

## Use of Mobile Application in Dzongkha Learning

Anita Maya Rai<sup>1</sup>, Sapna Thapa<sup>1</sup>, Jamyang Thinley<sup>1</sup>, Namgay Wangchuk<sup>1</sup>, Dechen Pelki<sup>2</sup>

Information Technology, College of Science and Technology, Royal University of Bhutan,

\*E-mail: [anitamaya.ra@gmail.com](mailto:anitamaya.ra@gmail.com)<sup>\*1</sup>, [sapnathapa405@gmail.com](mailto:sapnathapa405@gmail.com)<sup>\*1</sup>, [Jamyang.thinley97@gmail.com](mailto:Jamyang.thinley97@gmail.com)<sup>\*1</sup>,  
[nam8wangchuk@gmail.com](mailto:nam8wangchuk@gmail.com)<sup>\*1</sup>, [dechenpelki.cst@rub.edu.bt](mailto:dechenpelki.cst@rub.edu.bt)<sup>2</sup>

### Abstract

Since its inception, mobile technology has advanced so rapidly that everything has become easy. Unlike in the past, the mobile world has not only catered to the basic needs of people, it has also introduced applications that make learning easier and decision-making faster. One of the main learning platforms that mobile technology has enhanced is language Learning. Dzongkha being the national language of Bhutan, learning Dzongkha language has become a priority in developing an individual's skill to communicate and most importantly to preserve the culture of the country. This is where mobile technology plays a vibrant role in promoting the language. To examine the use of Mobile Application in Dzongkha Learning, an interview and the survey was carried out to collect opinions from respondents in order to develop an English Dzongkha Terminology application. According to the study it was found that most of the respondents prefer learning Dzongkha language through mobile.

**Keywords :** *English Dzongkha Terminology Application, mobile technology and Language Learning.*

### 6. INTRODUCTION

Advancement in technology has brought in change in so many ways. The way people see, hear, perceive, use and understand information has changed manifold. The world today runs on electronic devices out of which mobile phones have become an inevitable gadget that people seem to need 24\*7. Smart phones can do so much more contrary to their size. People can use the different types of applications that the smartphone can support to suit their needs and convenience anytime and anywhere. Out of the many mobile applications, applications in learning new languages have gained much popularity among the people interested in language learning.

This research paper will solely examine the need of mobile application that might help interested Dzongkha learners to learn and enhance their language not only in speaking but also in writing. The core objectives of the study are:

- ✓ to see the feasibility of developing an android application.
- ✓ to see how many people use smartphones.
- ✓ to find out how many people use smartphones in Learning Dzongkha since mobile phones have become one of the necessities for every individual.

- ✓ to see how effective smartphones are in promoting the language.

#### *Interview Questions*

- 8 How does the Dzongkha Development Commission (DDC) promote the use of Dzongkha?
- 9 How many Dzongkha mobile applications did DDC launch till date?
- 10 Have this project (s) been successful?
- 11 What are the feedbacks from the users?

#### *Survey Questions*

- 12 Which type of smartphones do you use?
- 13 What type of apps do you usually download?
- 14 Do you think that you need to improve your Dzongkha vocabulary?
- 15 Do you think it would be easier to learn Dzongkha terms if an app is developed?

### 7. METHODOLOGY

#### *Focus set*

This study was done in the College of Science and Technology and Dzongkha Development

Commission based on interviews and a survey, 2019. The target groups were divided into two, mainly to get valid information from the audience who are probable to face the problem with learning Dzongkha Language and the department responsible for promoting and enhancing Dzongkha Language through mobile technology. Individuals from DDC were interviewed and students from the College of Science and Technology were surveyed via a Google form.

The figures for Interview participants are as follows: Mr. Tenzin Namgay (Chief ICT Officer) and Mr. Singye T Dorji (Sr. ICT Associate)

The figures for Survey participants are as follows: Female=202, Male=160, in total 482 people have responded. Out of 962 targeted population, only 482 responded in a survey done randomly.

#### *Tools for Interview and Survey*

In order to collect the data, questionnaires were developed for both interviews and the survey differently. Google forms were circulated for data collection through survey while concerned individuals from DDC were interviewed openly.

## 8. LITERATURE REVIEW

The ability of learning has become spontaneous, personalized, ubiquitous and informal through a small portable device known as Mobile. The main advantage of mobile learning is that the learners can utilize the time in learning new materials despite their time and location. In their busy environment instead of taking a classroom-based course the learners tend to learn through a portable device. In fact, mobile learning can be an ideal solution to language learning obstacles in terms of time and place as per Miangah and Nezarat.

According to Gangaiamaran and Pasupathi, there is a rapid increase in adoption of mobile technology for language teaching and learning. Mobile Assisted Language Learning (MALL) provides easy access for any learner. In Mobile Learning, devices such as smartphones, iPod, tablet, laptop, iPad are implemented to scaffold language learning. Numerous apps are developed and utilized for learning English as a second language. These apps are readily available for download via the Internet. Learning materials can be accessed easily due to the portability and accessibility of mobile devices.

As per Rahimi and Miri, the effect of learning language through mobile dictionaries is more than learning language via paperback dictionaries. Learners improved their language ability when using mobile dictionaries. Mobile learning brings in major change in advancement of learner's motivation and positive outlooks toward learning any kind of language.

## 9. RESULTS AND ANALYSIS

### *Findings of an interview*

#### ✓ *How does the Dzongkha development commission (DDC) promote the use of Dzongkha?*

"Dzongkha Development Commission enhances and promotes Dzongkha in various ways. The holding of an advocacy workshops, seminars, meetings, and broadcasting through media have helped in greater advancement of enriching the language learning. Apart from these strategies, the Dzongkha Development Commission has been publishing books both in hard and soft copies. Moreover, few websites and mobile applications are also made available for some of the important and useful learning materials", as per Mr. Tenzin Namgyel (Chief ICT Officer). From these aspects, it was found that one of the ways of promoting Dzongkha is through mobile applications.

#### ✓ *How many Dzongkha mobile applications did DDC launch till date?*

According to Mr. Tenzin Namgyel, "Dzongkha being limited in vocabulary unlike English and other languages, it is a challenging task in the first place to convert every hard written content into applications, especially applications dealing with text to speech due to lack of proper word segmentation. However, the Department has launched more than five mobile applications in google play store and app store so far. Applications such as Dzongkha for kids, Dzongkha Dictionary App, Dzongkha Competency test, Dzongkha Spelling Game and Dzongkha English Phrases App are currently available for users." It was found that developing mobile applications are given priority.

#### ✓ *Have this project (s) been successful and what are the feedbacks from the users?*

"It has been easier to publicize new learning materials, especially the new terms in Dzongkha through mobile applications, unlike hard copy textbooks. As per the users, the feedbacks are positive", said Mr. Singye T Dorji.

"Most of the users found it useful. Users encouraged the department to develop more applications, especially for

children". It was found that learning through mobile application was much more effective compared to other means.

### Findings of Survey

#### 16 Which type of smartphones do you use?

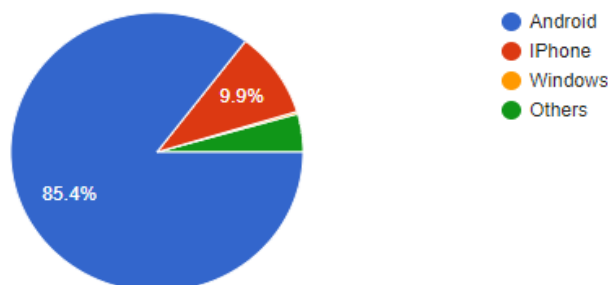


Fig.1 Respondents having type of smartphone.

On August 25, 2019, a survey was circulated targeting the student body of College of Science and Technology. There was a total of 962 students out of which 362 responded to the survey. From the data collected, it was found that android phones were the most popular among the students with as much as 85% of the respondents being android phone users.

#### 17 What type of apps do you usually download?

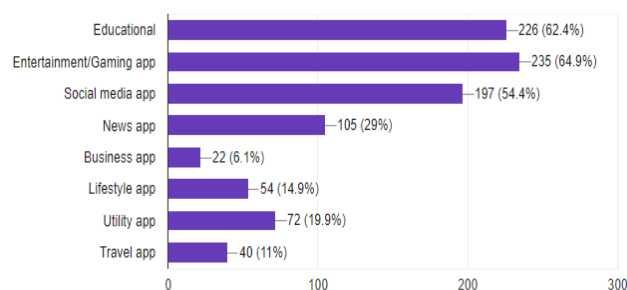


Fig.2 Various applications downloaded by participants.

Entertainment/gaming apps had the highest downloaders with 64.9% while educational apps came in second with 62.4%. From this it is clear that though entertainment is more popular among the students, they still feel the need for educational apps as they are helpful and easy to use.

#### 18 Do you think that you need to improve your Dzongkha vocabulary?

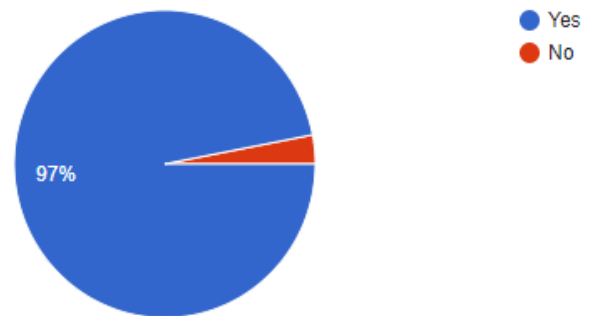


Fig.3 Participants need to improve their Dzongkha

Dzongkha is the national language of the country and yet it is still one of the toughest languages to learn. Although, Dzongkha is taught from a very young age, 97% of the respondents still felt that they needed to improve their Dzongkha. From this data it was seen that the field of Dzongkha learning remains vastly untouched. Thus, the need to come up with ideas and implement them in order to learn the particular language is of paramount importance. One of the many possibilities is the use of mobile application in learning Dzongkha, as mobile phones these days are a part of the day to day lives of most people (students).

#### 19 Do you think it would be easier to learn Dzongkha terms if an app is developed?

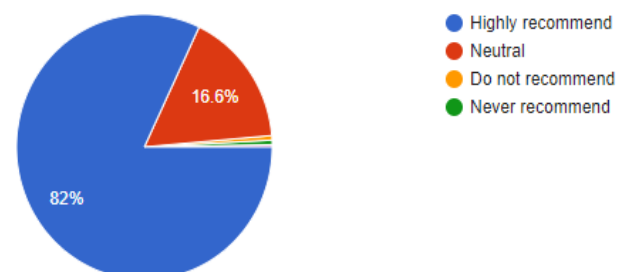


Fig.4 Participants respond to developing English Dzongkha Terminology Application.

As learning Dzongkha remains a challenging task, use of modern technology to enhance one's Dzongkha vocabulary is a very suitable thing. From the data collected it was found that 86.5% of the respondents felt that it would help them learn and enhance their Dzongkha vocabulary with the use of mobile application if developed.

## 10. CONCLUSION

The literature review done above provided an insight of how technology has taken over the traditional way of teaching and learning. It is a technique that is helping the language learners learn languages round the clock making them utilize their leisure time in a way that

is less formal and fun. The aim of this study was to examine the use of mobile application for learning Dzongkha Language. The findings showed that learning vocabulary is more convenient and time efficient than learning via books and advocacy. It was found that many of the respondents have smartphones and the most often downloaded applications are for educational purposes. Even though there are many platforms to learn Dzongkha language, due to its more practical nature and features, learning through mobile seems a primary priority. More number of respondents gave positive feedbacks on developing English Dzongkha Terminology Application and improving Dzongkha vocabulary seemed to be imperative for the participants. The Dzongkha Development Commission also supports the development of such ideas to enhance and promote the national language.

It can be concluded that developing an English Dzongkha Terminology Application would be very beneficial to the people to learn not only the existing terms but also new terms. Beside the benefits of time and efficiency of space, it will also help promote Dzongkha Language for all.

## 11. ACKNOWLEDGEMENT

We are grateful to the Dzongkha Development

Commission and the College of Science and Technology for providing an opportunity to conduct interviews and carry out the survey. We are also thankful to Mrs. Pema Choezom (Lecturer) for proofreading the research paper. Most importantly our heartfelt gratitude goes to all the participants for actively participating.

## REFERENCES

- Miangah, T. M., &Nezarat, A. (2012). Mobile-assisted language learning. *International Journal of distributed and Parallel System*, 3, 309-319.
- Gagaiamaran, R. & Pasupathi, M. (2017). Review on Use of Mobile Apps for Language Learning. *International Journal of Applied Engineering Research*, 12(21), 11242-11251.
- Rahimia, M. &Mirib, S.S. (2014). The Impact of Mobile Dictionary Use on Language Learning. *Procedia-Social and Behavioral Sciences*, 98, 1469-1474.