

Developing a Mandarin Learning Podcast for Flexible Learning

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ABSTRACT

Learning by means of mobile devices is becoming more popular. Efforts are being made in all academic disciplines, including foreign language teaching and learning to provide learning opportunities anywhere and anytime. This paper reports the attempt of a foreign language class which utilized Web 2.0 tools to create a flexible learning environment which could also be used to encourage mobile learning. The development of a series of podcasts to be used as a supplementary tool in learning Mandarin is the main concern of this paper. The students who were involved in this study were asked to evaluate the content and suitability of the podcasts. They were asked to complete a set of questionnaire and some of them were also randomly selected for an interview session. The findings showed that the use of podcasts as a learning tool was beneficial and podcast-based learning can be implemented as one of the creative ways to teach or learn a foreign language.

Keywords: Podcast, Flexible Learning, Chinese, Mandarin, Foreign Language

INTRODUCTION

In this borderless and technology enhanced era, many people are starting to be aware of the importance of knowing other languages for better communication and interaction in the world. Learning foreign languages has become the world's new phenomenon. The leaders of many countries are also aware that knowing foreign language(s) will be the key for their nations to stand tall in the international arena. Some monolingual countries are encouraging their citizens to learn foreign languages while bilingual countries are encouraging their people to learn other foreign languages as a third language. Foreign languages such as Arabic, Chinese, English, French, German, Japanese and Korean which are being promoted are the languages that are thought to be influential or have economic value.

As the case in Malaysia, a country with multi-racial citizens, Malaysians, irrespective of their ethnicity, have been encouraged to study other languages besides the national language. It is rather common to see a Malaysian conversing in their mother tongue, the national language, English as well as some other local dialect(s). Due to the awareness of the importance of learning foreign language(s), the demand for the learning of Mandarin – a spoken Chinese language – as a third or foreign language among non-Chinese Malaysian has also registered a huge increase in recent years (Cheun, 2006; Hoe & Lim, 2008). As this group of learners normally start without any formal instruction in Mandarin, the classes are mostly conducted using the Grammar Translation Method (Tan, Lim & Goh 2010). This approach, though effective, does not help students to acquire additional vocabularies and be an autonomous learner. It is postulated that mobile learning could be a possible method to change this third/foreign language learning scenario (Goh & Azlinda, 2009).

LITERATURE REVIEW

The development of technology has brought unlimited benefits to mankind including education. It has revolutionized the traditional teaching classroom into an interactive learning environment. Learning and teaching can be executed through the use of tools such as email, online forums, podcasts and CDs (Jensen & Sandlin, 1997; Goldberg, 2000; Hratinski, 2008). In recent years, the innovations in podcasting and the advancements in mobile and portable technologies, including smart phones, personal digital assistants (PDAs), and other media players (MP3s) have made possible a new way of learning which is different from the traditional forms of classroom and distance education (Song & Kidd, 2008).

The term podcasting is derived from i-Pods – the Apple's portable media player. Podcasting refers to the process of packaging/distributing multimedia content in podcast file format or MP3 on websites (Barlow, 2008). Podcast is a series of media files which are uploaded onto the website from time to time, and the users are allowed to subscribe, access, download, and play back the audio/video podcasts on their mobile phones, i-Pods, i-Phones, MP3/MP4 players, laptop computers and other portable devices.

In the educational field, the podcasts used usually consist of audio recordings of lectures, and can be used to review live lectures (Clark, Taylor & Westcott, 2007) and to provide

opportunities for students to rehearse oral presentations. Podcasts may also provide supplementary information to enhance traditional lectures (McGarr, 2009). As the media files of podcast can be audio or video files, podcast is classified into two types, audio podcast (podcast) and video podcast (vodcast) (Taylor & Clark, 2010). Learning through podcast promotes flexible and mobile learning as the learners can access, download, and listen to the podcasts learning materials whether once or multiple times on their computers, MP3 players, or any other portable devices at anywhere and at anytime (Morales & Moses, 2006). There is no time or geographical constraints whatsoever.

The podcast described in this study refers to audio podcast. Audio podcasts, in general, are sound files that are uploaded onto a designated website. According to Cebeci and Tekdal (2006), an educational podcasts must have words, music and voice effects for it to be well-received by users and to improve the efficiency of the learning process. In addition, Rosell-Aguilar (2007) believes that language learning podcasts should also have the following characteristics: (a) provide for language learning and cultural contacts; (b) have a series of reliable content; (c) have appropriate playback time; and (d) are portable. The availability of new podcasts on the designated website is often extended to the users via RSS feed.

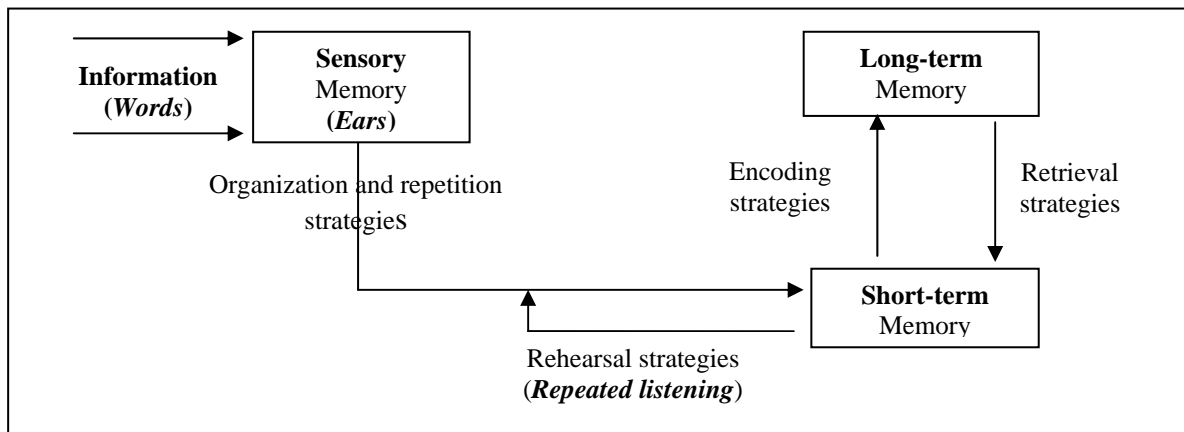
Implementation of podcast in education has been used to assist and enhance access to learning materials since 2005 (Kennedy, Krause, Judd, Churchward, & Gray, 2008). It, however, has still not yet gain popularity in South-east Asia countries such as Malaysia especially in the second and/or foreign language learning and teaching. The recent active application of podcast in foreign language learning in South-east Asia countries can be found in Singapore. At the National University of Singapore, Chan et al. (2010) had conducted several studies on the use and access of podcast among students who were learning foreign languages such as Chinese, German and Korean. The perceptions of the podcasts' were mostly positive and the podcasts achieved high access rates too.

In this study, attempts to use podcasts as a learning tool among non-Chinese students who were learning Mandarin as a foreign language were made. This learning tool indirectly provided students the opportunities to access and share learning materials at anywhere and anytime. Besides encouraging podcast-based learning as a creative practice in the teaching and learning of a foreign language, the use of podcasts also promoted flexible and mobile learning among the students. The podcasts created for the study also added to the collection of local learning content.

The theoretical framework of the study

In attempting to formulate a theoretical framework for the study, the researchers adapted and incorporated Memory Theory, Language Learning Strategies Theory and Stage Model of Information Processing. The theoretical framework is presented in Figure 1.1.

Figure 1.1 The theoretical framework of the study



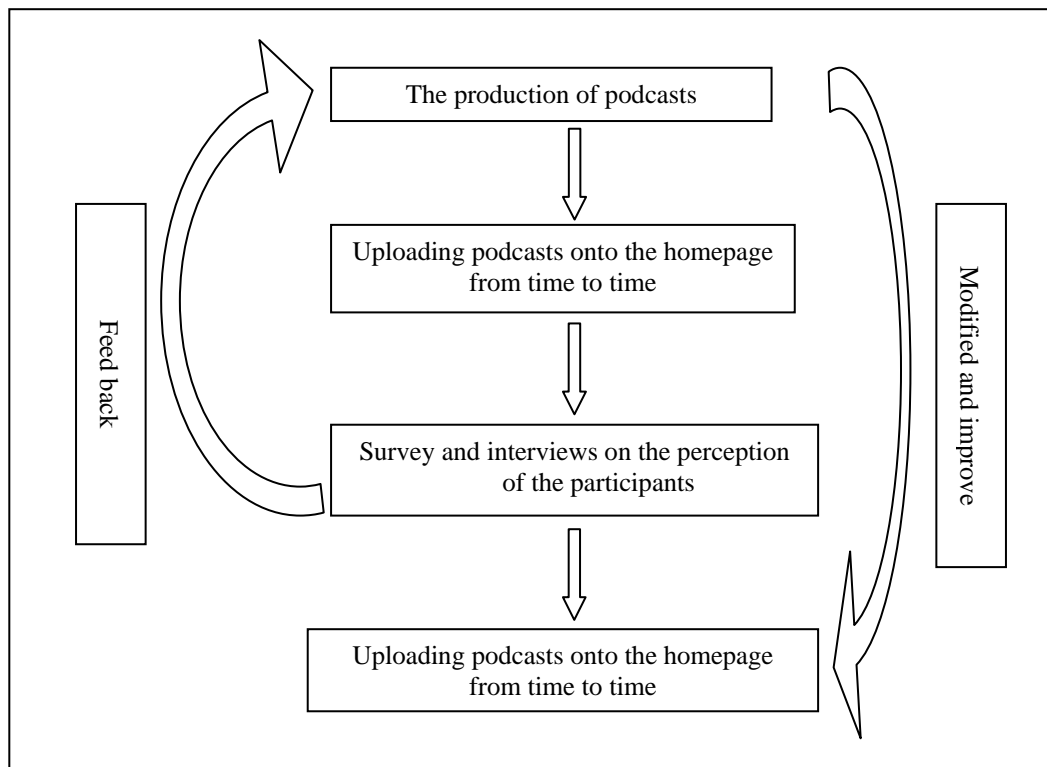
The importance of learning strategies is emphasized in the theoretical framework of this study. This framework proposes that information or language input (the audio files) received by the sensory memory of learners (ears) will be processed and stored into short-term memory through organization and repetition strategies. To hold the information in their short-term memory so that it will not be forgotten, learners need to repeat/reinforce the newly acquired information by utilising maintenance rehearsal strategies; in this case, to listen repeatedly to the audio files. At the same time, learners will need to code the information to store it in their long-term memory. Strategies for assisting coding include rehearsal, chunking, imagery, mnemonics, elaboration, schema activation, and level of processing (Huitt, 2003). To use the information stored in long-term memory, it must be retrieved (Gagné, 1985). Strategies for assisting retrieval include practicing, relearning, grouping, dividing, and continued exposure to the content (Huitt, 2003).

METHODOLOGY

The developing of the Mandarin learning podcast

The designing and developing of the podcasts was carried out in two phases. As illustrated in Figure 1.2, the work in the first phase started with the production of learning materials. The podcasts were then used by a group of students and their perceptions on the content and design of the podcasts were sought. The second phase involved improving the podcasts.

Figure 1.2: The developing and designing podcasts process



The Work in the First Phase

The work in the first phase started with texts writing, recording of a series of audio files for podcasts, and creating a homepage for the podcasts to upload. After the homepage and the podcasts were ready, the researchers introduced the podcast homepage to the students and uploaded the podcasts according to the course's learning schedule. The students were asked to access the homepage and subscribe to the RSS feed as the podcast would be uploaded from time to time.

At the end of the semester, a set of "Perception towards the Mandarin Learning Podcast" questionnaire was distributed to the students. They were ensured that it would not affect their examination grades. The questionnaire was administered to gauge the students' perception towards the content and design of the podcasts, and their attitudes towards podcast-based learning. Interviews with three participants were conducted to gather extra information regarding the students' perception towards the Mandarin Learning Podcast. The feedback of the students was used to improve and modify the podcast for the second phase of the study.

The Participants in the First Phase

26 students participated in the study. All of them were learning elementary Mandarin during that particular semester, and they had no prior knowledge in Mandarin. Table 1.1 shows the participants' information.

Table 1.1 The Participants' Information

	Frequency	Percent	Cumulative Percent
Gender			
Male	6	23.07	23.07
Female	20	76.93	100.0
Age			
20	4	15.38	15.38
21	16	61.54	76.92
22	6	23.08	100.0

The podcast homepage was introduced to the students and they were invited to access the podcasts and subscribe to the RSS feed. At the end of the semester, a set of a self-reported survey questionnaire, "Perception towards the Mandarin Learning Podcast" questionnaire were administered to the students. Only 23 out of 26 questionnaires were used for data analysis as there were three participants who did not answer completely. Descriptive statistics of SPSS 20 was used to serve the purposes. Besides, three students were also invited for face-to-face interview sessions to gain a better insight into their perceptions towards the podcasts.

Mandarin Learning Podcast

Podcast was the medium of the study, and it was used throughout the study. 12 podcasts were developed based on the course syllabus. Each podcast started with a short Chinese traditional music which was then followed by the content which lasted for between five to ten minutes. The podcast concluded with a short Chinese traditional music as well. The availability of a new podcast was made known to students via RSS feed. Students were given the freedom to either listen online or to download the podcasts onto their PCs, cell phones, MP3 players or other portable devices. The students can listen to the podcasts at any time and at any places at their convenience. Indirectly, mobile learning was promoted.

The podcasts were designed to accommodate the characteristics of language learning podcast. The podcasts created by the researchers were supplementary podcasts and have the following objectives:

1. To provide the students with listening and speaking contents and practices which are in tandem with the course content;
2. To provide students with additional supplementary vocabulary and phrases;
3. To allow students to listen to short dialogues to review the contents they had learnt in the classroom;
4. To encourage students to develop autonomy or independent learning outside the classroom; and
5. To introduce a new and more relaxed form of mobile learning.

Table 1.2 and Table 1.3 show the design and content of the podcasts created for the first phase of the study.

Table 1.2 The Design of the Podcast in the First Phase of Study

Number of episode	Frequency	Playing time	Handouts
12	One podcast each week	5 – 10 minutes	Only for supplementary vocabulary and phrases

Table 1.3 The Content of the Podcast in the First Phase of Study

Mandarin Learning Podcast	Content
Episode One: Hello	supplementary vocabulary and phrases
Episode Two: Who is he/she?	supplementary vocabulary and phrases
Episode Three : Listening exercise (1)	true or false statements translation of sentences
Episode Four: Numbers	supplementary vocabulary and phrases
Episode Five: My home	supplementary vocabulary and phrases
Episode Six: Listening exercise (2)	true or false statements translation of sentences
Episode Seven: What is the date?	supplementary vocabulary and phrases
Episode Eight: What day is today?	supplementary vocabulary and phrases
Episode Nine: Listening exercise (3)	true or false statements translation of sentences
Episode Ten: What is the time?	supplementary vocabulary and phrases
Episode Eleven: What are you doing?	supplementary vocabulary and phrases
Episode Twelve: Listening exercise (4)	true or false statements translation of sentences

“Perception towards the Mandarin Learning Podcast” Questionnaire

A set of a self-reported survey questionnaire, “Perception towards the Mandarin Learning Podcast” questionnaire, was used in the first phase of the study. The survey questionnaire was adapted from Chan, Chi, Chin, and Lin (2011). The questionnaire consisted of two parts: the first part was to investigate the students' personal information such as age, gender, the place they live, the type of cell phone they have, and the device used to listen to the podcast. The second part consisted of questions to investigate the students' views regarding the podcast contents and design, and the students' perception towards using the podcast. There were 17 items in this part. Items 1, 2, 3, 5, 6, 7, 9, 10, 11, 12 were items to survey the students' views regarding the podcast contents and design; while items 4, 8, 13, 14, 15, 16, 17 were to gauge the perception of the students towards the benefits of listening to the podcasts.

The students were required to answer the items in both parts of the questionnaire based on a five point Likert scale. Likert scale 1 referred to strongly disagree; 2 referred to disagree; 3 referred to no opinion; 4 referred to agree; and 5 referred to strongly agree. Of the items, items 7 and 14 were negative items, and so, reverse calculation was imposed during analysis for these two items

Results of the First Phase

The questionnaire results showed that most of the students were very satisfied with the content and design of these podcasts. A majority of the students believed that the podcasts provided great help to them in learning Mandarin. They thought that the podcasts increased their vocabulary and enhanced their conversational as well as listening skills. They liked to listen to the podcasts and they also thought that the podcasts were appealing to their interest of learning Mandarin. However, there were some students who felt that besides gaining those benefits, their learning burden had also increased. This is because they needed to set aside some free time to listen to the podcasts. The data obtained from the interview with three students provided almost the same information as the questionnaire results: the podcasts were beneficial; they acquired more vocabulary; and the podcasts strengthened their speaking and listening abilities. They also made some recommendations to improve the podcasts (details see Tan, Lim & Goh, 2012). However, it was found that instead of subscribe to RSS feed, a majority of the students bookmarked the podcast homepage and navigated it frequently.

The Work in the Second Phase

Based on the responses obtained from the questionnaire and interviews, the researchers modified and improved the podcasts. The features of the podcasts remained but the episodes were increased from 12 podcasts to 18 podcasts. The additional podcasts were three podcasts of questioning and answering, and three podcasts of dialogue. In addition, one more exercise on finding the correct answer was added for listening exercise. The modified podcast were shown in Table 1.4.

Table 1.4 The Design of the Podcast in the Second Phase of Study

Number of Episodes	Frequency	Playing time	Handouts
18	One/two podcast(s) each week	5 – 10 minutes	Every podcast

The content of the reorganized podcasts covers four main components – vocabulary and phrases, questioning and answering, dialogue and listening exercise. Each component and the related chapters are shown in the Figures 1.3 – 1.6.

Figure 1.3 The content of the podcasts for vocabulary and phrases in the second phase of the study

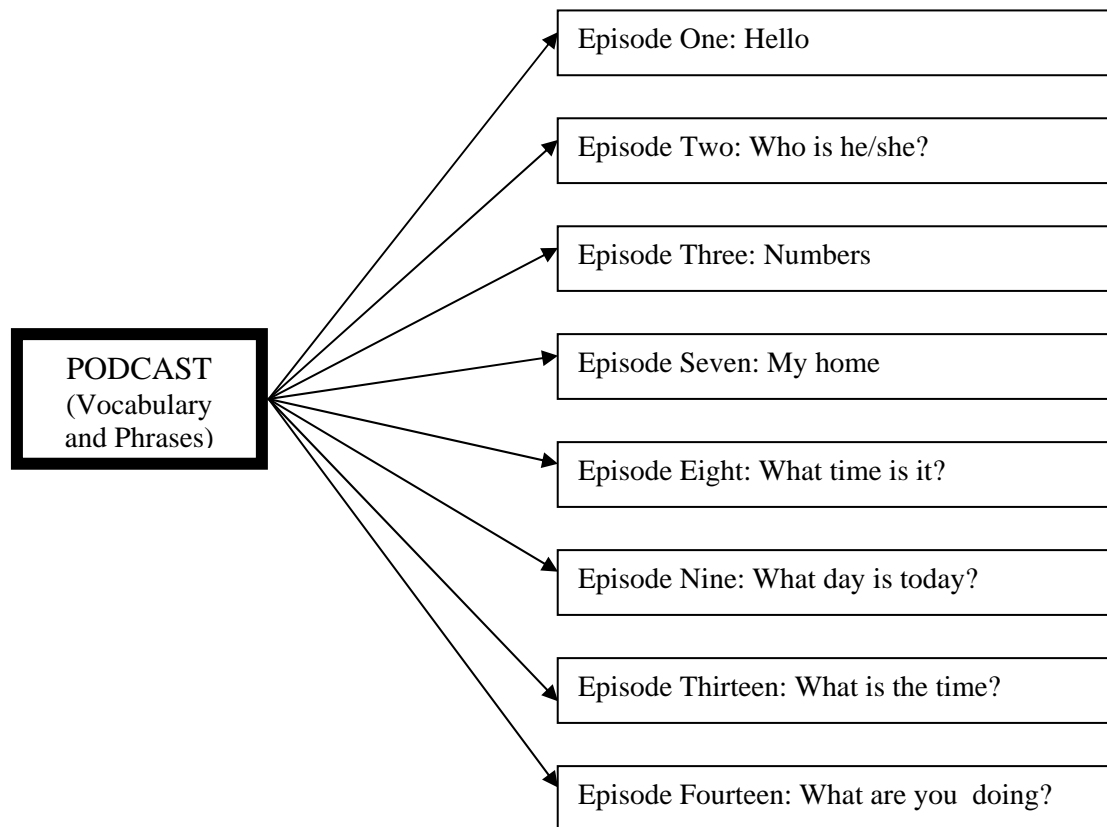


Figure 1.4 The content of the podcasts for questioning and answering in the second phase of the study

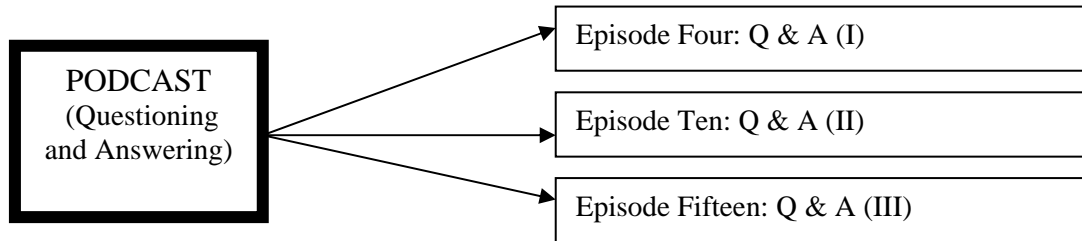


Figure 1.5 The content of the podcasts for dialogue in the second phase of the study

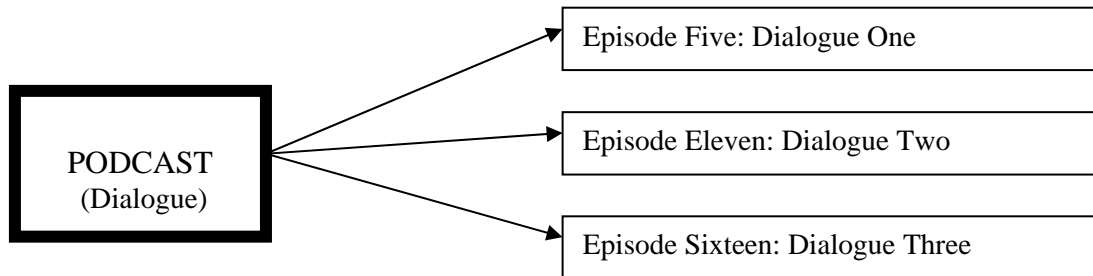
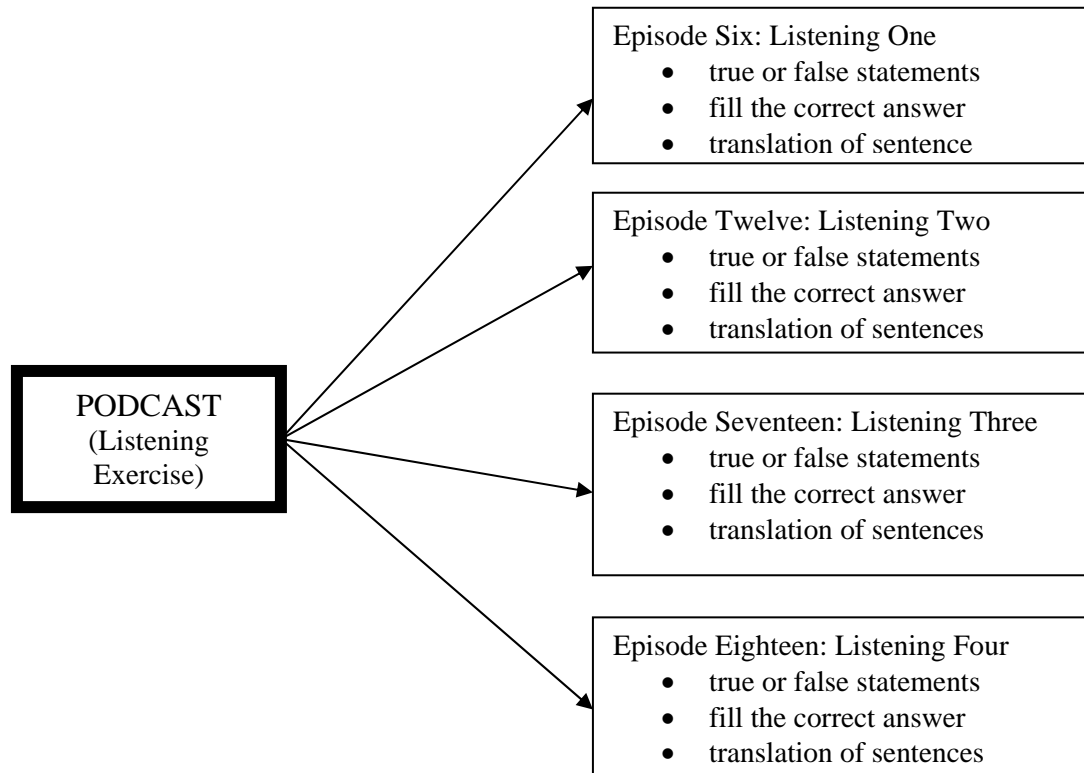


Figure 1.6 The content of the podcasts for listening exercises in the second phase of the study



Subscribing to RSS Feed

Based on the suggestions obtained from the participants, the researchers decided to explain to the participants in the following semester on how to subscribe to RSS feed. Once they are subscribed to the RSS feed, they will be informed on the availability of a new podcast episode. The following instructions were given to the students:

1. Navigate to the following homepage <http://uitmkedahbmd401.pbworks.com>
2. Click on the RSS feed icon on the toolbar or the RSS feed link at the bottom of the page. Please refer to Figure 1.7 and Figure 1.8.
3. On the pop-up dialogue box, choose the type of RSS feed reader you want to use for example Live Bookmarks, My Yahoo or Google. Then click *Subscribe Now*. Next, follow the instructions given by the host. Please refer to Figure 1.9.
4. For example, if you choose Google as the RSS feed reader, you will see the following screen. Please refer to Figure 1.10.
5. Click on *Add to Google Reader*. On the next screen, click the *Subscribe* button which is located on the left of the screen. Please refer to Figure 1.11.
6. You may need to sign in to Google first. Then upon clicking on the *Subscribe* button, you will be prompted to type in the URL of the page whose RSS feed you want to subscribe. In this case type or copy and paste the URL of the homepage

(<http://uitmkedahbmd401.pbworks.com/w/page/41068319/FrontPage>) into the box provided. Next, click *Add*.

7. After this is done, you do not need to surf the podcast homepage to find out whether there are any new learning materials. The feed will notify you if there is a new episode being uploaded. You may then download the podcast onto your computer or save it onto other personal devices for listening. The number given in the brackets next to the name of the homepage indicates the number of new and unread RSS feeds. Please refer to Figure 1.12.

Figure 1.7: The location of the RSS feed icon

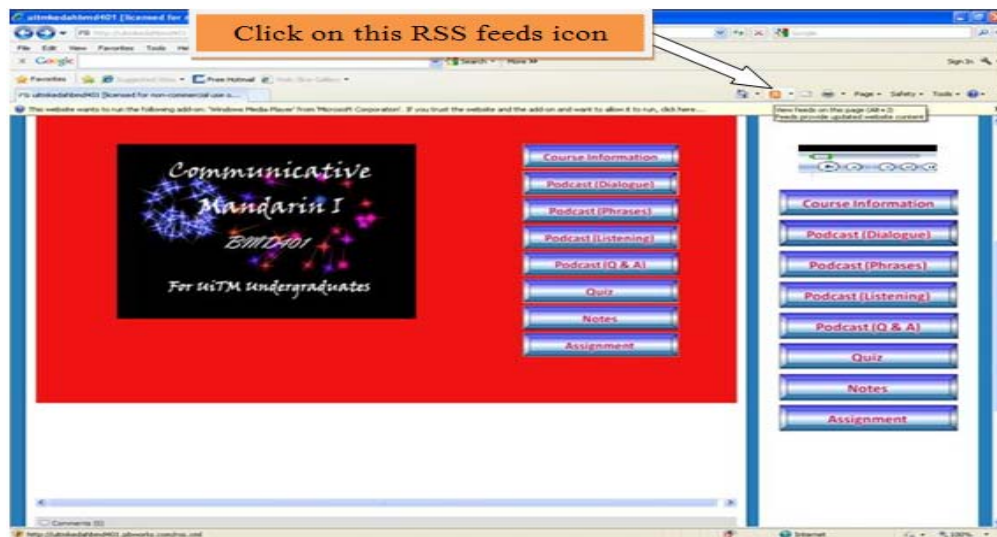


Figure 1.8: The location of the RSS feed link

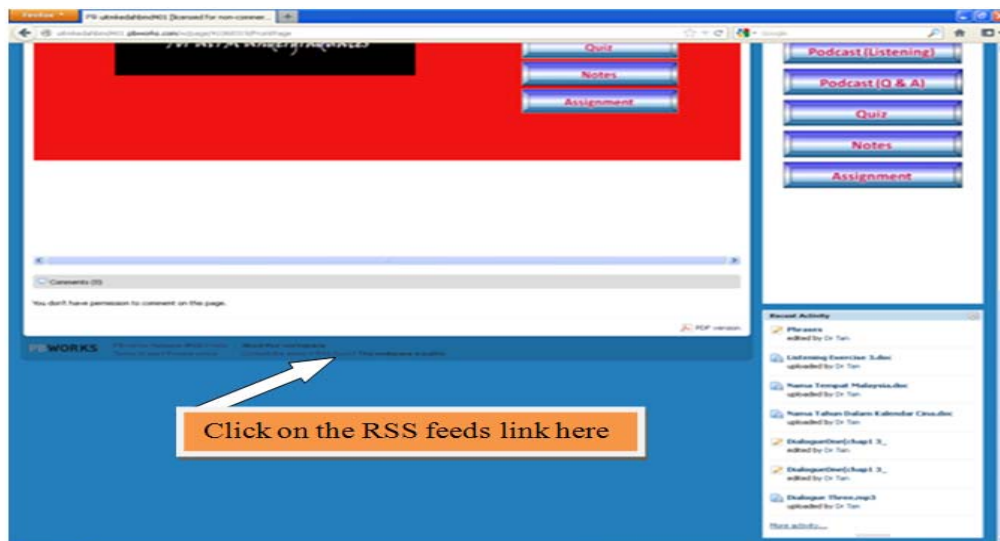


Figure 1.9: Choosing the RSS Feed Reader

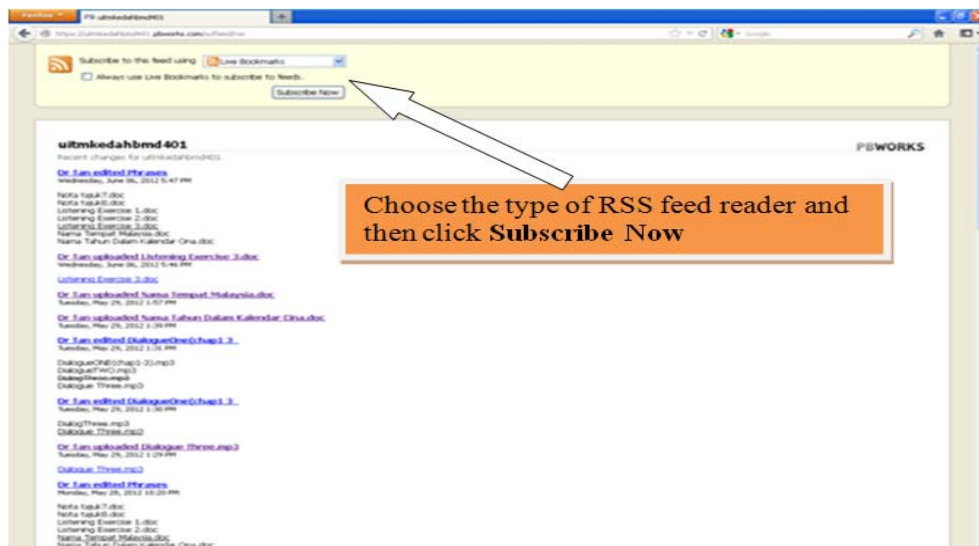


Figure 1.10: Adding the RSS Feed to Google Reader

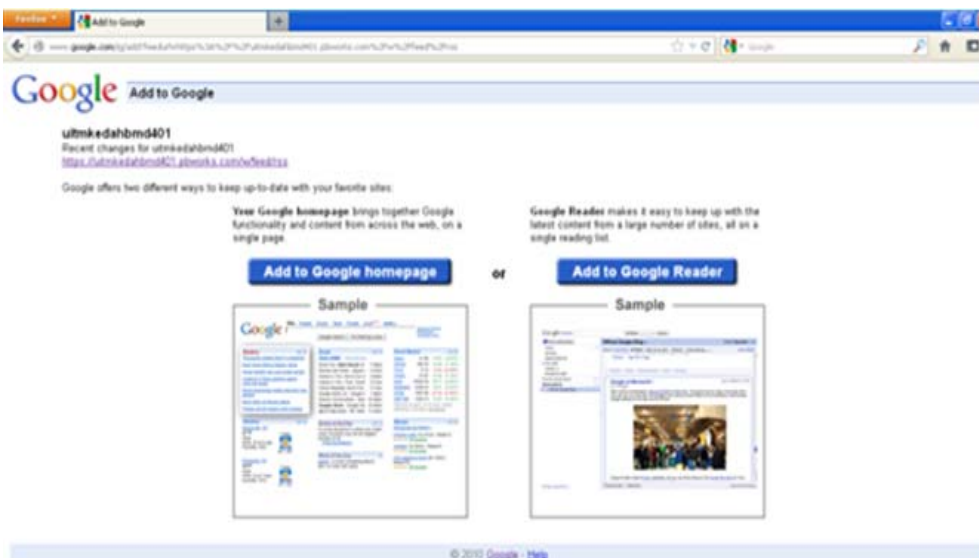


Figure 1.11: Subscribing to the RSS Feed via Google Reader

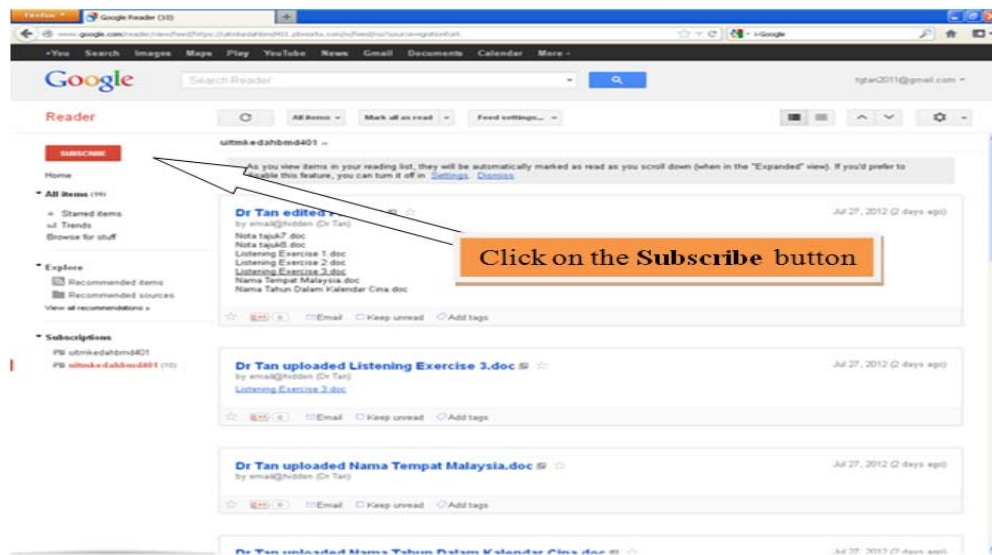


Figure 1.12: Indication of the Number of New/Unread RSS Feeds



CONCLUSION

This study discusses the development of podcasts as a learning supplementary tool for non-Chinese Malaysian learning Mandarin as a foreign language. The design and development process were described thoroughly. Besides the development of the learning materials, the students in the study were also asked to provide feedback on the design and content of the

podcasts. The evaluation was conducted through the administration of a questionnaire and interviews. Overall, the evaluation showed that podcast-based learning is welcomed by the students and it is flexible and beneficial to their learning. Future work in this area is recommended. For example, the evaluation strategy could be extended to include further data analysis such as hypothesis testing and correlation analysis. The analyses can perhaps provide more accurate findings and discussions. In addition, video podcast could also be developed along with audio podcast.

In conclusion, the objective of this study to develop podcasts as a learning tool for the learning of Mandarin as a foreign language so that students can access and share learning materials at anywhere and anytime, as well as to promote flexible and mobile learning among the students was successfully accomplished. The use of podcast-based learning as an innovative practice in the teaching and learning of foreign language learning was also successfully established.

However, there are still some areas that need to be further investigated. One such instance is to examine whether podcast-based learning can suit the various learning styles and if yes, the extent of its suitability. We look forward to continuing our research and developing an application based on the future progress of mobile technology and Internet advancement. Thus, the meaningful contribution of the paper is to provide a small step for recommending and implementing podcast-based learning that can meet pedagogical needs.

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