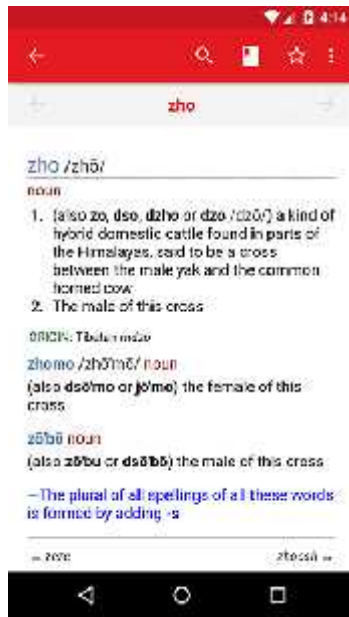
([play.google.com/store/apps/details?id=com.](https://play.google.com/store/apps/details?id=com.wordwebsoftware.android.chambers)

[wordwebsoftware.android.chambers](https://play.google.com/store/apps/details?id=com.wordwebsoftware.android.chambers)) states this 13th Edition reflects the changes in our language, with special attention paid to new words that have emerged, new uses of old words and the most up-to-date pronunciation. The 13th Edition includes over 3,00,000 distinct words, compounds, phrases and derived forms. It can install using All in One Downloader.

According to the website of the dictionary some salient features of Chambers dictionary are as follows:

- a) Spelling suggestions
- b) Sounds-like and often-confused
- c) Fast pattern-matching search (*, ?, vowel and consonant)
- d) Filter search results by noun, verb, adjective, adverbs
- e) Anagram solver
- f) Customize search options (case, derived forms, etc.)
- g) Cross-reference to other offline and online references

Fig. 2
The Screenshot of
Chambers Dictionary



The screenshot of Chambers Dictionary shows meanings, pronunciation, and part of speech of the word 'zho.' The interface looks elegant too.

(From the website of the dictionary)

c) Merriam Webster Dictionary

Merriam Webster Dictionary is America's most useful and respected dictionary, optimized for user's Android device. The website of the dictionary (play.google.com/store/apps/details?id=com.merriamwebster.premium) states this is the best Android app for English language reference, education, and vocabulary building. It is added with new word games to test user's vocabulary. Hundreds of words are given to test user's skills. The user will have complete access to definitions and synonyms whether or not he/she is connected. The user will need a connection to view illustrations, hear audio pronunciations, and use voice search. There are different versions of Merriam Webster Dictionary. Different versions of Merriam Webster Dictionary with more features and coverage can be installed using All in One Downloader.

Fig. 3

The Screenshot of Merriam

Webster Dictionary



The screenshot of Merriam Webster Dictionary shows meanings, pronunciation, synonyms, antonyms, examples and word origin, derivatives of the word 'eloquent'.

(From the website of the dictionary)

According to the website of the dictionary, the salient features of Merriam-Webster dictionary are as follows:

- a) Full Thesaurus: more than 200,000 word choices, examples, and explanation
- b) New Vocabulary-Building Quizzes: fun, fast quizzes to learn new or test user's vocabulary
- c) Having unabridged, Advanced Learners and Thesaurus version too
- d) Voice Search: look up a word without having to spell it
- e) Word of the Day: learn a new word every day
- f) Example Sentences: understand how a word is used in context
- g) Quick Definitions: perfect for on-the-go lookups
- h) Audio Pronunciations: voiced by real English speakers, not text-to-speech robots

- i) Favorite Words and Search History: Keep track of the words that are most important to user
- j) Premium Content: over 1000 graphical illustrations, and over 20,000 additional entries covering people, places, and foreign terms
- k) For Tablets: Scrolling Index: browse the entire dictionary

d) Oxford Advanced Learner's Dictionary, 8th Edition

Oxford Advanced Learner's Dictionary, 8th edition is the most popular dictionary among users. It has good illustration with British and American pronunciation of each and every head word. It occupies nearly half gigabyte of space. It can be installed using All in One Downloader, but data and cache should be cleared occasionally, if the user is frequently online. According to the website of the dictionary (play.google.com/store/apps/details?id=com.obisystems.msdict.embedded.wireless.oxford.dictionaryofenglish), the salient features of Oxford dictionary are as follows:

- a) Used by over 100 million English language learners to develop their English skills for work and study.
- b) Over 185,000 words, phrases, and meanings - including 900 new words and meanings.
- c) Clear explanations and example sentences from the authoritative oxford English corpus.
- d) Real voice audio for words and example sentences, in both British and American English accents including 116,000 spoken sentences to listen offline
- e) Synonyms, collocations and everyday expressions
- f) Oxford 3000 - the most important words to know in English
- g) Colour illustrations to enrich vocabulary

Fig.4

The Screenshot of OALD



The screenshot of OALD shows meanings, pronunciations, part of speech, examples with good illustration of a word ‘building’

(From the website of the dictionary)

e) Longman Dictionary of Contemporary English 2.1.0 (6th Edition, 2015)

The new edition of the best-selling Longman Dictionary of Contemporary English is a complete vocabulary and grammar resource that will enhance the user’s learning of English. According to the website of the dictionary (play.google.com/store/apps/details?id=com.mobifusion.android.ldoce5) it is integrated with grammar, thesaurus, and collocations to improve the user’s English

Fig. 5

The Screenshot of LDOCE



The screenshot of LDOCE shows, major categories of meanings a word ‘family’

(From the website of the dictionary)

According to the website of the dictionary the salient features of LDOCE are as follows:

- a) 165,000 corpus-based examples of natural English show words in context and how English is really used.
- b) Comprehensive- 230,000 words, phrases, and meanings – more than any other learner's dictionary
- c) Easy to use – easy to understand
- d) Definitions written using a vocabulary of just 2,000 words – the Longman Defining Vocabulary, ensuring all definitions are clear and easy to understand.
- e) Frequency information on the most common words – the new Longman Communication 9000 – helps the reader to learn them first.
- f) Words from the Academic Word List highlighted to help the user improve essays and presentations.
- g) An integrated Collocations Dictionary with more than 65,000 collocations:
- h) The integrated Thesaurus with more than 18,000 synonyms, antonyms

2.1.4 Usefulness of Smart Phones for Vocabulary Learning

When learning a language, vocabulary is perhaps the most important element for learners to acquire. Without a sufficient vocabulary, it is difficult to convey a lot of meaning, and most learners acknowledge this. Teachers, however, often leave this responsibility to the student and most vocabulary learning takes place outside the classroom. Smart phones provide a wonderful opportunity for learners in this respect.

The key advantages of smart phone in learning vocabularies are well documented, especially the possibility for “anywhere, anytime” learning, of transcending the barriers of a classroom, and having access to an “always on” device. Smart phones provide an efficient use of waiting time for spontaneous and fun just-in-time learning activities. These aspects of mobile learning encourage high-level learning, as the users are able to apply the information right away-something particularly useful for language learning where repetition and use are key to long term retention.

A research conducted by Gautam (2002) showed that most of the students lack the skills of using English to English dictionaries. He conducted research to 120 students of Master level (first year) from Kathmandu Valley using questionnaire and test items.

A research conducted by Ballantyne (2011) among three jobholders in Hong Kong shows that language learning takes place aided by the phones. However, it is not just the obvious referential tools that provide learning opportunities and specific language learning tools; there are strong links between learning and social networking tools as well as incidental learning through other non-language specific apps. He further states, “Patterns in the data emerged that showed that English was being acquired through the use of apps in general and social networking in particular”

Regarding this, Mindog (2016, p.4) in her research on smartphone apps for language learning, says “apps have become increasingly popular and experienced exponential growth since their introduction. A survey conducted by Steel (2012) showed that students use apps to support what they are learning in the classroom. The students appreciate mobile apps for their usability, accessibility, ease of downloading, and the service of

multiple purposes. Steel's survey result shows that students found mobile apps most beneficial for learning "vocabulary ... reading, writing, grammar and translation tasks" (Steel, 2012, p. 3). The most common apps used were dictionaries, translators, flashcards, and vocabulary games.

In this context Cedergen and Hellman (2012, p.35) in their research opine studies and surveys performed on students about the use of smart phones in learning foreign languages are generally positive. For example a Turkish study compared digital flashcards on a mobile phone with traditional flashcards on paper. 60 undergraduate students were participating and the results showed that the ones who had used the mobile application had reached better results than the ones who used traditional methods (Ba o lu, 2010). Furthermore a survey in Japan from 2007 showed that students were more prone to use computers than mobile phones for vocabulary learning, but argues that this might be due to the expenses of mobile Internet. The writer however concludes that the potential of the mobile application was great (Stockwell, 2007).

In another more extensive survey by Thornton and Houser (2005), over 300 Japanese university students were studied regarding their use of mobile devices in a language learning context. The results showed that the students evaluated educational materials designed for mobile phones very positively and that they were able to learn via this medium. The researchers also found mobile phones are a very effective platform for vocabulary learning as they are able to catch the students' interests and create new study opportunities.

2.2 Review of Empirical Literature

Researchers of some major universities in the world have carried out researches on smartphone use for language learning. Lu (2008) from National Keelung Vocational High School, Keelung City, Taiwan has conducted a research on “Effectiveness of Vocabulary Learning via Mobile Phone” setting an objective of finding out the effectiveness SMS message in self-learning vocabulary. He conducted research on 31 students of grade 10 in Taiwan. The students were divided into two groups who were taken paper-based examination and mobile-based SMS examination separately. He used questionnaire and test items as the tools for his research. The result showed that mobile groups had greater vocabulary gains than their paper-group counterparts.

Cedergen and Hellman (2012) carried out research on “Smartphone Applications: The future tool for vocabulary learning?” with an objective of finding out the effects that the introduction of a mobile application could have on high school students’ in vocabulary learning processes. In the research they selected seven Swedish students who were studying English as the second language. For this they designed application prototype flashcards. The result exhibited that mobile application provides them with new learning opportunities and enables more spontaneous learning.

Kim and Kwon (2012) from Chung-Ang University conducted a research on “ Smartphone Applications for Effective Mobile-Assisted Language Learning” with an objective to find out the common and distinctive features of smartphone application and to find out the strengths and weaknesses in utilizing present smartphone applications for effective mobile-assisted language learning (MALL). They conducted research on 87 smart phone applications. The research concluded that the ESL apps

seem effective in that they provide a personal and learner-centered learning opportunity with ubiquitously accessible and flexible practices.

Similarly, in another research entitled “Towards the Use of Mobile Phones for Learning English as a Foreign Language: Hesitation or Welcome?” conducted by Dang (2013) with an objective to explore students’ experience of using mobile phones for learning English showed that vast majority of students had used their mobile phones to study English. Also, they expressed mobile phone has immensely helped them in English language learning. He conducted research on seventy six second-year English major students from four intact classes at Hoa Sen University using questionnaire tool.

Similarly, a research by Ramamurthy and Rao (2016) entitled “Smartphones Promote Autonomous Learning in ESL Classrooms” with objectives to identify the type of learning skills gained using smartphones in the ESL classroom and to investigate whether smart phones promote the autonomous learning process showed that learners were moderately satisfied when they use smart phones for their learning purpose. The process of learning gets easier when the learners get quick access to additional resources while they are learning in the classrooms; for instance, finding definitions of the unknown words, examples and further explanations help them to compare ideas. They conducted research on 70 students of diploma and degree level in business and engineering programmes using questionnaires as the tool of research.

2.3 Implications of the Review for the Study

The researcher reviewed the number of researches to satisfy his research queries. They show a smart phone as a better tool for vocabulary learning. However, he did not find any researches that were conducted on the

extent to which smart phone dictionaries are used for vocabulary learning. Many researches have been carried on the applications of smart phone for language learning, but none of them is primarily focused on the use smart phone dictionaries. In spite of this, they have given the researcher some great idea for conducting research.

From the study carried out by Lu (2008) the researcher got the concept of data collection procedure. This study showed the researcher that the population of data collection can be separated for the comparison of two different tests.

In the way, by the research by Cedergen and Karinhllman (2012), the researcher got the idea that mobile application can be a tool for research. This research also guided the researcher to employ the right sampling procedure to collect data.

Likewise by the research, by Kim and Kwon (2012) the research got the idea of designing conceptual framework. From the research by Dang (2013) the researcher got the concept of writing introduction part. Similarly from the research conducted by Ramamurthy and Rao (2016), the researcher got the concept of designing questionnaire.

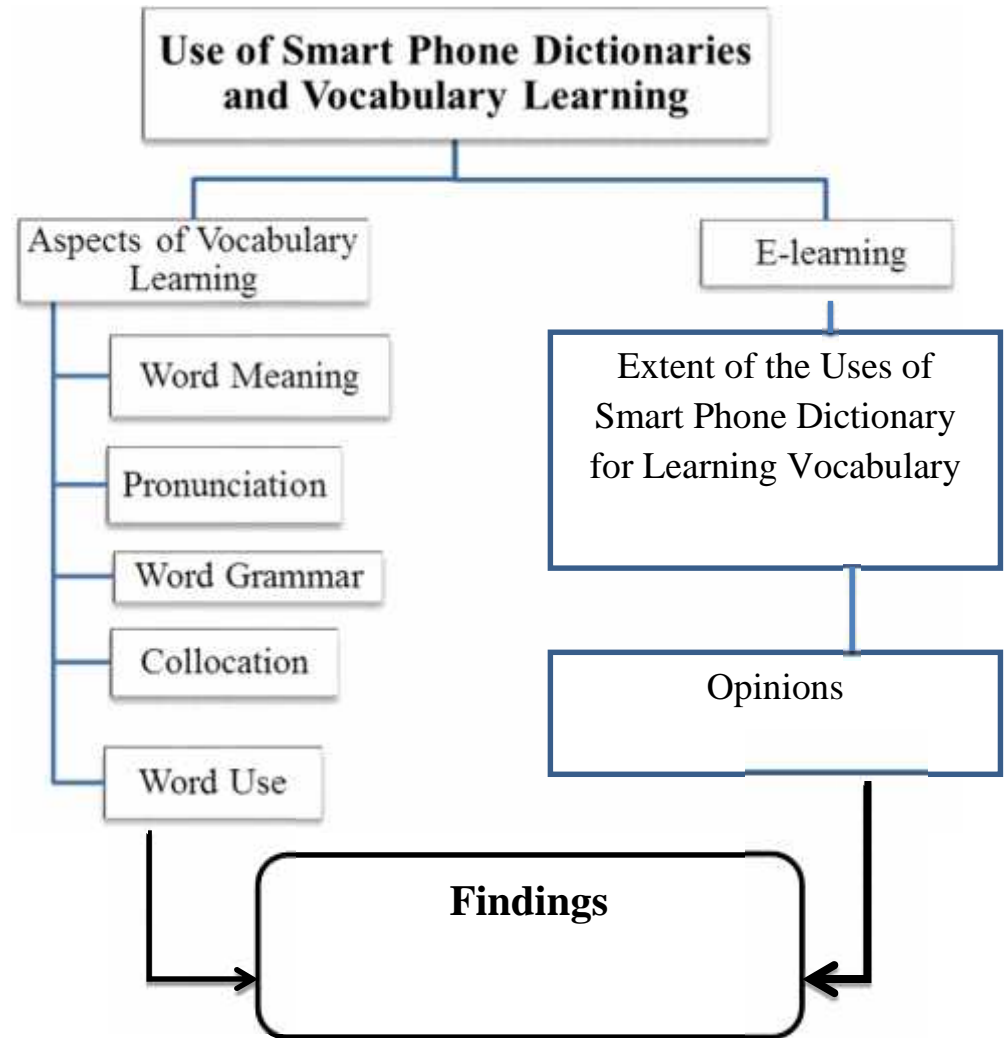
2.4 Conceptual Framework

A conceptual framework is an analytical tool with several variations and contexts. It is used to make conceptual distinctions and organize ideas. Strong conceptual frameworks capture something real and do this in a way that is easy to remember and apply. It is connected to the research project's goal that directs the collection and analysis of data. Business dictionary defines it as 'A theoretical structure of assumptions, principles, and rules that holds together the ideas comprising a broad concept.

The conceptual framework of the study was like this:

Fig. 6

Conceptual Framework



CHAPTER THREE

METHODS AND PROCEDURES OF THE STUDY

To achieve the set of objectives of the study, the following methodology was adopted:

3.1 Design of the Study

This research was survey based research since it aimed at finding the extent in which the students used their smart phone dictionaries to learn vocabularies with their opinions about the use of those dictionaries. The researcher went to the concerned 6 campuses of Chitwan district purposively sampled 120 students from the campuses randomly.

This study was based on survey research. The survey research is a research which is carried out to obtain the general overview of a phenomenon, event, issue or a situation. Shubhechchu and Yonghang (2011, p .183) state it is the most commonly used method of investigation in educational research which is superficial in nature. It may be of large scale like census or to a small scale like a small class room. It may be carried by a single researcher or a group of researcher.

3.2 Population, Sample and Sampling Procedure

All the students of Bachelors level (first Year) of Chitwan district were the population of the study. There were 120 students choosing more or less 25 students from each campus randomly. Generally, the students of bachelor degree are prone to use smart phones. So the students of bachelor degree were selected purposively.

The sampling of the campuses was based on the researcher's ease of access. So, the campuses were not chosen non-randomly or purposively.

3.3 Field of Study

The study is related to extent of the use of smart mobile phone among students of higher level, the researcher conducted survey in the campuses within Chitwan District. The list of campuses is tabled in the Appendix I.

3.4. Tools and Techniques of Data Collection

The primary tool for data collection was solely questionnaires. Such questionnaires were distributed to the students having smart mobile phones and they were requested to answer them. The researcher was present in the classroom as a facilitator to explain the questions that the students found difficulty to understand. Then the researcher collected the filled questionnaires and analysed them for the further process.

3.5 Process of Data Collection

The researcher went to the six campuses with the questionnaire and the recommendation letter for conducting research. He handed over the letter to the campus chief by introducing himself. After getting the permission and direction from the campus chief he went to the concerned classroom. After a short introduction about the research to the students and interrogating whether they use smart phone dictionaries or not, he distributed the questionnaire to them. He requested them to answer them sincerely. He explained any difficult questions that were asked by respondents. He collected the filled up questionnaire with a few words of gratitude. He analysed them systematically, descriptively and analytically.

3.6 Data Analysis and Interpretation Procedure

Systematically collected data were analysed, interpreted and presented descriptively with the help of tables, illustrations and diagrams.

CHAPTER FOUR

ANALYSIS AND INTERPRETATION OF THE RESULT

The analysis of the data and interpretation of the result were carried out under the following headings:

- a) The Possession, Uses and Roles of a Paper Dictionary
- b) The Knowledge, Uses and Roles of Smart Phone Dictionaries
- c) The Advantages and Disadvantages of Smart Phone Dictionaries in Learning Vocabulary
- d) Preferences of Using Smart Phone Dictionaries Inside and Outside of a Classroom
- e) Degree of the Frequency of Use of the Paper Dictionaries Inside and Outside the Classroom
- f) Specific Features of Smart Phone Dictionaries Liked and Disliked by Students
- g) Source of Knowledge to Install Smart Phone Dictionaries

4.1.1 The Possession, Uses and Roles of a Paper Dictionary

A paper dictionary is the alternative use of a smart phone dictionary. The students were asked different questions related to a paper dictionary which they possess like whether they have a paper dictionary or not, if they have, which dictionary do they have, how long have been they using it, how often do they use it and why are they using it. They are further analyzed in the following subheadings:

4.1.1.1 Possession of a Paper Dictionary by the Students

A good dictionary is immensely helpful to learn vocabularies. With the help of the dictionary a student himself can check out the correct meanings, uses, grammatical information, pronunciations, uses of a word

and the like. Reading English text and writing about something by consulting a dictionary are quite fruitful in learning vocabularies. A student should consult a dictionary if he has confusion about a certain aspect of a word. In this context, the students were asked whether they possess a dictionary or not and to name the dictionary if they have any. The following table shows the following results:

Table 1
Number of Students Using a Paper Dictionary

S.N.	Name of Dictionaries	No of Students	Percentage
1	OALD	51	42.50
2	OMD	27	22.50
3	OPD	15	12.50
4	Merriam Webster Dictionary	2	1.66
5	Ajanta Dictionary	13	10.83
6	Not Having Any Paper Dictionaries	12	10.00
	Total	120	100

The Table 1 illustrates that Oxford Advanced Learner’s Dictionary (OALD) is used by 42.50% of students, Oxford Mini Dictionary (OMD) is used by 22.50% of the students, Oxford Pocket Dictionary (OPD) is used by 12.50%, of students, Ajanta Dictionary is used by 10.83% of students and Merriam Webster Dictionary is used by 1.66% of the students. Likewise, 10% of the students do not use any kinds of paper dictionaries. The table shows that Oxford dictionary is the most popular dictionary among students and Merriam Webster dictionary is the least used one. It shows 10% of the students have no paper dictionaries at all.

4.1.1.2 Time of Regular Use of the Paper Dictionary

The students were asked how long they have been using this paper dictionary. As 12 participants do not have any paper dictionaries, only 108 participants were involved in this analysis. The following table shows their responses:

Table 2
Time of Regular Use of the Paper Dictionary

S.N.	Time of Use of the Paper Dictionary	No of Students	Percentage
1	1 to 3 years	53	49.07
2	4 to 6 years	22	20.37
3	7 to 9 years	13	12.04
4	10 to 13	20	18.52
	Total	108	100.00

The table 2 displays 49.07% of students are using a paper dictionary for last 1 to 3 years, 20.37% of students for last 4 to 6 years, 12.04% of students for last 7 to 9 years and 18.52% of students for last 10 to 13 years. The table shows the most of the students are using paper dictionary for last 1 year to 3 years. Very few numbers of students are using it for last 7 to 9 years. Most of them started using a paper dictionary as they joined 10+2 level. It shows very few numbers of them started using a paper dictionary from their primary level. Most of the students have no practice of using it from lower levels.

4.1.1.3 Degree of the Frequency of Use of the Paper Dictionary

The students were asked how often they use the paper dictionary at home. The following table shows the result:

Table 3
Degree of the Frequency of Use of the Paper Dictionary

S.N	Frequency of Use	Number of Students	Percentage
1	Never	14	12.96
2	Rarely	11	10.19
3	Occasionally	37	34.26
4	Frequently	46	42.59
	Total	108	100.00

The table 3 illustrates that 12.96% of students never use a paper dictionary at their homes, 10.19% of students use it rarely, 34.26% of students use it occasionally and 42.59% of students use it frequently. It shows less than half per cent of students use a paper dictionary frequently. It is very low use of a dictionary. Such low use of dictionaries hinders in vocabulary learning.

4.1.1.4 Reasons of Using the Paper Dictionary

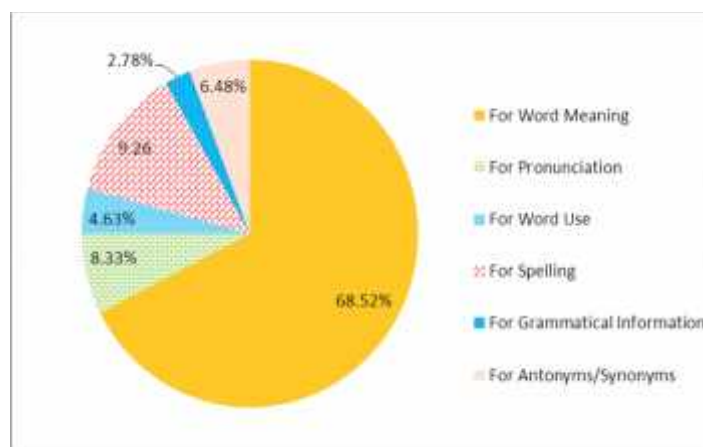
The students were asked the reasons of consulting a paper dictionary. They responded differently. Only the students who had paper dictionary are included in the analysis. The following table shows their responses:

Table 4
Reasons of Using the Paper Dictionary

S.N.	Reasons of Using the Paper Dictionary	Number of Students	Percentage
1	For Word Meaning	74	68.52
2	For Pronunciation	9	8.33
3	For Word Use	5	4.63
4	For Spelling	10	9.26
5	For Grammatical Information	3	2.78
6	For Antonyms/Synonyms	7	6.48
	Total	108	100.00

The table 4 shows that highest number of students (68.52%) use a paper dictionary just for word meaning, 8.33% of students use it for pronunciation, 4.63% of students use it for word use, 9.26% of students use it spelling, 2.78% of students use it for grammatical information and 6.48% of students use the dictionary to find out antonyms and synonyms. It shows that most of them are least concerned about the other aspects of words like collocation, word formation and derivatives. Only a few numbers of them are conscious about the different aspects of a word. Diametrically it can be shown as:

Fig 7
Reasons of Using the Paper Dictionary



4.1.2 The Knowledge, Uses and Roles of Smart Phone Dictionaries

For a better learning of vocabularies, the students should have a sound knowledge of smart phone dictionaries and they should use them regularly by considering all the aspects of a word. Considering these realities, the students were asked the questions related to smart phone dictionaries. They were asked to mention the installed smart phone dictionaries in their mobile set, the names of the best smart phone dictionaries in their views, the names of smart phone dictionaries they have heard or used of and the roles of smart phone dictionaries in learning vocabularies. They are further analysed in the following subheadings:

4.1.2.1 Knowledge of the Names of Smart Phone Dictionaries by the Students

The students were asked to name smart phone dictionaries that they have used or heard of. They mentioned two or more than two smart phone dictionaries. The following table shows their limited knowledge of smart phone dictionaries:

Table 5**Names of Smart Phone Dictionaries Known by Students**

S.N.	Names of Smart Phone Dictionaries	Number of Responses	Percent age
1	English to Nepali Dictionary	50	25.77
2	English Dictionary	25	12.89
3	Oxford Dictionary	55	20.22
4	Nepali Dictionary	22	8.09
5	English Phrasal Dictionary	2	0.74
6	WordWeb	20	7.35
7	Merriam Webster Dictionary	25	9.19
8	English Livio 3.0	5	1.84
9	Cambridge Dictionary	11	4.04
10	Standard Dictionary	3	1.10
11	Translation Dictionary	15	5.51
12	Nepali to English Dictionary	5	1.84
13	Medical Dictionary	3	1.10
14	Offline English Dictionary	5	1.84
15	Deutch Wortebuch	1	0.37
16	English German Dictionary	1	0.37
17	Dictionary English	10	3.68
18	Korean to Nepali Dictionary	1	0.37
19	Japanese to Nepali Dictionary	1	0.37
20	LDOCE 5	4	1.47
21	Wordset	5	1.84
22	ABC Dictionary	3	1.10
	Total	272	100.00

The responses from the table 5 shows 25.77% of students have heard about English to Nepali Dictionary, 12.89% of students have heard about English Dictionary, 20.22% of students have heard about Oxford Dictionary, 8.09% of students have heard about Nepali Dictionary, 7.35% of students have heard about WordWeb, 9.19% of students have heard about Merriam Webster Dictionary. There are other good smart phone dictionaries but very few numbers of students have heard or used them. The knowledge of other smart phone dictionaries is quite low.

4.1.2.2 Installed Smart Phone Dictionary in the Mobile Phone by the Students

The students were asked to mention the smart phone dictionary they have installed in their mobile set. Some of them had a good knowledge of such smart phones dictionary and they have installed it in their smart mobile whereas others have very little knowledge about such smart phones dictionary. The following table shows their responses:

Table 6
Installed Smart Phone Dictionary by the Students

S.N.	Name of Installed Smart Phone Dictionaries	Number of Students	Percentage
1	English to Nepali Dictionary	37	30.83
2	Dictionary English	6	5.00
3	Merriam Webster Dictionary	9	7.50
4	Oxford Dictionary	22	18.33
5	English Livio 3.2 Dictionary	2	1.67
6	Wordweb	15	12.50
7	English Dictionary	9	7.50
8	Nepali Dictionary	17	14.17
9	Wordset	1	0.83
10	Dictionary+	1	0.83
11	LODCE5	1	0.83
	Total	120	100.00

The table 6 shows that 30.83% of students have installed English to Nepali Dictionary, 18.33% of students have installed Oxford Dictionary, 12.50% of students have installed Wordweb dictionary and 14.17% of students have installed Nepali dictionary. Other dictionaries are installed by very few number of students. The use of English to Nepali Dictionary is almost twice the use of other most prominent dictionaries. The students tend to know the meanings of English words in Nepali language. So it is the most preferred one among students. From their responses it is clear that most of the students do not have a sound knowledge of good smart phone dictionaries.

4.1.2.3 The Best Smart Phone Dictionaries in the Views of Students

The students were asked to name the best smart phone dictionary according to their view. They have different smart phone dictionary as the best smart phone dictionary. The following table shows their selection of best smart phone dictionary:

Table 7

The Best Smart Phone Dictionaries in the Views of Students

S.N.	Best Smart Phone Dictionaries	Number of Students	Percentage
1	English to Nepali Dictionary	28	23.33
2	Oxford Advanced Learner's Dictionary	54	45.00
3	Merriam Webster Dictionary	12	10.00
4	Dictionary English	5	4.17
5	English Livio 5	4	3.33
6	Word Web	17	14.17
	Total	120	100.00

The table shows that 23.33% of students viewed Nepali to English Dictionary as the best one as it helps them in finding meanings in Nepali language. During the data collection process the students were told some

good features of Oxford Dictionary. So 45% of them preferred it as the best smart phone dictionary. Merriam Webster Dictionary (free version) can be easily installed from play store and it has large vocabulary with antonyms and synonyms, but only 10% of students have regarded it as the best smart phone dictionary. It shows they have very little knowledge about the good smart phone dictionaries. WordWeb is another good smart phone dictionary with large vocabularies and a wide range of antonyms and synonyms, but it is selected by only 14.17% of student as the best smart phone dictionary.

4.1.2.4 Roles of Smart Phone Dictionaries in Learning Vocabulary

The students were asked how smart phone dictionaries helped to improve their English. They responded with two or more than two ways that smart phone dictionary helped to improve their English. The following table shows the ways smart phone dictionary helped them to improve their English:

Table 8
Roles of Smart Phone Dictionaries in Learning Vocabulary

S.N.	Roles of Smart Phone Dictionaries	Number of Responses	Percentage
1	By giving correct meanings	115	32.86
2	By giving correct spellings	34	9.71
3	By giving correct grammatical information	56	16.00
4	By helping in translation	17	4.86
5	By giving correct pronunciations	75	21.43
6	By giving correct use of words	45	12.86
7	By giving the collocation of words	3	0.86
8	By giving the origin of words	5	1.43
	Total	350	100.00

The table 8 shows that 32.86% of responses were by correcting meanings of words that the students were not sure of. Likewise, 9.71% of responses

were by correcting spellings. It shows 16% of responses were by giving correct grammatical information of words. Similarly, 21.43% of responses were by giving correct pronunciations of words. Other roles are comparatively low. The table shows giving correct meanings, spellings, grammatical information and the use of words in sentences are greater roles of smart phone dictionaries than other aspects of words in learning vocabulary. It shows most of students consult dictionary basically for these four reasons.

4.1.2.5 Checking Usefulness of Smart Phone Dictionaries in Vocabulary Learning

The students were asked whether smart phone dictionaries are helpful in vocabulary learning or not. The following table shows their responses:

Table 9
Checking Usefulness of Smart Phone Dictionaries in Vocabulary Learning

S.N.	Views on Usefulness of Smart Phone Dictionary	No of Students	Percentage
1	Smart phone dictionaries help in vocabulary learning	115	95.83
2	Smart phone dictionaries do not help in vocabulary learning	5	4.17
	Total	120	100

The table 9 shows that 95.83% of students believe smart phone dictionaries help them in learning vocabularies, whereas only 4.17% of students responded that smart phone dictionaries do not help them in vocabulary learning. It shows their ignorance about the use of smart phone dictionaries.

4.1.3 The Advantages and Disadvantages of Smart Phone

Dictionaries in Learning Vocabulary

For the better understanding of all aspects of words, a student should have a good knowledge of the advantages and the disadvantages of using smart phone dictionaries. The students were asked to point out the advantages and disadvantages of using smart phone dictionaries by comparing them. They have a wide range of responses regarding them. They are further analysed in the following subheadings:

4.1.3.1 Advantages of Smart Phone Dictionaries over Paper

Dictionaries

The students were asked to write down the advantages of smart phone dictionaries in comparison to paper dictionaries. Each student responded with two or more than advantages. The following table shows them:

Table 10

Advantages of Smart Phone Dictionaries over Paper Dictionaries

S. N.	Advantages of Smart Phone Dictionaries	Number of Responses	Percentage
1	It is easy to carry.	22	10.00
2	It is easy to use.	16	7.27
3	Words can be searched quickly.	84	38.18
4	It can be used anywhere.	38	17.27
5	It can be used anytime.	35	15.91
6	It has large vocabulary.	22	10.00
7	It has eBook reading facility.	1	0.45
8	It has more information than paper dictionary.	1	0.45
9	Updates are available on it.	1	0.45
	Total	220	100.00

The table shows that most of the students (38.18%) liked smart phone dictionaries because words can be searched very quickly in them. Next, 10% of students preferred it because they are easy to carry. 17.27% students liked because they can be used anywhere they like. It shows, 15.91% of students select them as they can be used anytime. Paper dictionaries have no such advantages. Other advantages like large vocabulary, more information and available updates, eBook reading facility are pointed out by relatively low number of students.

4.1.3.2 Disadvantages of Smart Phone Dictionaries over Paper Dictionaries

Despite of having many advantages of the use of smart phone dictionaries in a classroom, they have numerous disadvantages too. In this regard, the students were asked to write down the disadvantages of smart phone dictionary in comparison to paper dictionary, they pointed out a list of them. The first three disadvantages are related to smart mobile set rather than smart phone dictionaries.

Table 11**Disadvantages of Smart Phone Dictionaries over Paper Dictionaries**

S.N.	Disadvantages of Smart Phone Dictionaries	No of Responses	Percentage
1	It cannot be used if the mobile hangs.	25	17.99
2	It cannot be used if there is no battery charge.	15	10.79
	It cannot be used if there is some problem in mobile.	6	4.32
4	Online charge is very expensive.	4	2.88
5	It decreases the use of paper dictionary.	4	2.88
6	Some dictionaries have very few words.	34	24.46
7	Some dictionaries have grammatical errors.	3	2.16
8	The dictionary opens very slowly.	1	0.72
9	It makes people addict to mobile phone.	2	1.44
10	Paid version dictionaries are expensive.	4	2.88
11	Some dictionaries cannot be used offline.	24	17.27
12	It makes people lazy.	6	4.32
13	Overuse of smart phone dictionary has eye problem.	4	2.88
14	It distract our mind	1	0.72
15	It cannot be there where there is no electricity facility.	1	0.72
16	It does not have any disadvantages.	4	2.88
17	The user will lose creative power.	1	0.72
	Total	139	100.00

The table shows most of the students responses (17.99%) are related to the dissatisfaction of hanging problem while using a dictionary. A group of students (24.46%) pointed limitation of vocabulary in some dictionaries like English to Nepali Dictionary. Some dictionaries are available only online. So, 17.27% of students demanded that the dictionaries should be available offline too. Other disadvantages like grammatical errors, slow opening, losing creativity, and having eye problem are vivid in nature, but quite low number of students has pointed out them.

4.1.3.3 Choice of Using Paper Dictionary over Smart Phone Dictionary

As the students were asked whether they use paper dictionary or smart phone dictionary more or both equally, most of them preferred to use smart phone dictionaries more than a paper dictionary. The following table shows their responses:

Table 12

Choice of Using Paper Dictionary over Smart Phone Dictionary

S.N.	Preferences	Number of Students	Percentage
1	Use Smart Phone Dictionary	75	62.50
2	Use Paper Dictionary	13	10.83
3	Use Both dictionaries Equally	32	26.67
	Total	120	100.00

This table 11 shows that 62.50% of students prefer to use Smart phone dictionary and 10.83% of students prefer to use paper dictionary whereas 26.67% of students use both types of dictionaries equally. The preference

of using smart phone dictionary is nearly six times greater than the preference of using paper dictionary.

4.1.3.4 Reasons of Being Best Smart Phone Dictionary

The students were asked to give reasons of choosing a smart phone dictionary as the best one. Most of them gave two or more than two reasons. Most of them preferred the features like quick search, easy to use anywhere and anytime and easy to carry as the reasons of being a smart phone dictionary the best one. The following table shows the result:

Table 13
Reasons of Being Best Smart Phone Dictionary

S.N.	Reasons	Number of Responses	Percentage
1	It can be used anywhere.	85	14.48
2	It is easy to use.	89	15.16
3	It is easy to carry.	62	10.56
4	It gives more examples.	29	4.94
5	It has different colour.	23	3.92
6	It has good Illustrations.	52	8.86
7	The words can be searched easily and quickly.	110	18.74
8	It helps in translation.	15	2.56
9	It gives meaning in Nepali.	34	5.79
10	It has wide coverage of words.	32	5.45
11	It gives antonyms and synonyms.	20	3.41
12	It has audio pronunciation too.	15	2.56
13	It is dust free.	1	0.17
14	It can be updated from time to time.	18	3.07
	Total	587	100.00

The table 13 shows that the students have different reasons of selecting a smart phone dictionary as the best one. It shows, 18.74% of students

preferred it because words can be searched in it very quickly and easily. Similarly, 15.16% of students preferred easy to use as the reason of being a smart phone dictionary as the best one. Likewise, 14.48% of students preferred easy to use anywhere as the reason of being a smart phone dictionary as the best dictionary. The reasons given by the students are not specific. They are general. They do not know specific features of a specific smart phone dictionary. Other few reasons are vivid but they are few in number.

4.1.3.5 Permission to Use Smart Phone Dictionaries in a Classroom

The students were asked if they were allowed to use a smart phone dictionary in a classroom or not, they responded in the following ways:

Table 14

Permission to use a Smart Phone Dictionaries in a Classroom

S.N.	Responses	No of Students	Percentage
1	Yes (Allowed to use smart phone dictionaries)	94	78.33
2	No (Not allowed to use smart phone dictionaries)	26	21.67
	Total	120	100.00

The table 14 shows that 78.33% students were allowed to use a smart phone dictionaries in a classroom, but 21.67% of student responded that they were not allowed to use smart phone dictionaries in a classroom. As positive responses are nearly four times higher than negative ones, it shows that most of the teachers allow permission to use smart phone dictionaries in a class room

4.1.4 Degree of Frequency of the Use of Smart Phone Dictionaries inside and Outside the Classroom

For the correct use of a word, a student should use a dictionary in a regular basis. In this regard, the students were asked how often they use smart phone dictionaries inside and outside a classroom. They responded differently. This issue is further analysed in the following subheadings.

4.1.4.1 Frequency of the Use of Smart Phone Dictionaries Inside the Classroom

The students were asked how often they use a dictionary inside and outside a classroom. The following table shows their responses:

Table 15

Frequency of the Use of Smart Phone Dictionaries in the Classroom

S.N.	Frequency of Use	Number of Students	Percentage
1	Not any time	17	14.17
2	For Some Time	91	75.83
3	For Many times	12	10.00
4	For all Time	0	0
5	Total	120	100.00

The following table shows that 14.47% of students do not use smart phone dictionaries inside the classroom, 75.83% of students use them for some time, 10% of them use for many times. The frequency of the use of smart phone dictionaries in the classroom is very low.

4.1.4.2 Frequency of the Use of Smart Phone Dictionaries Outside the Classroom

The students were asked how often they use smart phone dictionaries outside the classroom. The following table shows their responses:

Table 16
Frequency of the Use of Smart Phone Dictionaries Outside the Classroom

S.N.	Frequency of Use	Number of Students	Percentage
1	Not any time	10	8.33
2	For Some Time	63	52.50
3	For Many times	42	35.00
4	For all Time	5	4.17
	Total	120	100.00

From the table No 16, it can be interpreted that 8.33% of students do not use smart phone dictionaries at all when they are out of the classroom, 52.50% of students use them for some time or rarely. Only 35% of students use them for many times or frequently. The number such good students is quite low.

4.1.4.3 Degree of the Preference of Use of the Smart Phone Dictionary Inside the Classroom

The students were asked to number 1 to 6 to the reasons of using smart phone dictionaries in a classroom according to their degree of preference, giving number 1 to the highest degree of preference and 6 to the lowest degree of preference. There were six categories in the options. The following table shows their preferences of using them:

Table 17

Degree of the Preference of Use of the Smart Phone Dictionary Inside the Classroom

S.N.	Reasons	Preferences in Percentage					
		1st	2nd	3rd	4th	5th	6th
1	For word meaning	80.83	14.17	4.17	10.00	8.33	0.00
2	For spelling	3.33	4.17	11.67	46.67	7.50	3.33
3	For pronunciation	2.50	5.00	60.00	11.67	8.33	4.17
4	For word use	4.17	73.33	10.00	5.83	5.00	3.33
5	For collocation	4.17	3.33	11.67	8.33	5.83	85.83
6	For antonyms/synonyms	5.00	0.00	2.50	17.50	65.00	3.33
	Total	100	100	100	100	100	100

The table 17 reveals as the first preference 80.83% of students use smart phone dictionaries for word meaning. As the second preference 73.33% of students use them for word use. As the third preference 60% of students use the dictionaries for pronunciation. As the fourth preference 46.67% of students use the dictionaries for spelling. As the fifth preference, 65% of students use dictionaries for knowing for antonyms and synonyms of words. The use of smart phone dictionaries for collocation is the least preferred one according to the table. It is preferred by 85.83% of students.

4.1.4.4 Degree of the Preference of Use of the Smart Phone Dictionary Outside the Classroom

The students were asked to number 1 to 6 to the reasons of using smart phone dictionaries outside a classroom according to their degree of preference, giving number 1 to the highest degree of preference and 6 to

the lowest degree of preference. There were six categories in the options. The following table shows their preferences of using them:

Table 18
Degree of the Preference of Use of the Smart Phone Dictionary
Outside the Classroom

S.N.	Reasons	Preferences in Percentage					
		1st	2nd	3rd	4th	5th	6th
1	For word Meaning	75.83	12.50	4.17	8.33	7.50	0.00
2	For spelling	7.50	3.33	10.00	50.00	6.67	3.33
3	For pronunciation	1.67	5.83	62.50	8.33	12.50	4.17
4	For word use	7.50	75.83	8.33	6.67	4.17	3.33
5	For Collocation	3.33	2.50	10.83	10.00	6.67	85.83
6	For antonyms/synonyms	4.17	0.00	4.17	16.67	62.50	3.33
	Total	100	100	100	100	100	100

The table shows as the first preference 75.83% of students use smart phone dictionaries outside the classroom for word meaning. As the second preference 75.83% of them use for word use. As the third preference 62.50% of them use dictionaries for pronunciation. As the fourth preference 50.50% of them use dictionaries for spelling. As the fifth preference, 62% of them use dictionaries finding out for antonyms and synonyms of words. The use of smart phone dictionaries for collocation is the least preferred one according to the analysis which lies in the sixth preference.

4.1.5 Specific Features of Smart Phone Dictionaries Liked and Disliked by Students

The students were asked to mention the liked and disliked features and the features to be improved in smart phone dictionaries. Following subheadings illustrates them:

4.1.5.1 Specific Features of Smart Phone Dictionaries Liked by Students

The students were asked to write down the specific features of smart phone dictionaries liked by them. They mentioned two or more features which they liked. The following table shows why they liked smart phone dictionaries:

Table 19
Specific Features of Smart Phone Dictionaries Liked by Students

S.N.	Liked Specific Features of Smart Phone Dictionary	No of Responses	Percentage
1	It has audio pronunciation.	45	24.06
2	Words can be searched quickly.	72	38.50
3	It is easy to use.	3	1.60
4	It can be taken anywhere	9	4.81
5	It helps in checking spelling.	2	1.07
6	It is easy to carry.	12	6.42
7	It has good illustration.	3	1.60
8	It gives detailed meaning.	5	2.67
9	It can be used any time.	8	4.28
10	It can be used anywhere.	7	3.74
11	It has translation facility.	2	1.07
12	It has wide coverage.	4	2.14
13	It is less expensive than paper money.	3	1.60
14	It has online data for more information.	1	0.53
15	It has search history.	9	4.81
16	It gives synonyms and antonyms	2	1.07
	Total	187	100.00

The table 18 shows that 24.06% of students like smart phone dictionaries because they have audio pronunciations of words. Similarly, 38.50% liked them because words can be searched very quickly on them. Likewise, 6.42% of students liked them because they are easy to carry. Other reasons are vivid in nature but they are selected very few number of students.

4.1.5.2 Specific Features of Smart Phone Dictionaries Disliked by Students

The students were asked to write down the specific features of smart phone dictionaries disliked by them. They mentioned two or more features which they disliked. The following table shows why they disliked smart phone dictionaries:

Table 20
Specific Features of Smart Phone Dictionaries Disliked by Students

S.N.	Disliked Features of Smart Phone Dictionaries	No of Students	Percentage
1	Some dictionaries have limited vocabulary.	33	27.50
2	It cannot be used if there is no battery charge.	6	5.00
3	It cannot be used if there is some problem in phone.	3	2.50
4	It has hanging problem.	14	11.67
5	It makes reader passive.	3	2.50
8	The good dictionaries are not free of cost.	5	4.17
9	The dictionary has no meaning in Nepali.	2	1.67
10	It cannot be used offline.	25	20.83
11	It does not have any technical words.	1	0.83
12	It should be updated from time to time.	6	5.00
13	It does not have any problems.	22	18.33
	Total	120	100.00

The table 20 shows that 20.83% of students disliked smart phone dictionaries because they cannot be used offline, 27.50% of them disliked them because they have limited vocabularies and 11.67% of them disliked smart phone dictionaries as they have hanging problems. Other dislikes are quite low. It shows, 18.33% of students state there are not any problems in smart phone dictionaries.

4.1.5.3 Features to be Improved in Smart Phone Dictionaries

The students were asked to mention the features to be improved in smart phone dictionaries. The following table shows the improved to be made in smart phone dictionaries:

Table 21
Features to be Improved in Smart Phone Dictionaries

S.N.	Features to be Improved	No of Students	Percentage
1	Translation from English to Nepali should be available.	15	12.50
2	It should be available offline.	32	26.67
3	Word coverage should be increased.	17	14.17
4	Audio Pronunciation of each and every word should be given.	4	3.33
5	The dictionaries should be applicable to all sorts of mobile.	3	2.50
8	Good illustrations should be added.	15	12.50
9	Origin of words should be given.	2	1.67
10	Simple language should be given.	8	6.67
11	Antonyms and synonyms should be added.	3	2.50
12	More examples of word use should be mentioned.	3	2.50
13	Short and simple meanings should be given	2	1.67
14	Short video of words should be kept.	6	5.00
15	Wikipedia for more information should be added.	3	2.50
16	Technical terms of academic fields should be added.	2	1.67
17	Updates should be free of cost.	2	1.67
18	It should be cheap.	3	2.50
	Total	120	100

The table shows the improvements to be made in smart phone dictionaries as suggested by students. They have pointed out diverse features to be improved. The greatest improvement is availability dictionaries in offline mode. It is suggested by 26.67% of students. Next greatest improvement is for the increase of vocabularies in smart phone dictionaries. It is suggested by 14.17% of students. Third greatest one is inclusion of good illustrations in smart phone dictionaries. It is suggested by 12.50 % of students. Another improvement like translation facility from English to Nepali is also suggested by 12.50% of students. Other improvements like audio pronunciations, applicability of smart phone dictionaries to all mobile set, origin of words, short meanings and simple language, more examples of words, inclusion of Wikipedia, free updates and cheapness are suggested by the least number of students.

4.1.6 Sources of Knowledge to Install Smart Phone Dictionaries

The students were asked different sources of knowledge they received to install smart phone dictionaries in their mobile set. In this category, they were asked if they were suggested by their teachers install smart phone dictionary or not and the knowledge they got to install such dictionaries in their mobile set.

4.1.6.1 Giving Suggestions by Teachers to install Smart Phone Dictionaries or Not

The students were asked if they were suggested to install smart phone dictionaries in their mobile or not. The following table shows their responses:

Table 22

Giving suggestions by Teachers to install Smart Phone Dictionaries or Not

S. N.	Suggestions by Teachers	No of Students	Percentage
1	Yes	104	86.67
2	No	16	13.33
	Total	120	100.00

The table 22 shows that 86.67% students were suggested by their teacher to install smart phone dictionaries in their mobile set, whereas 13.33% of students were not suggested by their teacher to install smart phone dictionaries in their mobile set. It shows the maximum numbers of students are suggested by their teachers to install smart phone dictionaries in their mobile phone.

4.1.6.2 Source of Knowledge to Install Smart Phone Dictionaries

The students were asked from whom they first got suggestion to install smart phone dictionary in their mobile set. The following table shows their responses:

Table 23

Source of Knowledge to Install Smart Phone Dictionaries

S. N.	Source of Knowledge	No of Students	Percentage
1	Teachers	46	38.33
2	Friends	57	47.50
3	Relatives	10	8.33
4	Others	7	5.83
	Total	120	100.00

The table 23 shows that 38.33% of students got information for installing smart phone dictionaries in their mobile set from their teachers, 47.50% of students from their friends, 8.33% of students from relatives and 5.83% of students from their relatives. The teacher is found to be the

greatest source for information for installing smart phone dictionaries in their dictionaries.

4.2 Summary of the Findings

On the basis of analysis and interpretation of the data, the major findings of the study have been presented in this chapter. It also deals with some recommendations and pedagogical implications which are made on the basis of the findings

- a) The students have very scanty knowledge of good smart phone dictionaries. Only 25.77% of students have used or heard about English to Nepali Dictionary, 20.22% of students have used or heard about Oxford dictionary, 7.35% of students have heard or used WordWeb dictionary and 9.19% of students have heard or used Merriam Webster dictionary. The use and knowledge of other smart phone dictionaries are nominal.
- b) Most of the students have installed only these dictionaries in their mobile set and they think these are only best smart phone dictionaries.
- c) It can be concluded that 80.83% of students use smart phone dictionaries for word meanings.
- d) The study revealed that 38.50% of students like smart phone dictionaries because words can be searched very quickly and easily on them.
- e) It showed that 27.50% of students dislike smart phone dictionaries because the dictionaries have very few words. 11.679% of students dislike them because of hanging problem of mobile phone.
- f) The study showed that 62.50% of students prefer smart phone dictionaries more than paper dictionaries and they use smart phone dictionaries much more frequently than paper dictionaries.

- g) The researcher got the point that 78.33% of students are allowed to use smart phone dictionaries in a classroom.
- h) The analysis of the data showed that 75.83 % of them use them in the classroom occasionally and 10% of them use smart phone dictionaries in the classroom frequently, but outside the classroom they use of smart phone dictionaries much more frequently.
- i) The preferences of students of using smart phone dictionaries are for word meanings, word uses, spellings, antonyms and synonyms and collocations respectively inside and outside the classroom.
- j) Availability of offline dictionaries, large word coverage with audio pronunciation and good illustrations are major demands of improvement of most of the students.
- k) The study reveals that 86.67% of students got suggestions to install smart phone dictionaries in their mobile set from their teachers.
- l) Most of the students got information about smart phone dictionaries either from their friends or teachers. The study shows that 38.33% of students got information about smart phone dictionaries from their teachers and 47.50% of students got information about them of from their friends.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATION

5.1 Conclusions

This study was carried out to find the extent of the use of smart phone dictionaries in vocabulary learning. The research shows that most of the students do not have a sound knowledge about smart phone dictionaries. They have installed and used common smart phone dictionaries like WordWeb, English to Nepali Dictionary and English Dictionary. Most of them have started using smart phone dictionaries for last three or four years. The study shows that most of the students use such dictionaries less frequently inside and outside their classrooms. If they use them, they use such dictionaries primarily for word meanings. They give less preference to the other aspects of words like the correct uses of words, correct pronunciations of words, their grammatical information, collocations and so on. They prefer using smart phone dictionaries more than paper dictionaries because words can be searched in such dictionaries very easily and quickly. The study shows the students do not like those smart phone dictionaries which have very few words with a lot of grammatical errors. The students do not use those smart phone dictionaries which open very slowly too. They demanded that smart phone dictionaries with large vocabularies, good illustrations, audio pronunciation of words and translation facilities.

5.2 Recommendations

These findings can benefit all the educators, teachers, students, parents and policy makers who are involved in education fields directly or

indirectly. Some recommendations and pedagogical implications are mentioned below:

5.2.1 Policy Related

The overall intellectual development of a student is shaped by the interrelationship and mutual cooperation among the student himself, his parents with home environment, his teachers and educational policy formed by the government. The study shows that the students have very scanty knowledge of the use of smart phone dictionaries. The following implications are for the policy makers of the country:

- i. Most of the students do not have paper dictionary at home. They should be encouraged to buy one. For this curriculum should be designed with more exercises in which they have to use a dictionary regularly.
- ii. The curriculum should be designed with the all aspects of vocabulary learning, not merely word meanings. It should include exercises based on spellings, word uses, pronunciations, derivatives, word formation, parts of speech, and grammatical information and so on.
- iii. Most of the students have started using dictionary from higher levels. The students of lower level have not got any idea of using them. Simple exercises about the use of dictionary should be introduced in the curriculum from lower levels.
- iv. Some of the smart phone dictionaries like English to Nepali Dictionary have very limited vocabularies. There are a lot of grammatical errors too on it. Such dictionaries should be improved by adding more words and removing grammatical errors. Even the

ministry of education should design a good smart phone dictionary and it should be available to the students free of cost.

- v. The good smart phone dictionaries available in the web should be publicised through articles and mass media so that the students have a good knowledge about them.
- vi. Most of the smart phone dictionaries have no audio pronunciations, good illustrations and large number of vocabularies. The ministry of education should design such dictionaries with these features.
- vii. The use of smart phone dictionaries as learning resources should be incorporated in curriculum.

5.2.2 Practice Related

Practice related implications refer to the implications which are related to the students, teachers and parents. They are the sole users of smart phone dictionaries. They are the practitioner of the implications. The following implications are suggested for them:

- i. Most of the students rarely use dictionary at home. Regular exercises should be given to them about the use of a dictionary.
- ii. Most of the students use dictionary mainly for meanings. They should be encouraged to use it other aspects words like spellings, grammatical information, collocations, derivatives, pronunciations, parts of speech and so on.
- iii. Most of the students of higher levels do not know good smart phone dictionaries available in the web. They should be guided to install some of them in their smart phones.
- iv. Most of the students of higher levels use smart phone dictionaries more than paper dictionaries. They should be encouraged to use both of them equally.

- v. A teacher should allow students to use smart phone dictionaries in the classroom silently without disturbing a class. If it is so a student can settle his/her doubt about a certain aspect of a word instantly.
- vi. A teacher should give suggestions to the students to install good smart phone dictionaries. For this he or she should have a good knowledge about them.

5.2.3 Further Research

A research cannot be complete. Many questions can be raised and researched in any given area. This is the study of the use of smart phone dictionaries in vocabulary learning. The data and the findings collected from this study can be used as the secondary source by other researchers. The researcher recommends for the further research whether the use of smart phone dictionaries can be made in improving writing, reading and speaking skills. Comparison between any two skills can also be another topic of research. Similarly, whether other e-language learning possibilities can be made available by smart phone or not may another topic for research and the attitudes of teachers on smart phone dictionaries can be other topics of research.

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APPENDIX I

The Names of Visited Campuses

S.N.	Name of Campuses	Total Students	Faculties
1.	Janaadarsha Multiple Campus, Birendranagar	25	BBS (First Year)
2.	Jhuwani Shankar Multiple Campus, Parsa	15	BA/Bd. (First Year)
3.	New Capital College, Tandi	15	BBS (First Year)
4	Shahid Smriti Multiple Campus, Shantichowk	15	B.Ed. (First Year)
5.	Saptagandaki Multiple Campus, Bharatpur	25	BBS (First Year)
6	Balkumari College, Narayangarh	25	B Sc. (First Year) (Microbiology Group)