Learning Academic Vocabulary through a Mobile App

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Abstract

Improving learners' lexical competence through vocabulary instruction has not always been prioritised in ESL/EFL teaching agenda. However, the advent of new technologies has fostered the development of mobile assisted language learning (MALL) and the increase in mobile apps for vocabulary learning. This paper will be focusing on the importance of using a mobile app to teach academic vocabulary. The app offers 10 PhD candidates an online course to improve their academic vocabulary as to prepare for their doctoral entrance exams. The online course, quizzes and the survey were used as instruments. The participants were randomly selected to learn academic vocabulary on self-directed basis for a specified duration. At the end of course, all participants responded to the quizzes and survey. Their results were promising and their feedback indicated positive acceptance and appreciation.

Keywords: academic vocabulary; mobile app; MALL; lexical competence; technologies.

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1. INTRODUCTION

Learners are fully aware of the significance of vocabulary when learning a second or a foreign language (Schmitt, 2010); they tend to buy dictionaries instead of grammar books to improve their linguistic competence as well as vocabulary knowledge. Speaking of vocabulary, for instance, Lewis (1997) attaches importance to it and claims that what distinguishes an intermediate learner from an advanced learner is not how complex their grammatical knowledge is, but rather how expanded their lexicon is. In the same vein, McCarthy (1990) contends that "no matter how well the student learns grammar, no matter how successfully the sounds of L2 are mastered, without words to express a wide range of meanings, communication in an L2 just cannot happen in any meaningful way" (p. viii). Antonacci et al. (2014) believe that successful students are those who possess rich academic vocabulary in terms of content area classrooms, and academic vocabulary helps them deal with several tasks. Biemiller (2005) also says that the lack of this knowledge may lead to failures. Despite the fact that there is a myriad of approaches to teaching vocabulary, there is a common consensus that students need to improve their vocabulary knowledge to be able to understand different and complex texts. Therefore, the understanding of texts has a close-knit and vital relationship with the knowledge of the vocabulary (Anderson & Nagy, 1991; Baker et al., 1998; Ouellette, 2006). Not knowing a word will make it difficult to understand and decipher its meaning in a text.

Furthermore, a plethora of research has been conducted in relation to the implementation of mobile learning in language learning (Al-Said, 2015; Al-Emran et al., 2015; Soleimani, 2014). Learners believe that these apps will facilitate their learning of new languages and help them memorise vocabulary effectively. Mobile apps are tools that make learning more convenient and practical. Other studies reflected learners' positive attitudes towards learning through mobile apps (Khaoula, 2016; Basal et al., 2016). However, there are still certain challenges that learners are still facing such as adopting mobiles apps for language learning. In the Algeria, the use of such apps is totally absent. Learners are not even familiar with this concept

in the classrooms. In addition, one of the most common difficulties is dealing with large files in their mobile phones when it comes to the storage and some of the learning apps and which drain their mobile phone's battery quickly. Some of the learners also admit that they are not comfortable in reading and writing in small screen on mobile phones as compared to laptop.

This study tackles the role of a mobile app that is specifically designed to raise Algerian PhD candidates' awareness of the importance of using mobile apps to expand their vocabulary, but more specifically the academic vocabulary. It also attempts to gather their feedback concerning the usefulness of the mobile app used to teach them academic words and expressions that they can use while writing or speaking.

2. Literature Review

The literature to come revolves around the two key concepts, namely academic vocabulary and the use of educational mobile apps to teach vocabulary.

2.1. Defining Academic Vocabulary

It is safer to start with a simple yet comprehensive definition of vocabulary first. According to Cambridge Advanced Learner's Dictionary (2008), vocabulary refers to all the words a particular individual knows and uses, and all the words in a particular language or subject. Similarly, Hatch & Brown (1995) define vocabulary as the specific set of words a person is familiar with and can use in a language. Vocabulary may seem simple, yet it is much more than just single words. That is, vocabulary covers not only single words but also multiword phrases. The word lexis is therefore used to encompass the totality of items in the language (Barcroft et al., 2011). The notion has various types such as specialised/non-specialised, academic/general, formal/informal, receptive/productive and active/passive. The diverse array of types makes learning vocabulary significant, and learners should obtain an efficient knowledge of these different word groups to be able to interact and communicate properly.

Academic vocabulary is a vital part in lexis and it is variously known as useful scientific vocabulary, subtechnical vocabulary, semi-technical vocabulary, specialised non-technical lexis, frame words (Nation, 2001). It

generally refers to the group of words that fits into the academic discourse and can be used across many disciplines. Beck et al. (2013) introduce a framework, which categorises words into three tiers: basic words, words of high frequency and specialised words used in specific disciplines.

Academic vocabulary is a key component of academic language. The ability to read and understand academic texts is inextricably linked to the academic vocabulary knowledge. (Nagy & Townsend, 2012). Familiarity with academic vocabulary is critical for teachers to "support learners' understanding and use of the language of the disciplines," (p. 96). Nation (2001) also says that learning English vocabulary is one of the most important tasks facing English learners and that learners with limited knowledge of words are likely to experience failure in their professional and academic settings. Moreover, students may find it difficult to understand core concepts of their school subjects if they do not possess sufficient knowledge of the vocabulary (Harmon et al., 2005).

2.2. Mall: Mobile Assisted Language Learning

It is evidenced that using technology may support the learning of language skills (Shih, 2011; Lopez, 2010; Miyazoe & Anderson, 2010). Learning with technology (computers) first started in the early of the 60s (Canning, 2004), hence the term Computer Assisted Language Learning (CALL). Computers were then equipped with applications in teaching and learning of a language (Levy, 1997). Teaching and learning instruction has been promoted in the 70s with the advent of personal computers. The term Computer Assisted Language Instruction (CALI), was later made popular in the United States of America (USA) in the early 1980s. The uses of language learning software was common among the language practitioners teaching English as a second or foreign language to teach learners listening, reading, speaking and writing skills. According to Delcloque (2000), that decade was a giant leap in education in which educational software supported various learning activities with the help of computers.

Stepping one decade further, in the 90s, two innovations of technology namely the multimedia and Internet were introduced. The role of computers dramatically changed and they were used in language classes or language

labs. However, the word that is now dominating the scene of digital learning is Mobile Assisted Language Learning (MALL), replacing textbooks (Eaton, 2010). Mobile users have the privilege to choose and download almost any application that they find useful and helpful in their learning.

These apps provide many opportunities to learners whether inside or outside the classroom irrespective of time and place. Using mobile apps in language learning has gained special interest recently, specifically in the area of vocabulary development. There are thousands of apps, which teach vocabulary. Some of them teach words through flash cards, reminders or even mini dictionaries.

2.3. Feedback in Educational Apps

Although a growing body of research has tackled the notion of MALL, research on the types of feedback used in educational apps may still seem insufficient. Some recent studies reviewed educational software and apps more broadly, with no emphasis on feedback. Cherner et al. (2014) put forward a framework for how to choose educational apps based on their purpose, content, and value. For example, Larkin (2015) evaluated apps for mathematics, analysing how many of them provided the learner with conceptual knowledge (i.e., information that involves understanding related to the meaning of mathematics), procedural knowledge (the ability to follow a set of sequential steps to solve mathematical tasks) and declarative knowledge (information that the learner retrieves from memory without hesitation).

Others such as Highfield & Goodwin (2013) reviewed the pedagogical content within the most popular apps in Australia, UK, and the USA, and found that 74% of all apps had elements of 'drill and practice', tasks that require minimal cognitive investment on behalf of the learner. These types of tasks usually require minimal cognitive investment and frequently use extrinsic rewards. From this review, it can be concluded that more apps need to be developed that also focus the ability to develop as self-regulatory learners, who do not only memorize things by heart without understanding. Hirsh- Pasek et al. (2015) offer a way to define the potential educational impact of current and future apps. Along the same line, Sjödén (2017)

evaluated what factors are important when evaluating an educational app, and here feedback is mentioned as one of the cornerstones.

3. METHODOLOGY

3.1. Participants

Ten Algerian PhD candidates participated in the study. They are all preparing for the doctoral entrance exams. They decided to participate in the study, which will enrich their vocabulary, especially with academic words and phrases they can use while writing their essays or compositions. They claimed that they still have lack of academic words to use in writing. However, they have some familiarity with using vocabulary mobile apps. Their role in this study is to download the app, sign up as new members and enrol on the online course, read the lessons, take the online quizzes and give their feedback at the end of the course.

3.2. Instrument

Different research instruments were used in the study, namely the mobile app, the online course, the quizzes and the survey. The mobile app should be installed on their smartphones. It is like a platform that directs users to a list of courses. The online course labelled as 'Academic English' consists of different sections, each of which tackles various lessons about academic nouns, verbs, adjectives and adverbs, in addition to other expressions. Students will have to respond to quizzes at the end of each section. Lessons may include texts, examples, audio recordings and tables. A survey will pop up right after finishing the course to gather some information about the course, app as well as learners' feedback or suggestions to enhance the overall experience.

3.3. Procedures

The current study employed a mobile interactive app called 'Collopedia'. It is used as a learning and testing platform. It also helps teachers gather details on students' overall performance as well as feedback. Automatic quizzes and survey will appear as programmed. In this study, a quiz with a number of questions will appear in the form of a new window and participants are required to answer to be able to move to the next section. Answering them will be considered as a step which will be counted to their

overall course completion, i.e., students must finish all steps to obtain 100 course completion. The survey will also appear at the end of the course as a new window and participants will have to scroll up and down to respond to the questions. They can select an option or write a full text. The study took three days and all participants finished all the steps provided.

4. Results and Discussion

The following section discusses participants' answers and feedback.

4.1. Participants' Quiz Answers

Participants	Scores
1	100% (15/15)
2	93% (14/15)
3	73% (11/15)
4	100% (15/15)
5	80% (12/15)
6	93% (14/15)
7	100% (15/15)
8	87% (13/15)
9	100% (15/15)
10	100% (15/15)

Table 1. Participants' Scores in the Quiz

As can be noticed, all participants obtained higher scores in the quiz. The latter consists of 15 questions to test their memory of some academic words and expressions participants came across throughout the course. It is believed that courses as such will foster learning academic vocabulary and commit these words and expressions to learners' memory quite effectively. Half of the participants (50%) got the full score in all questions; 20 % answer 14 out of 15 questions; however, only 10% got 11, 12 and 13 out of questions. All these results considered, the participants got 92.6 as a mean of their overall scores, which is a very high mean that they managed to remember most of the academic words highlighted in the quiz.

4.2. Participants' Feedback
1. **Could you give us your opinion about the course?**

Participants	Feedback
1	*The selection of such course is of great importance, since it sheds light on some ignored elements, also corrects common mistakes and errors that may any researcher fall on it. In my opinion, I have noticed that the course is so useful, because I reaped the required benefits from it.*
2	*Very useful and beneficial course. It refreshed my English.*
3	*It looks so important gaining new skills and knowledge.*
4	*I really needed this course to improve my academic vocabulary before the exams.*
5	*This course was so organised that it teaches you the required and key words/phrases to be able to write academic essays.*
6	*These are important words and expressions we can use to polish our academic writing. I learned many of these. Thank you.*
7	*Essential course that tackles many useful academic words and phrases. I highly recommend it.*
8	*I appreciate your efforts and time put in the creation of this course. It is so useful and informative.*
9	*So many things to learn from this course apart from academic vocabulary.*
10	*I was fortunate to participate and learn new things from this amazing course. Short yet full of knowledge.*

Table 2. Participants' Feedback on the Course (Question 1)

All participants' responses were positive. This means that they appreciated learning from the course which was designed on a mobile app. They enjoyed learning new words and phrases that can help them expand

their academic vocabulary repertoire and therefore improve their academic writing with key words and expressions. Overall, the course was so useful and informative.

2. How did you find learning using the app?

All the participants chose 'useful', which means that all of them found the course helpful. It taught them new academic vocabulary with extra tips and most of the common mistakes they should avoid.

3. Do you have any suggestions or comments to help me improve the course and app?

Participants	Feedback
1	*I suggest to put all the questions at the end of the course. Thank you.*
2	*You explain the course in very simple and detailed way. Continue, you are doing great, sir.*
3	*Wonderful app and course. I am looking to seeing more similar ones that revolve around academic vocabulary.*
4	*The app was easy to use. I love it.*
5	*I had so minor issues trying to sign up, but it worked after all. Great app.*
6	*Thank you so much. Although it was large but it is well organised.*
7	*What I really like about the app is that it feels like you are on a social media app where you can share your thoughts. I liked the interactive course and how quizzes pop up.*
8	*Useful app with informative course.*
9	*A treasure*
10	*I hope the course was longer, but I appreciate that. The app works fine.*

Table 3. Participants' Feedback on the Course (Question 3)

Participants appreciate the way the app is designed to facilitate and learning. According to their comments, using mobile apps has become a

necessity as today's generations are more inclined into technology. For learning to be more effective and sophisticated, more technological apps should be developed in which learners can download and have access to their content. The app proved to be useful to teach PhD candidates some key academic words and expressions that they can use in writing for their exams or even assignments.

4. CONCLUSION

This study sets out to determine PhD candidates' perceptions on the use of a mobile app for learning academic vocabulary. The study confirmed that participants accepted the integration of mobile apps not only in their learning of vocabulary, but English in general. In general sense, it can be deduced that this app has succeeded to make learning academic vocabulary more engaging and fun and participants really appreciated this experience in which they could learn and memorise many words and expression to use in academic writing. Last but not least, this work contributes to the existing knowledge in the field of mobile learning especially in language learning.

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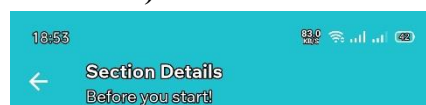
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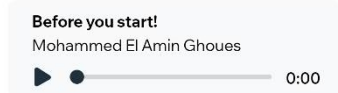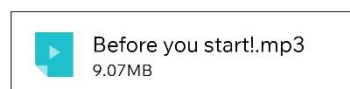
6. Appendices

Appendix A: The App Interface (The Online Course)

Appendix B: A Sample of a Quiz and Survey

18:53

Step Quiz

Only the program owner will see your answers.

Complete the pair of sentences using the same word in the correct form.
I saw her ..... to her husband and whisper something in his ear.
Let us now ..... to the subject of social networking.*
This question has 1 correct answer.

turn

pose

focus

Submit

18:55

.

Only the program owner will see your answers.

Could you give us your opinion about the course?*

Your response

How did you find learning using the app? *

☺ Useful

☹ Not useful

Submit