

# Study on Building Educational Mobile Application Contents Focusing on Korean Loanwords for North Korean Refugees

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## Abstract

**Objectives:** Due to the advance in mobile computing technologies, mobile assisted language learning is being developed. In this study, build a mobile education application regarding loanwords for North Korean Refugees. **Methods/Statistical Analysis:** This study covers the necessity and practical cases of loanword selection and building application contents in advance to forming educational application contents regarding loanwords for North Korean refugees. For this, this study has extracted vocabulary based on the living environments, which refugees will encounter in their processes of adapting to life in South Korea. The vocabularies are presented in different categories, divided by situations and places. **Findings:** An effective and practical approach to vocabulary teaching is needed for North Korean refugees whose ultimate goal is to settle down in Korean society. It would help them adjust to their Korean lives to link their daily lives closely to loan words that pose a challenge to communication. Presenting loanwords through mobile devices that are relatively more accessible and easier to prepare will be helpful for the refugees to search, understand, and utilize the necessary vocabularies. This kind of information provision makes full use of the expandability of mobile devices, and further enables more diverse and bountiful materials for vocabulary learning. **Improvements/Applications:** Compiling a list of useful loan words in the future based on this study would serve as a more practical help for North Korean refugees.

**Keywords:** Application, Educational Contents, Loanword, Mobile Environment, North Korean Refugees

## 1. Introduction

North Korean refugees refer to people who left their family or work in North Korea and are currently residing in other countries. According to the data released by the Ministry of Unification on December 2015, the total population amounts to 28,795, among which 8,503 are men and 20,292 are women. However, many of the refugees are having difficulty in settling in the South Korean society and even routine conversation in their lives. The study done by<sup>1</sup> focuses on which kind of communication

the North Korean refugees find most important and in what occasions they find the most difficulty. The analysis on communication adaptation showed that the refugees are having difficulty in Korean language, specifically 1.5 to 4 occasions per week. The part in which they found most uncomfortable was unfamiliar loanwords used in daily life, especially those driven from English.

Loanwords are foreign words that have been incorporated in the vocabulary system of another language due to frequent usage. According to the research done by the National Institute of the Korean Language (2007),

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although loanwords exist in both North and South Korea, the form, meaning, type, and usage differs between the two regions. Due to<sup>2</sup> this difference, North Korean refugees face difficulty with loanwords while adapting to the South Korean society.

For the North Korean refugees' adaptation in South Korean language, Hanawon, the educational facility for the settlement of North Korean refugees in South Korea, is conducting a total 30-hour language education program. The<sup>3</sup> program is divided into 'Comparison of North and South Korean language, loanwords, standard pronunciation practice and Language and culture'. The duration of the loanwords section is 14 hours, while most of the other sections last 4-8 hours. But it is still insufficient to fully understand the language and culture of South Korea and effectively carry out communication in South Korean language only with education in Hanawon. Especially loanwords section is pointed out as the most difficult, despite its longest hours within the education program. The difficulty in communication has to be resolved in order to enable successful settlement of North Korean refugees. Therefore, the loanwords should be analysed and well organized to let North Korean refugees find them less difficult and confusing.

Due to the advance in Internet technology, education via mobile devices is receiving attention for its relatively high accessibility and low limitation of time and space. Mobile assisted language learning (MALL), in broad terms, is the integration of mobile device into language learning process. In<sup>4</sup> general learning through mobile devices refers to the aspect of mobility of the learner and the mobile nature of the devices. And it increases the relevance of mobile devices in the classroom context apart from the consideration of using the devices for learning outside the classroom environment. Also<sup>5</sup> mobile devices enable language education to provide specific contents according to a variable learning environment such as a learning purpose or characteristics of a learner, rather than a continuous language education in a regular program. Therefore<sup>6</sup> mobile application that can provide necessary information and be practically utilized would be a big help to the learners who have difficulty in attending in-house learning like Korean language learners who aim to settle down in Korea. It is imperative that mobile-friendly contents be developed in the field of Korean education as well. This study is focusing on categorizing and sorting loanwords in South Korea, and at the same time, building loanword application to provide interpretation and information to North Korean refugees whenever needed.

## 2. The Direction for Selecting Loanword List and Building Application Contents

### 2.1 Loanword Selection for Building Mobile Contents for North Korean Refugees

This study aims to provide meanings and information regarding loanwords by utilizing application for the successful settlement of North Korean refugees in the South Korean society. For this purpose, the loanwords to be presented to the refugees should be limited to the ones that are useful in adapting to the Korean society.

Meanwhile, the educational vocabulary list provided to foreign learners was based on the categorized list of words that are most frequently used among native Koreans. However, this study is based on the formerly selected vocabulary from previous studies, and also the loanwords related to the difficult communication occasions collected through interviews and surveys targeting North Korean refugees. Similar<sup>2</sup> method based on practical resources was used in the recent『Korean vocabulary education for North Korean refugees』by the National Institute of Korean Language (2012) to collect a vocabulary list. Moreover, the method of categorizing and providing the selected vocabulary to the learners is also crucial. The selected vocabulary should be categorized and provided based on the topics and usable communication occasion. Simply giving out a vocabulary list and the meanings to North Korean refugees has limitation in letting them understand and utilize the loanwords. Therefore, the loanwords should be presented with the appropriate communication scenes in which those are used, in order to enhance efficiency. Moreover, the application should be a tool that can help the North Korean refugees be equipped with necessary knowledge and information to live among the South Korean people as the agents of survival, settlement and study<sup>3</sup>.

### 2.2 Method for Forming Application Contents for North Korean Refugees

In order to solve the difficulty in communication, for building actual application contents, the macroscopic structure such as selecting and presenting the entries and the microscopic structure such as pronunciation, meanings, usage information, and comparison with North

Korean words, sample sentence, synonym and antonym should be considered after selecting the loanwords.

In the macroscopic structure, entries would be comprised of loanwords used in routine communications and presented in categories such as private life, public life, information and communication, social and cultural life. These will be the loanwords frequently used in written and spoken language. In the microscopic structure, the corresponding North Korean words, standard meaning in the South Korean language, standard pronunciation and actual pronunciation, vocal information, synonyms and antonyms, and situational sample sentences and conversational examples, relevant images and videos should be presented for efficiency in learning. Moreover, encyclopedic information and etymology could be presented for better understanding of the pertinent entry.

### 3. Building Application Contents

In this section, the actual construction of the application would be presented. Beforehand, the table showing the flow of the overall contents and format would be proposed. And the actual implementation of the application would be shown based on the organized contents. The application would be called ‘South Korean loanword collection’ and be presented in the form of storyboards.

#### 3.1 Application Framework

Following are the contents necessary for actually implementing the loanword application for the North Korean refugees. The overall framework of the application can be checked based on table 1.

**Table 1.** Contents framework of ‘South Korean loanword collection’

‘South Korean loanword collection’ application	Level 1		Level 2	Level 3	contents	
	search box				Explanation	Dictionary definition or the selected loanword Picture or image relevant to the loanword
	classification	Private life	Living, clothing, food, transportation, leisure, lifestyle	Vocabularylist based on the categories/ Alphabetically arranged list and importance-based list		
		Public life	Public office, education, medicine, finance, workplace			
		Information/ communication	Printed media, electronic media, computer, mobile, internet			
		Social/ Cultural life	Relationships, politics and history, law, symbol, unit, color			
	my vocabulary list			Loanword list added by the user	Sample sentence	Appropriate sentence in which the selected loanword is used
	guide				Cultural information	Cultural/ Social knowledge related to the selected loanword
	settings				Operation guide, Inquiry	
				Application information, notice, updates		

**Table 2.** Starting screen of ‘South Korean loanword collection’

	<p>This is the first screen of the ‘South Korean loanword collection’ application. There is a search engine on the top of the screen to enter and search vocabulary. The learner can search for the vocabulary they want, or select one of the given four categories based on the learner’s personal interest and situation. The main categories are divided into private life, public life, information and communication, social and cultural life.</p> <ol style="list-style-type: none"> <li>1. After pressing Private life, the next screen appears. The next screen shows the entries of the lower categories of Private life.</li> <li>2. After pressing Public life, the next screen appears. The next screen shows the entries of the lower categories of Public life.</li> <li>3. After pressing Information and communication, the next screen appears. The next screen shows the entries of the lower categories of Information and communication.</li> <li>4. After pressing Social and cultural life, the next screen appears. The next screen shows the entries of the lower categories of Social and cultural life.</li> </ol>
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**Table 3.** Lower categories of ‘South Korean loanword collection’

	<p>After selecting a category in the first screen, the related lower categories appear. These are the entries of the subcategory. Firstly, Private life has 6 subcategories of living, clothing, food, transportation, leisure and lifestyle. These are the entries most closely related to the private life situations the refugees may encounter during their settlement. The vocabulary list related to housing appears when you select the Living icon.</p> <p>The other subcategories work likewise. Leisure and lifestyle category shows the loanword list related to beauty, shopping and hobbies that are necessary in the routine of North Korean refugees. The entries of Public life are classified into Public office, education, medicine, finance, and workplace. Next, the entries of Information and communication are Printed media, electronic media, computer, mobile, internet, which includes large portion of the loanwords that the North Korean refugees were unable to freely encounter in their former environments in North Korea.</p> <p>Lastly, the entries of Social and Cultural life are Relationships, politics and history, law, symbol, unit, color, which includes the loanwords the refugees are newly introduced to under the democratic system, its social phenomena and interaction with the South Korean people within.</p> <p>By clicking the arrow on the upper left corner of the screen or press ‘search’ in the lower left corner, you can go back to the first screen. In order to search for vocabulary relevant to the entry or view the vocabulary list, you can select the pertinent icon.</p>
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### 3.2 Actual Implementation of the Application

This section will present the actual implementation of the application based on the previously discussed vocabulary list. The contents will be composed with loanwords for North Korean refugees, and the placement of the contents, menus, programme on screens in actual implementation will be presented in the form of storyboards. This will also be referred to as ‘South Korean loanword collection’<sup>8</sup>.

Table 2 is the first screen you will see when the ‘South Korean loanword collection’ application is launched. There is a search engine on the top of the screen to enter

and search vocabulary. The learner can search for the vocabulary they want, or select one of the given four categories based on the learner’s personal interest and situation.

The loanwords are presented in four categories regarding the North Korean refugees’ communication situations. The vocabulary are collected from the routine environments and presented in the categories of place and situation<sup>9,10</sup>. As shown in table 3 and table 4, the main categories are divided into private life, public life, information and communication, social and cultural life. The categorization takes into the North Korean refugees’ difficulties in settlement due to the problems in

**Table 4.** Subject catalog of ‘South Korean loanword collection’- ‘Living’

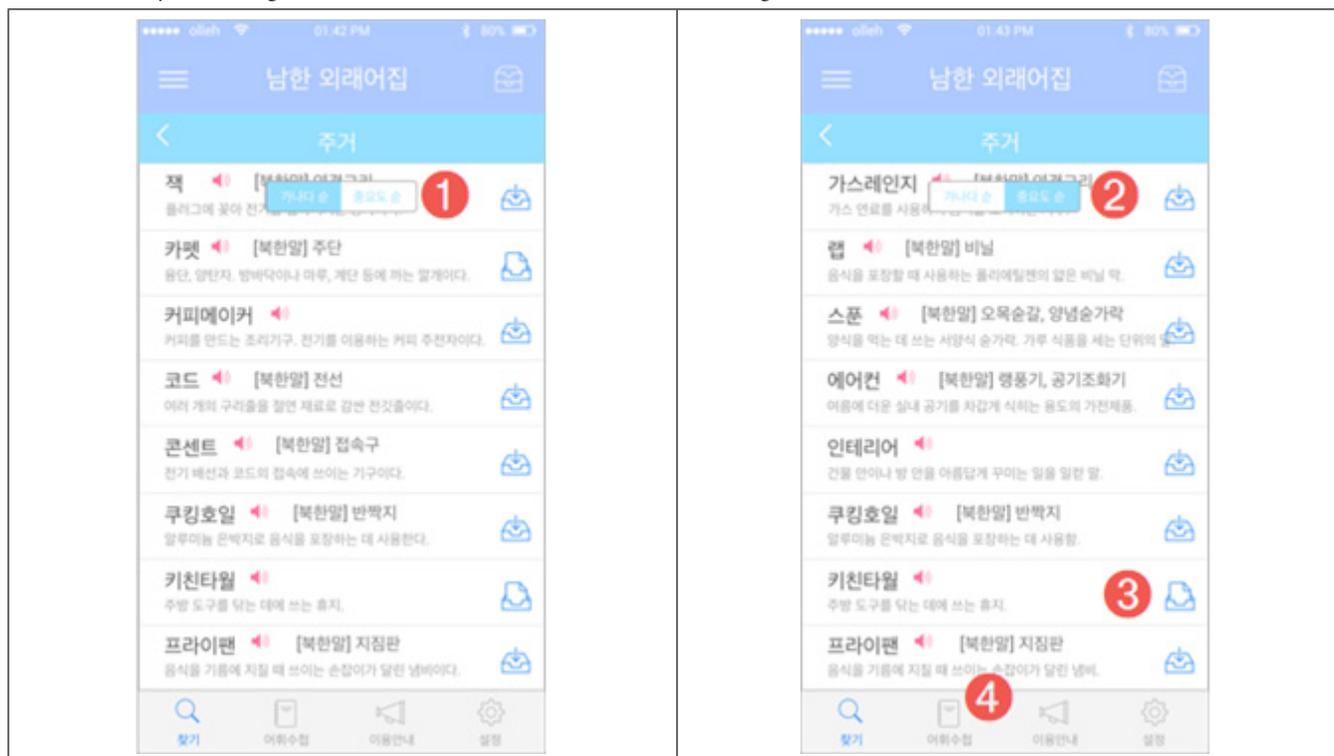
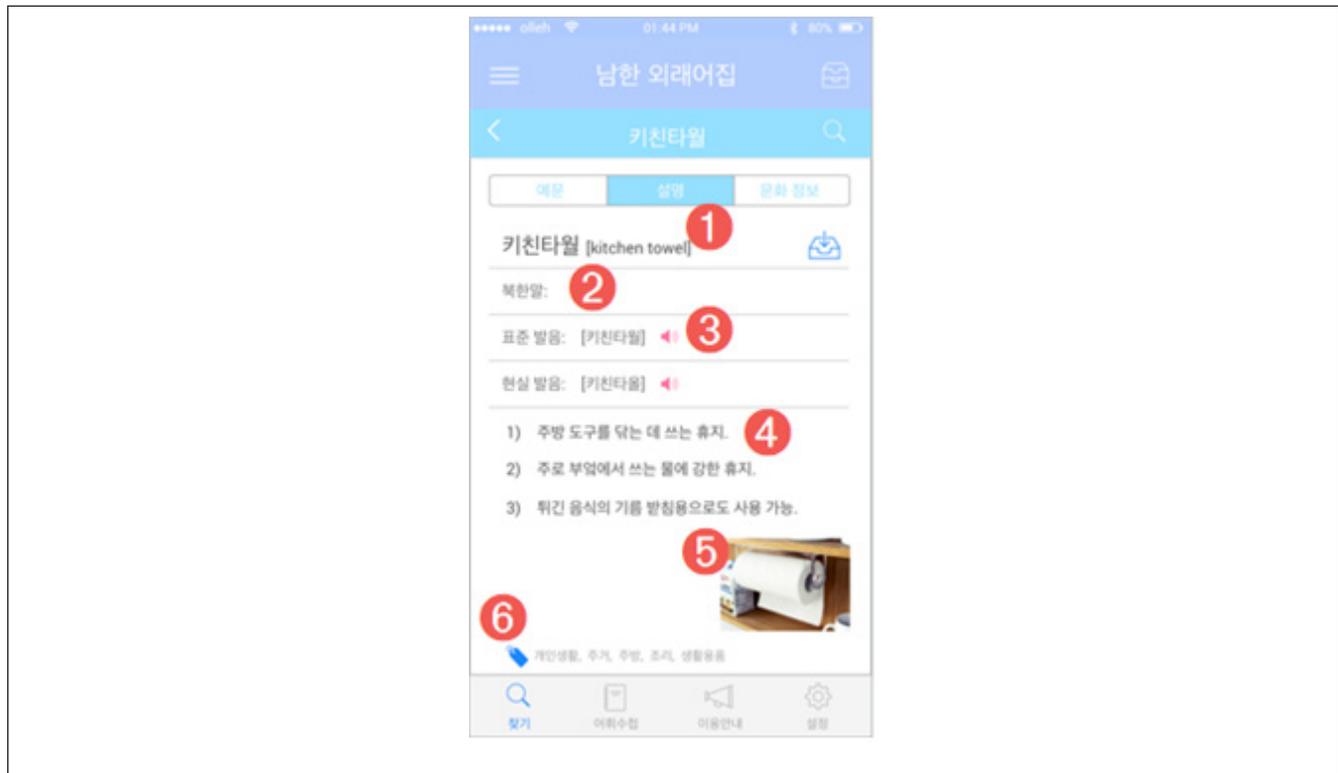


Table 4. is the loanword list related to ‘Living’ and it can be presented in two ways by choosing one of the icons on the top of the screen that states ‘Alphabetical order/ Importance-based order’. The basic format of the list follows the alphabetical order, and the search result can be shown in two ways.

1. Alphabetical order: After pressing this icon the loanwords related to ‘Living’ appears in Korean-alphabetical order.
2. Importance-based order: After pressing this icon the loanwords related to ‘Living’ appears in importance-based order.
3. Save vocabulary: The word that the user find important can be saved separately in word note’ by pressing the icon on the left.
4. Word note: Saved loanwords are collected separately

**Table 5.** Search result of ‘Kitchen towel’



This is the search result screen of ‘Kitchen towel’. The result appears after searching ‘Kitchen towel’ in the search engine of the first screen of the application, or by selecting the relevant entries. The search result screen comprises of 3 categories of ‘Sample sentence, vocabulary definition, cultural information’, and the basic result is the definition explanation for the vocabulary.

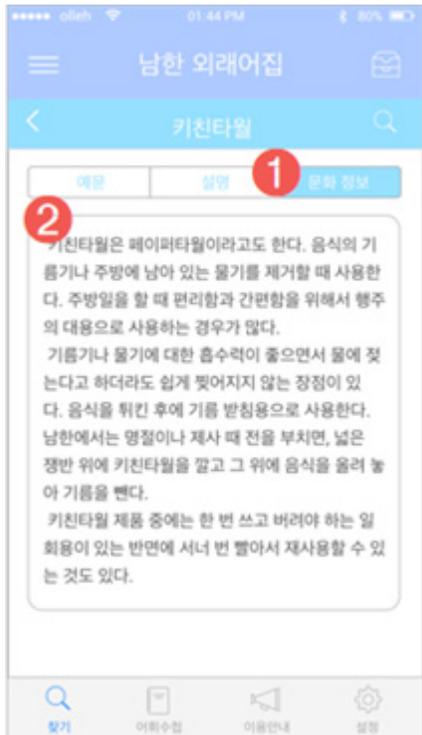
1. Search word: The search result of ‘Kitchen towel’ appears with the English word on the top of the screen.
2. North Korean word: If a corresponding North Korean word exists, it appears in the result to help the understanding.
3. Pronunciation: The actual pronunciation and the standard pronunciation is presented in the result to provide voice support.
4. Terms and additional explanations: The details regarding the loanword are provided to explain the actual usage of the word. The explanations are to help the North Korean refugees understand the newly introduced objects or concepts that does not exist in North Korea.
5. Pictures and image: Visual materials are presented to help understand the unfamiliar words.
6. Tags: The user can search related vocabulary by following the tag attached to the words. The vocabulary with same tags can be presented in a list. There can be more than one tags attached to a word.

communication based on the unfamiliar culture in South Korean society as shown in table 5. Also, the information and communication category takes the expansion of Internet usage and its significance in the South Korean society. The social and cultural life category is based on the cultural difference the refugees may encounter during their settlement in the new social system as shown in table 6 and table 7.

## 4. Conclusions

For the North Korean refugees to successfully settle down in the Korean society, efficient and pragmatic vocabulary information should be provided for them. Providing efficient information regarding loanwords by associating closely with real life can be especially helpful, since refugees have shown the most difficulty

**Table 6.** Cultural information in the ‘South Korean loanword collection’

	<p>This is the cultural information screen of the search result of ‘Kitchen towel’. The cultural information can be chosen in the three categories on the top of the previous screen. The user can freely move to the previous or first screen of the application.</p> <ol style="list-style-type: none"> <li>1. Cultural information: After pressing ‘cultural information’ among the basic definition category screen, the cultural information relevant to the vocabulary appears.</li> <li>2. The contents of cultural information: This includes the terms and etymology of the vocabulary. It can also include synonyms and practical tips for using the word in actual life.</li> </ol> <p>Through this information, the user can easily understand and accept the cultural information along with the definition of the word.</p>
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**Table 7.** Sample sentence screen of ‘South Korean loanword collection’

	<p>This is the screen showing the sample sentence of the loanword.</p> <ol style="list-style-type: none"> <li>1. Sample statement: Sample sentence appears on the screen after pressing the ‘Sample sentence’ icon.</li> <li>2. Sample sentence based on situation and context: The sample statement is based on the most appropriate situation the vocabulary is used. Also it is presented in the form of a conversation section in order to help the learner understand the context. Multiple sample sentences are presented to portray various situations the word can be used in.</li> </ol> <p>There are some cases in which the dictionary definitions do not match the actual usage of the vocabulary. Presenting various communication situations with the word can mitigate this problem.</p>
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in learning loanwords during the language learning process. Moreover, it can be even more helpful by providing the information about loanwords through mobile devices that can be easily accessed in any situations or locations. The discussed type of providing information combined with the extendability of mobile devices will result in various methodological directions for vocabulary education.

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