

## SMARTPHONE APPLICATION: A REVIEW OF POTENTIAL USE FOR NURSING STUDENTS

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### Abstract

The advancement of Smartphone application has brought significant changes to people's life. The Smartphone is not only used as a communication tool but also lead people to do certain activities in multiple ways. Those ways include accessing information, looking for entertainment, making photos and videos, playing games, and using specific application features. For medical students, especially nursing students, using a medical application in the Smartphone can be one of the potential ways in learning English easily. It provides them an opportunity to get some types of learning activities meaningfully. They can use of image and animation on the apps to learn basic medical English, create, share and reflect English medical materials through audio or text, and gain the information about healthcare domain. Thus, this paper gives a brief discussion of using Smartphone application in English language teaching by highlighting few samples of application and activities for nursing students.

*Key words: Smartphone application, nursing students, medical English*

### A. INTRODUCTION

Mostly, English has been used as a medium of interaction and communication for people around the world. It becomes an international language in which it has been used for certain purposes such as for business, law, education, literature and even in medical terminology. In medical terminology, for instance, people are served some vocabularies list and texts about medical terms in English. Thus, it is very important for the health professional, particularly nurse that standing in the front line of this field to be able to have good ability in English. The ability involves the ability to have professional communication in medical use, the ability to read and write text related to medical health, and the ability to give instruction concerning health education and patient disease in oral and written forms reliably.

Therefore, nurses need to have good ability in English. Nurses must not only be proficient in general English but also must be proficient in the use of medical terminology. Nurses have to be able to communicate in English with patients, doctors, and family in the context of health and at the same time, they also know how to behave politely and demonstrate how to use the medical tools properly.

Indeed, this skill automatically becomes urgent for them to support their performance in doing their job such as attending an international conference and visiting foreign doctors or nurses for professional development. For that reason, English has been put in the curriculum as one subject to be fulfilled by nursing students.

The nursing curriculum offers courses of English language at two subsequent levels; English for Nurse 1 and English for Nurse 2. Through these subjects, the students learn to speak in a variety of genres, including oral presentations, interviews, and both formal and informal conversations. Besides that, they also learn to listen to instructions, inform others, ask questions, take care patients, and translate technical information into simplified language for patients. Finally, they also learn to write summary and report related to language in medical use. Later, it is expected that after taking the course the students can have good English competence in verbal production skill and written skills to interact with a patient, patient's family, doctors and other health professionals in a professional capacity.

However, gaining English skills during the teaching and learning process stills becomes a challenge for nursing students. During the course, they tend to have difficulty in using academic English and the technical language of healthcare. They complain about not knowing the meaning of particular words, not knowing the pronunciation of certain words, their own need for more time to speak, being unable to skim-read, and coping with their own. Besides that, the students experienced difficulties with speaking and comprehending both classroom and clinical situations with patients and health personnel (Shakya and Horsfall, 2000).

One way to solve the students' challenge in language learning is benefiting from technology. With the advanced technology, integration of materials in language classroom has become widespread (Vanderplank, 2010). For now, many technological devices were available to be used by teachers to enhance classroom learning. Personal digital assistants, tablet computers, smartphone, and laptops are the devices examples which can support teaching and learning process.

The smartphone is one of the devices teachers and students are familiar with. It is handheld telecommunication devices that combine miniaturized hardware of a personal computer and a mobile phone with a relatively large touchscreen.

(Kulendran, 2014). From its feature, the smartphone has added functionality of a personal digital assistant (PDA), wireless Internet access, a compact digital camera, global positioning system, and a high-resolution touchscreen. This sophisticated tool can be used by teachers in delivering English medical material for nursing students. As a learning aid, the Smart phone can make ‘smart students smarter’ by providing 10,275 unique applications labeled under ‘Medical’ and ‘Healthcare and Fitness’ categories (Gavali, 2017). Thus, smartphone applications have encouraged exciting opportunities for nursing students with flexible access to learning materials anytime and anywhere. This paper gives a brief discussion of using Smartphone application in English language teaching by highlighting few samples of application and activities for nursing students.

## **B. REVIEW OF RELATED LITERATURE**

As previously mentioned, the smartphone is a handheld device which provides a constant connection to the internet via email, text messaging, video-conferencing and social networking software, often integrated with additional functions such as a camera; the devices can also be used to access multimedia content such as podcasts and video (Wallace, 2012). A typical Smartphone has a high-resolution touchscreen display, WiFi connectivity, Web browsing capabilities, and the ability to accept sophisticated applications. This is one of the devices that would enable teachers to serve teaching materials variously. The smartphone can be in educational activities to access course content, acquire information related to students’ performance, and to encourage discussion and sharing between students and teachers.

There are some reasons why a smartphone is appropriate for language learning. According to Pesce (2007), smartphone is suitable for language learners because of some reasons; (1) Convenience – The mobility of these devices provides students with the chance to study/review any day, anytime, without the need to remember to bring their books or class materials, (2) Efficiency – Most apps are tremendously user-friendly and well-organized into topics. This means students don’t waste any time looking for what they want to practice, (3) Engagement – Language learning apps are the ideal tool to engage learners who are very tech-minded and naturally enjoy using gadgets.

In line with this, Zilber (2013) adds that smartphones have suited to the delivery of certain kinds of English language learning and practice because of some reasons; (1) familiar and easy to use, (2) personal, private and carried everywhere, (3) a natural environment for speaking and listening, (4) equipped with microphone, speakers, and special speech processing hardware and software, (5) network connected fully-capable computing devices, and (6) becoming ubiquitous.

### C. DISCUSSION

There are thousands of applications available in a wide range of categories including some tailored to specific medical fields, and the number is increasing rapidly. These apps are available mobile operating systems (OS) used by modern smartphones include Google's Android, Apple's iOS, and Research in Motion's Blackberry OS. The applications are able to work with or without internet access. Internet access is only needed when a user logs in for the very first time in order to download the lessons to the device.

Before using applications in the classroom, the teacher needs to consider several things. Firstly, the teacher needs to make the application appropriate to the students' ability. It means that the range of difficulty provided in the apps is nearly same with the students' condition. So, they might feel that the apps are quite helpful for them to support their learning process. Second, the apps must be created by native English speakers so the students can truly get authentic materials in learning medical English. Finally, the apps are designed in small segments, engaging, entertaining and addictive.

Here, I would like to review some simple applications which can be used by the teacher in delivering English medical materials for nursing students. The applications can be discussed below:

#### 1. Disease dictionary



Disease dictionary is one of complete application which offers students a long list of illnesses and conditions nurses are apt to encounter, along with symptoms and preferred treatments. From this application, students can get type in the symptom and a list of possible diseases that will appear. They will get

comprehensive information about how to deal with symptoms/how to prevent the disease and how to improve knowledge about diseases.

By using this application, the teacher can explore materials on students' reading comprehension meaningfully. Teachers might use this application to teach students on getting knowledge of illnesses and its symptom. Besides that, texts provided in the application are useful as learning the material in teaching reading skills.



figure1. Disease Dictionary

2. Nursing Procedure



Nursing Procedures focuses largely on providing nurses the best resources before they begin a procedure in medical health. Generally, the contents are divided into three main categories; general nursing, psychiatric nursing, and midwifery. For nursing students, this application is useful in providing them details steps in doing medical procedure practically.



Figure 2. Nursing Procedure

3. Mini Nurse Lite



This application offers valuable information about nursing skills. It consists of six main categories which include medical terminologies, abbreviations (suffixes and prefixes), drug calculations, lab values, medical facts, skills and news. The content from this ‘cool’ application are beneficial for gaining students’ knowledge in learning medical English. The students are served English medical use meaningfully.



Figure 3. Mini Nurse Lite

**4. Nursing Training Video**

To improve students’ ability in speaking English, teachers can use this nursing training video application. The application contains a lot of video related on medical activity. By using the video, teachers can show language use properly related on context and situation. Besides that, students also can learn how to pronounce words correctly and listening to the conversation clearly.

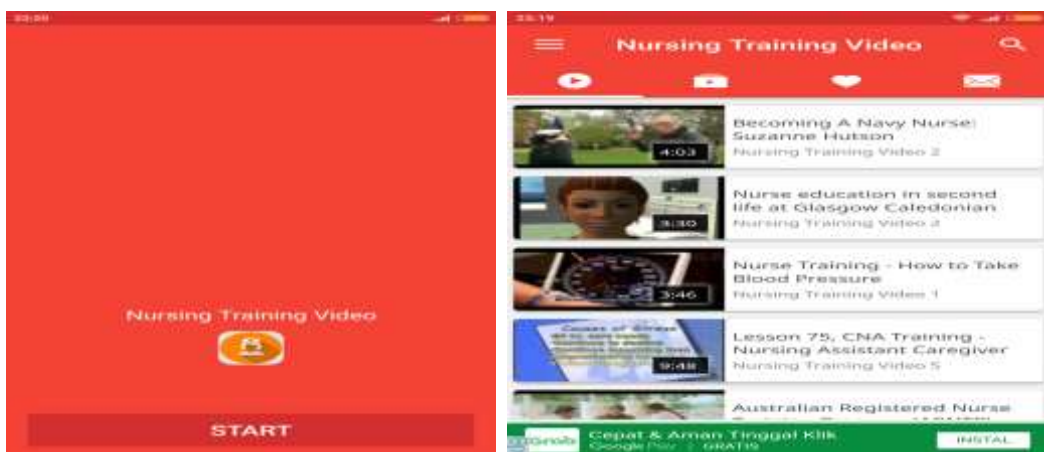


Figure 4. Nursing Training Video



## D. CONCLUSION

This paper has introduced the use of a smartphone application in teaching medical English for nursing students. It has discussed the reasons to use smartphone application as an aid in teaching medical English. Few samples of application and activities for teaching nursing students have also been described. Meanwhile, as the aims of the paper introduce an idea in teaching medical English through a smartphone; more detail learning activities in specific English medical materials have not been discussed yet. For further discussion, it might be discussed descriptively in other scientific paper.

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