

Evaluating ELT Materials: A Comparison between Traditional Materials and Mobile Apps

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Abstract

This study attempted to evaluate and compare language learning apps and the related traditional books on the same subject. The apps included Murphy's *English Grammar and Cambridge Discovery Readers* and the traditional materials were *English Grammar in Use* and *Developing Reading Skills*. The study, thus, aimed to do a comparative analysis between traditional ELT materials and the digital versions. In doing so, it aimed to evaluate ELT mobile apps and consider their effectiveness for English language learning. The analysis was conducted based on the frameworks adapted from Hubbard (2006) and Reinders and Pegrum (2015). Based on these frameworks, the overall features and functions of the selected applications were analyzed in terms of three categories: 'content and design', 'L2 approaches' and 'technology'. The analysis demonstrated that these ELT apps seemed to be effective in that they could provide a personal and learner-centered learning opportunity for learners as they would make them independent from any time and any place. Needless to say, by realizing mobility as a more situated, field-dependent and collaborative form of learning, the effective design and use of ELT mobile applications should continue to be studied in order to suggest the right direction to effective MALL.

Keywords: ELT materials, educational applications, mobile learning (MALL), mobile apps, evaluation of materials

Introduction

Widespread ownership of mobile phones and the increasing availability of other portable and wireless devices have changed the landscape of technology-supported learning. Employing these technologies appears to be in line with strategic educational goals, such as improving student retention and achievement, catering to individual needs and providing opportunities for learners who would not be able to participate in education (Kukulska-Hulme, 2005). Efforts have been made to understand how mobile technologies relate to both traditional and innovative ways of teaching and learning, showing the applicability of mobile learning across a wide spectrum of activity (Kukulska-Hulme & Traxler, 2007, Naismith, 2004) as well as highlighting the most important emerging issues (Sharples, 2006).

Mobile learning is gaining its popularity as it is accepted to be an effective technique of delivering lessons and acquiring knowledge (Chinnery, 2006). What is powerful about ESL apps is that they seem effective in that they provide a personal and learner-centered learning opportunity with a variety of resources and activities. This could encourage learners to develop a sense of individuality and develop personal learning habits (Godwin-Jones, 2011). Students can more easily and promptly access language learning materials and tools on their own anytime and anywhere; therefore, enhancing their language learning motivation and autonomy in MALL.

An interesting area of research is the content of mobile materials. In many cases, not only the content but often the pedagogy has already been designed into these apps. The shift towards the use of educational apps has prompted research into the theoretical basis of materials thus

developed. Some scholars have argued that the pedagogical basis of these apps is somewhat traditional, leaning towards information transmission and especially behaviorism (Murray & Olcese, 2011; Oakley et al., 2012; Searson, 2014; UNESCO, 2012). In other words, it appears that such materials are underpinned by a behaviorist, teacher-centered, transmission model of instruction despite the potential for more innovative constructivist, collaborative, learner-centered instruction (Beatty, 2013; Burston, 2014).

Hence, researchers have reviewed the use of mobile technology and its applications for language education (Chinnery, 2006; Godwin-Jones, 2011; Kukulska-Hulme & Shield, 2007, 2008). Chinnery (2006) comprehensively reviewed empirical research which utilized some of mobile devices including cell phones, PDAs, and iPods. For example, instructors teach short English lessons by sending them to students' emails via mobile phones (Thornton & Houser, 2005) or giving vocabulary instruction via SMS for Italian learners in Australia (Levy & Kennedy, 2005, cited in Chinnery, 2006).

Thus, the problem is whether it is only the environment in which materials are presented that has changed or together with it the theoretical underpinning of their development has also undergone changes. In other words, despite the widespread use of mobile L2 applications, discussion about its effectiveness has not been settled yet within the field (Kim, Heyoung & Kwon, Yeonhee, (2012). Hence, there is a need for research into effectiveness of digital materials, specifically instructional apps developed for learning/teaching different language skills. In this line and to fulfill the purposes of this study, both quantitative and qualitative analyses were conducted to find about the overall patterns of common and distinctive features of mobile apps. It further sought to discuss the strengths and weaknesses of the learning apps from a pedagogical and technological perspective as compared with traditional materials. Specifically, the following questions were addressed.

Q1. How are ELT mobile apps different from traditional ELT materials?

Q2. What are the common and distinctive features of ELT mobile apps in terms of their effectiveness?

Literature review

The advent of mobile technology, such as smartphones and tablet technologies has been followed by a paradigm shift in using technology in schools (Leung & Chan, 2003). Students and teachers can use such mobile devices anytime and anywhere as they are highly portable and powerful (Murray & Olcese, 2011; Pilgrim et al., 2012). Since there is large number of educational apps available and more apps are continually developed, there is an urgent need for teachers to have an evaluation framework in order to assist them in selecting quality apps (Earl, 2013; Rao, 2012).

Using mobile phones for the purposes of language learning dates back to 2001 (Houser, Thornton, Yokoi & Yasuda). However, due to the limited development of the technology at the time, its application was simply in the form SMS (i.e., text messaging). Since then a number of researchers have explored the use of mobile phones in language learning, again mostly involving SMS (Andrews, 2003; Horstmanshof, 2004; Kiernan & Aizawa, 2004; Levy & Kennedy, 2005; Kennedy & Levy, 2008; Mellow, 2005; Stockwell, 2007; Stockwell, 2010; Thornton & Houser, 2005).

Since the term mobile-assisted language learning (MALL) was first coined by Chinnery (2006), the use of mobile devices to support language learning has increased. In general, MALL has been considered as a subset of both mobile learning and computer-assisted language learning; however, Kukulska-Hulme and Shield (2008) note that MALL differs from CALL "in its use of

personal, portable devices that enable new ways of learning, emphasizing continuity or spontaneity of access and interaction across different contexts of use” (p. 23).

The domain of mobile learning includes the new teaching and learning techniques and the wide variety of mobile applications. Despite this ubiquitous presence, there is yet no agreed-upon definition of ‘mobile learning’ or ‘m-learning’. Many researchers have emphasized “mobility” of mobile learning (Kukulka-Hulme, 2007; 2009; Sharples, 2006; Traxler, 2007). Mobility needs to be understood not only in terms of spatial movement, but also the ways in which such movement may enable time-shifting and boundary-crossing (Kukulka-Hulme, 2009).

Broadly speaking, m-learning can be defined as using technological devices, including smartphones, MP3 players and hand-held computers that might have an impact on language learning (Dudeney & Hockly, 2007). Due to globalization, recently, technological devices have become widespread, not only in the developed countries, but also in developing ones (Ozdamli & Cavus, 2011). Various types of mobile devices are accessed by the users, particularly smartphones. However, it is still not clear to what extent mobiles are effective with regard to EFL students in terms of English language learning.

Numerous studies have reported on the use of mobile devices used to develop language skills in the last few decades. Thornton and Houser (2005) used mobile phones for English vocabulary lessons and reported that, compared with paper- and computer-based lessons, mobile-learners had a better experience in learning and preferred learning with mobile phones. Levy and Kennedy (2005) also implemented short message service (SMS) for Italian vocabulary instruction to send word knowledge and to request feedback. Majority of learners responded positively to the project. Kiernan and Aizawa (2004) explored using mobile phones for task-based language learning and concluded that incorporating tasks can promote L2 acquisition and make learners focus on meaning. Cho (2009) and Lee (2010) maintain that smartphones enable the combination of multimedia and the web and heighten the learners’ autonomy and collaboration.

Kukulka-Hulme and Shield (2007) also comprehensively reviewed MALL-related research with a focus on speaking and listening domains. They reviewed research on MALL in terms of the types of mobile devices including mobile phones, tablet PCs, MP3 players, and so on. Lan, Sung, and Chang (2007), too, conducted a comparative study to investigate the benefit of using Tablet PCs in EFL contexts in order to improve peer collaboration in reading classes, compared to the traditional class setting. The results demonstrated that the application of Tablet PC to facilitate the collaboration between peers outweighed the potential weaknesses hindering students’ collaboration process in a traditional setting. Moreover, using mobile-device-supported peer-assisted learning could reduce EFL learners’ anxiety and promote their motivation and confidence. Motallebzadeh and Ganjali (2011) also examined the effects of SMS on 40 Iranian EFL learners’ performance on vocabulary retention and reading comprehension. The results showed that mobile phone users outperformed the control group with regard to both vocabulary and reading comprehension scores.

A review on studies on MALL reveals that the evaluation of MALL resources ultimately comes down to an evaluation of the learning design of those resources. It has been noted in recent years that, with the increase in the use of technology in education, there is a growing emphasis on the importance of learning design (Phillips, McNaught & Kennedy, 2012). Teachers are required to adopt the role of learning designers (Garcia, 2014; Hockly, 2013; Laurillard, 2012; Miller & Doering, 2014; Milrad et al., 2013). In fact, with a huge amount of educational apps available and more apps being continually developed, teachers need an evaluation framework to support them

in selecting quality apps. This study was thus designed to apply such evaluation frameworks to common L2 learning apps and compare the results with traditional books.

Method

Materials

English Grammar in Use app

The English Grammar in use application, developed by Raymond Murphy, is the grammar app which intermediate learners of English need. This is a downloadable application and does not require an internet connection. So, the app can be used completely separate from the website. This app requires Android 4.1 and up to be downloaded. Its content size is 46 M.

Murphy's English Grammar in use app is downloaded between 10.000 and 50.000 times from the Google Play store per month and receives 4.2 stars out of 5. The app includes 6 free lessons. In fact, the app only offers six lessons free and then the user needs to buy the 145 remaining lessons.

The English Grammar in Use app forms a part of a website (www.cambridge.org) which is an extensive language community of different users that offers English language courses. This app is for learners of English who want help with grammar. It is intended for intermediate learners (learners who have already studied the basic grammar of English). It contains clear presentation of grammar points together with interactive exercises to help you practice and improve. There are 145 units in the app. Each unit concentrates on a particular point of grammar.

In 2014, Murphy adapted all 145 units from the English Grammar in Use book, re-designing the grammar explanations and exercises to work effectively on smartphones and tablets.

Cambridge Discovery Readers app

The Cambridge Discovery Readers app is a downloadable app and does not require an internet connection. This app can also be downloaded from the www.cambridge.org. The app requires Android 4.0 and up to be downloaded. Its content size is 7.1 M. The app is downloaded between 5,000 - 10,000 times from the Google Play store per month and receives 3.7 stars out of 5.

This app is not free. In fact, the app does not offer any free lesson. There is only one free reader in this application (B2+ level) that can be downloaded.

The app is divided into four proficiency levels (A1-B2+), that is to say the material is designed for beginners to advanced intermediate learners. In fact, there are 96 Cambridge Discovery Readers offered in 8 progressive levels from beginning to advanced (A1 to B2+).

Level A1 is for beginning learners of English, has 16 titles and 400 headwords.

Level A1+ is for beginning learners of English, has 16 titles and has 450 headwords.

Level A2 is for low intermediate learners of English, has 16 titles and has 700 headwords.

Level A2+ is for low intermediate learners of English, has 16 titles and has 900 headwords.

Level B1 is for intermediate learners of English, has 12 titles and has 1200 headwords.

Level B1+ is for intermediate learners, has 8 titles and has 1400 headwords.

Level B2 is for high intermediate learners, has 6 titles and has 1800 headwords.

Level B2+ is for advanced learners of English, has 4 chapters and has 2000 headwords.

Each topic includes different types of exercises such as multiple choice, Drag and drop, Pairing, Fill in the blank, True/ False.

It is important to note that within the app are no grammar rule explanations. After downloading the application, you have to choose which level you need to study and buy its

lessons. All in all, the Cambridge Discovery Education™ interactive readers are the next generation of reader apps to help learn English with engaging topics, high-impact Discovery Education™ video and interactive exercises. One has to read and watch the stories and learn English with these engaging graded readers from level A1 to B2+.

English Grammar in Use

This is the world's best-selling grammar book for intermediate learners of English published by Cambridge University Press. The first edition of the book was published by in 1985. The second edition was published in 1991. This time the book changed from black and white to 2-colour printing. Additional grammar exercises were added. English Grammar in Use, Third edition was published in 2004. This edition consists of an upgrade to 4-colour printing and for the first time includes a CD-ROM with interactive exercises. English Grammar in Use, Fourth edition was published in 2012. It was also made available for the first time as a fully digital product: English Grammar in Use Online. This includes all of the content from the print book, plus audio, interactive exercises, automatic marking and progress tracking.

Developing Reading Skills

Developing Reading skills is intended mainly for intermediate students and is designed for adults who want to strengthen their reading skills. This book has been designed for self-instruction as well as for class instruction.

The book consists of 12 chapters, each one begins with a reading part, accompanied by some exercises. The readings are arranged in order of difficulty. The simplified structures and vocabulary are occasionally in the earlier readings. The exercises deliberately build upon vocabulary and structures introduced in earlier chapters. In later readings, there are margin glosses to help the reader out. So, it is recommended that the chapters be presented in the given order.

The next part is exercises. The exercises in this book concentrate on three areas of reading skills development: 1) vocabulary development; 2) structural analysis; 3) relational and inferential analysis. In these exercises different types of questions are included such as: analysis of ideas and relationships, interpretation of words and phrases, antonyms/ synonyms, determiners and prepositions, word forms, sentence scramble, topics for discussion and composition, reading reconstruction, cloze, vocabulary application, and punctuation.

Models of the study

To analyze the data, the models developed by Hubbard (2006) and Reinders and Pegrum (2015) were used. The models includes the following elements.

I. Content/Design Target

A. Target Learners

- 1.age (children, young adult, adult)
- 2.interest (general, ESP)
- 3.proficiency level (beginner, intermediate, advanced)

B. Content

- 1.topic
- 2.organization
- 3.content size (number of units, topics, sentences, words, etc)

C. Learning styles (recognition, recall, comprehension, experiential learning etc.)

D. Learning strategies (field-dependent/independent, deductive/inductive reasoning, collaborative, etc)

II. Procedure & Approach (Pedagogy and SLA)

A. Activities

1. Instructional (tutorials, drills, text(voice) reconstruction)
2. Individual (test, quiz, game)
3. Facilitative (dictionary, database, verb conjugate, spell/grammar checker, pronunciation)

B. Focus

1. Linguistic focus (discourse, lexis, grammar, spelling, pronunciation)
2. Language skill focus (reading, listening, writing, speaking)
3. Sociolinguistic focus (form/meaning focused, information gathering, authentic tasks)

C. Methodological approaches (audio-lingual, situated, task-based, structural, etc)

III. Technological Features

A. Multimedia (videos/ graphics/Sound/Music/Resolution size)

B. Exploitation of mobile potential

1. Other Functions (memo pad, voice recording, speech synthesizing, speech/text recognition)
2. Web 2.0 features (SNS, wiki, blog, podcasting etc.)

Procedure

The study began with a search on Google Play store which turned up astonishing number of apps that claim to teach English. First, the apps were according to what they mainly focused on teaching. Then, two apps which are fully investigated and written about in this research project were selected.

The search and gathering of information was both done on a tablet and a Samsung Galaxy SIII smartphone because the smartphone runs on an Android operating system the search was limited to Android applications and further to the Google Play store.

This study dealt with two smartphone applications for learning English. One of these apps was a grammar application and the other one a reading app. In addition, the paperback book of each app was used to do a comparison between traditional materials and mobile apps.

The data were collected from a careful analysis of the pedagogical issues included in each ELT mobile application and in the print version of the apps as the traditional ELT materials.

This study employed the framework adapted from Hubbard (2006) and Reinders and Pegrum (2015) as the basis of an analytical framework. First, Hubbard's evaluation criteria designed for applications were used to do the analysis and then the overall features and learning design of two selected applications were analyzed with respect to the framework.

Results

As stated before, this study was aimed at analyzing two types of teaching materials for the learners of English: traditional and digital. The purpose was, in fact, two-fold: how these two types of teaching materials compared and what distinguishing elements of digital materials were.

Digital materials

In this section, a thorough analysis of the digital materials, namely, the two apps selected, will be presented. The apps are English Grammar in Use, and Cambridge Discovery Readers.

English Grammar in Use app

Content/Design, Target learners

English grammar in use app is intended for intermediate learners (learners who have already studied the basic grammar of English). Therefore, the assumed proficiency level of this app is intermediate. The target users of the application are mostly adults or young adults. This seems closely related to the population of smartphone owners.

All of the grammar apps focus on general learning purposes. So, according to the learners' weaknesses in grammar, the target users are considered to have general interest in learning grammar and a limited number of learners use this app for special purposes such as business English or English exam preparation. As a matter of fact, the users select lessons according to their interest, or for learning the grammar points which they have problem with.

Content

The Murphy's English Grammar in use contains a free starter pack of 6 units, a study guide and glossary with in-app purchasing you can choose the other grammar units you want to buy.

This starter pack includes six grammar units (present and past tenses) with clear explanations and interactive exercises, a glossary of grammar words, and a study guide to help you decide which grammar units you need to study.

The app consists of 145 units which after downloading the starter pack you can buy all 145 grammar units or just the units you need. The name of the units indicates which grammar topic will be covered.

Each unit has two parts: explanations and exercises. The explanation is divided into different sections (A, B, C, D...). For using a unit, start with A. Study the explanations and examples. Touch the sound icon to hear examples. Do the exercise(s) at the end of A, then work through B, C, etc. in the same way.

The first section of a unit is always a short dialogue which is related to a picture and covers the situation that will be practiced throughout the lesson (e.g., present simple). After the dialogue, there is a sentence dictated with real voice and is related to that point of grammar which is taught in this unit. After describing the grammar point, there are two or three exercises.

The next section presents another form of the grammar rule (e.g. negative form, question form). A native voice pronounces the word/phrase and the user can touch the sound icon to hear a whole sentence containing the word/phrase.

Audio recordings of the example sentences help you to improve your listening skills as well as your grammar. Each section in a lesson has two or three exercises. In the last part of each unit, there is a list of other units which cover the same grammatical point.

There is no feedback in the app. This app is a downloadable application not a web-based one and does not require an internet connection. The motivational aspect and feedback is, however, to a great extent, lacking from the downloaded apps. This difference can be explained partly by the fact that the web-based apps can store infinite amount of information online while the web-based apps have to limit their size. Due to the fact that downloaded applications take up much memory space on the smartphone, they have to limit their size and the study material they offer needs to be limited.

This app offers a limited number of lessons and it does not have any personalized feedback. The feedback only is limited to color indications of right and wrong answers to the exercises. Answers to the grammar activities are marked automatically and allow you to reveal the correct answer when you make a mistake. In fact, in the unit menu of the app you can see

which unit and exercises you have used. You can check your answer immediately. The correct answer will appear in green. In addition, the questions you have answered correctly are ticked.

Learning style

Most of the apps require cognitive learning style such as learning styles of recognition, recall, comprehension, rather than socio-cognitive learning. Most of the apps include comprehension learning style. This app includes recalling and comprehension learning style too.

Although the apps apply grammar contents in the “bite-size” screen, the learning styles of this app are recognition + reconstruction, comprehension, comprehension+ experiential learning.

One noticeable attempt in this app is presenting comprehensive grammar instruction with various examples and exercises.

Learning strategies

English grammar in use app is a self-study reference for learners to use without a teacher and is perfect for independent studying. Each unit in this app has two parts: explanations and exercises. The explanation is divided into different sections (A, B, C, D...). The first section is always a short dialogue which is related to a picture and covers the situation that will be practiced throughout the lesson (e.g. Present simple). After the dialogue, there is a sentence dictated with real voice and is related to that point of grammar which is thought in this unit. So, the technique of grammar teaching in this app is both inductive and deductive, because in section 1 of each unit the subject of lesson is told by examples, after that the grammatical rule is said. But, in the next sections the rule is said first, the examples are given later.

This app will be useful for some students who have problem with grammar. The units of the app are not ordered according to the level of difficulty, so the app can be used selectively and flexibly in accordance with the grammar syllabus being used and the difficulties individual students are having. Because this app is a downloadable application and every learner has to download it on his/her mobile phone to use, the app is for the student to use individually.

However, the app is helpful for independent language learning, but there was no attempt to provide or facilitate collaborative learning in the app.

All in all, there is no full instruction in the app that controls learners, but the app is a learning opportunity which is individualized, personal, analytic and learner- centered.

Also, this app employs various functions of multimedia for personal and field-independent learning.

Procedures and Approaches

Activities

Each section of a unit usually has 2 or 3 exercises. The exercises may be presented in different ways within each course but they are essentially always one of the three following types:

- o Multiple-choice questions.
- o Drag and drop:
 - Pairing,
 - Word ordering.
 - Fill in the blanks.
- o True / false

Despite the different materials the language courses build on the exercises they offer are generally very much alike. The reasons for this similarity are the limitations the technology poses

on the developers. The activities of the app are analyzed to be ‘not well developed’ and also ‘traditional’.

Although the instructions of the app are tutorials or drills, but it seems that the app offers listed language data only, no recognized instruction. The exercises however do not offer any motivational feedback beyond the color indication of right and wrong. There is no learners’ own reconstruction of text or voice activity in the app. There is no game or quiz among the exercises of the app.

The app consists of some parts, such as spelling, short form, pronunciation and verb conjugate. Also, there is a glossary of grammar words which has a list of units (contents) and some of the difficult grammatical points and is a general description of each point of grammar and its examples.

Focus

According to the fact that grammar applications are developed mostly for young adult learners of the intermediate level, they all focus on general learning purposes. The major linguistic focus of this application is on grammar.

Although the audio recordings of the example sentences in the app help you to improve your listening skills, at the same time as improving your grammar.

At the end of each section in explanation part there are other language exercises such as spelling and pronunciation which are also closely related to developing word knowledge.

These observations point to the fact that the mobile apps focus more on receptive language skills than productive, and present more form-focused short language information. This app is form- focused too.

Methodological Approaches

As long as the technology is limited to pre-programmed input and output we can expect the apps to be predominantly behaviorist. The developers of English language learning apps use various approaches and methodologies which all are supposed to guarantee a fun and easy learning process with equally various study material with emphasis on different aspects of language learning. In fact, the basic structure of all the apps is bound by the same technological limitations of pre-programmed software which then puts them all at the behaviorist side of the pedagogy continuum.

Most of the grammar apps are considered as formal instruction. The methodological approaches in this grammar app also remain traditional. The lesson was given by structural unit, and then tests were provided.

Two dominant methods in this app are audio- lingual and task- based. Sound icon and audio recordings of the examples in this app are highlighted for repetition drills.

Technological Features

Multimedia, Web 2.0, and other functions

All in all, features such as multimedia (music, graphic, video, sound, resolution size) web 2.0 and interaction (E-mail, web links, CMS, SNS, wiki, blog, podcasting) and some of the other functions such as text recognition, voice recording, score marking, , add & remove, memo pad, speech synthesizing, speech/text recognition are considered as multimedia and exploitation of mobile potential.

In this app, some of this features such as the pronunciation sound of the examples, graphic, your record of the units and exercises you have used are seen. It is analyzed that the only

employed multimedia feature in this app is sound and graphic. Also, in the exercises part, the questions you have answered correctly are ticked in green and the incorrect answers will appear in red.

Cambridge Discovery Readers app

Content/Design Target

Target learners

The app is divided into four proficiency levels (A1-B2). In fact, there are 94 Cambridge Discovery Education Readers offered in 8 progressive levels from beginning to advanced (A1 to B2+). So, the assumed proficiency level varies from beginning, intermediate, to advanced.

Most of the reading applications were analyzed from a general interest perspective for all age and proficiency groups. So, the target users of the application can be children, young adults and adults and the application was designed for all ages.

The target users are considered to have general interest in learning English, and the application does not offer content for special interest groups such as business English or test preparation.

Content

The Cambridge Discovery Readers are the next generation of reader apps to help you learn English with engaging topics, high-impact Discovery Education™ video, and exercises.

The Cambridge discovery app is a downloadable application and does not require an internet connection. The users can download it on app store or get it on Google Play.

The user can however register to the Cambridge website which offers the course online. (www.cambridge.org). Each Reader comes with access to the Cambridge Learner Management System which brings the content of the reader alive- integrated video, audio and interactive activities makes for a truly engaged learner. This coupled with robust online learning tools such as a gradebook, interactive glossary, video transcription and a notation feature provides a rich learning environment that matches the way the modern student learns.

However, the app can be use completely separate from the website, but it does not offer all the functions and materials that can be found on the website (e.g. pdf learning material).

The complete app has 96 topics and is divided into four proficiency levels (A1 – B2+) within each there are multiple sections that cover different topics. The material is designed for beginners to advanced intermediate learners (A1-B2+), and includes 7000 headwords and key phrases. The levels are A1, A1+, A2, A2+, B1, B1+, B2, B2+).

Level Letter Category	Level	Headwords
A1	Starter	400
A1+	Low Beginner	450
A2	Beginner	700
A2+	Low Intermediate	900
B1	Intermediate	1200
B1+	Upper Intermediate	1400
B2	Low Advanced	1800
B2+	Advanced	2000

The app includes a study guide for the learner's reading practice. You have to read and watch the stories and learn English with these engaging graded readers from level A1 to B2. After reading these sections you'll receive one free reader –Avalanche (B2+).

After downloading the application, you have to choose which level you need to study and buy its lessons. You have to read and watch the stories and learn English with these engaging graded readers from level A1 to B2.

The organization and study features have distinctive patterns according to the level of target learners. Within each level there are several topics and each topic includes different exercises. Also, the topic and genre of its reading texts are diverse.

On the app's initial page, you have two options: to choose proficiency levels, selecting the topic. Each unit consist several sections: before you read, chapter 1, chapter 2, chapter 3, chapter 4, after you read, glossary, acknowledgements. In fact, at the top of each section there is a table of contents which consists of the unit sections.

Before beginning the first chapter the unit starts with a short part named before you read to make the learners ready for what is going to be taught in this unit. This part begins with an abstract of the unit accompanied by some exercises.

Chapter 1 consists of several paragraphs and the audio files of them. A native voice pronounces each paragraph's text. The users are expected to read the text while listening to the audio file. So, reading and listening skills can be developed at the same time in this app.

A picture is given for each paragraph that describes the scene. The new words' synonym in each chapter is said at the end of the related paragraph. There are some exercises at the end of the chapter. Chapters 2, 3 and 4 are just like the first one.

Before the next section of the unit there is a review of the unit with various exercises. At last, the unit ends with the glossary part which addresses the new words of the unit.

The app offers no feedback except for right and wrong and has not incorporated any particular motivational aspects beyond the color indication of right and wrong into the app. All in all, the web-based apps fare better than the downloaded apps both in motivation and feedback. The web-based apps take up less memory space on the smartphone and can offer much more study material because everything is stored on the Internet. But, the downloaded apps tend to take up much memory space on the devices and consequently the study material they offer needs to be limited. On the other hand, the user can practice whenever and wherever he/she pleases without worrying about connection or possible extra costs.

Learning style

The topic and genre of the app's reading texts is diverse. Also, for levels A1 to B1+ of the app it is created paired readers that have interrelated themes that can be used together for more comprehension. For example, in the level A1 there are two topics named Drink Up and Eat Up which their theme is related to food, drink and nutrition. These pair readers can be used for the subject of experiential learning between learners.

A1:

Drink Up! /

Eat Up!

Themes: food, drink and nutrition

B1

Found: Discovery and Recovery /

Losing It: The Meaning of Loss

Themes: archaeology and anthropology

The app provides audio files, and in each chapter even provides text with videos. In the final page of each chapter, the app provides various tools for language learning to encourage learners and be more motivated:

Tools, Dictionary, Notes, Text Size, Resources, Glossary, Video library

So, in this reading app, there is a variety of learning styles such as recognition, recall, comprehension as well as experiential learning. Also, the technology functions as resources (ex. Glossary, video library) and tools (ex. dictionary, notes, text size, etc.) in this app and it is up to the users to control them for developing language knowledge.

Learning strategies

The app provides various tools and functions of multimedia such as sounds, videos, music and images for personal, perceptual, and field- independent learning.

As a matter of fact, audio files, text with videos and glossary enhance learner's language learning motivation and effectively facilitate users for independent language learning and encourage learners to be more motivated.

Using the accessible and suitable materials and tools, the app provides a learner-centered learning opportunity for students which can encourage individual learning. There is no attempt to encourage or facilitate collaborative learning in the app.

Procedures and Approaches

Activities

The units include various types of exercises. The exercises are the following:

1. A vocabulary exercise supported by flashcards containing an image and a written word. The user needs to choose the word which best completes the definition.

2. Next one contains a short paragraph. The user reads the sentences which he/she then needs to complete by choosing the correct words for each on.

3. This exercise requires the learner to decide if the statements about the information given in the lesson are true or false.

In this exercise as in others, the incorrect answers are highlighted in red and the correct in green. When the user either gives a correct or an incorrect answer in the exercises, the app criticizes the performance with both negative and positive comments.

Also, in each exercise there is an answer key. After finishing the exercise, the user can press answer key button to see his/her correct or incorrect answers and performance for the exercise in percent.

4. This one is a video quest. The user watches a video about the chapter's title and then she/he is asked to answer the question concerning the information discussed in the video

There is a transcript part for each video which can be shown or hide according to the user's selection. So, each video can be followed by its text.

5. this exercise is a free writing. The user is asked to compare two items concerning the information discussed in the text.

6. Lastly, at the end of each unit, there is a review of the unit with six types of exercises:

- o multiple choice
- o an exercise in writing, where the user gets three categories for which he/she has to answer in short sentences.

- o Matching sentences with the correct word or phrase.

- o Gap filling by choosing from prepared options.

- o True / false exercise

Gap filling by choosing the correct answers from the drop - down menu.

The number of video quests in each app is more than the other types of exercises.

All in all, the app offers very varied activities. All kinds of activities are used in this app. The activities are instructional. Also, activities like multiple choice are considered as individual activities in this app.

The app facilitates the users with audio files, text with videos and glossaries for independent language learning.

Focus

Most reading apps offer word exercises only, and users are expected to read the story while listening to the audio file. The major linguistic focus of this app is on lexis.

Reading and listening skills can be developed at the same time in this app, but there is no instruction or guide for learners.

The data analysis of this reading app shows that this app is meaning-focused. Also, the development of reading skill is the most common skill area in this app.

Methodological Approaches

A few L2 approaches were found in reading categories. According to the content organization of this app, each unit in this application consists of several sections and the audio files of them. Before the next section of the unit there is a review of the unit with various exercises. So, the dominant methodological approaches in this app are audio-lingual and task (test)-based.

Technological Features

Multimedia, Web 2.0, and other functions

In this app, the user is expected to read the story while listening to the audio file. So, recent mobile technologies such as speech recognition or text recognition are embedded in this app.

There are two scaffolding devices for L2 readers in this app: First, the new words are linked to the glossary part and are marked with a blue number. Second, a picture is given for each

Paragraph that describes the scene. So, the most frequently employed multimedia feature in this app was sound, graphics and video.

Traditional materials

In this section, an analysis of the traditional materials will be presented. The books are *English Grammar in Use*, and *Developing Reading Skills*.

English Grammar in Use

English Grammar in Use Fourth edition is an updated version of the world's best-selling grammar title. It has a fresh, appealing new design and clear layout, with revised and updated examples, but retains all the key features of clarity and accessibility that have made the book popular with millions of learners and teachers around the world. The CD-ROM contains lots of additional practice exercises to consolidate learning, ideal for self-study but also suitable for reinforcement work in the classroom. An online version and book without answers are available separately.

English Grammar in Use is a self-study reference and practice book for intermediate-level learners (A1-B2). Therefore, the assumed proficiency level of this book is intermediate. With

clear examples and easy-to-follow exercises, it covers all the areas of grammar needed at this level.

The book consists of 145 units. The units are organized in grammatical categories and concentrate on a particular point of grammar. They are not ordered according to level of difficulty, so it is not intended that learners work through the book from beginning to end.

Each unit consists of two facing pages. On the left page there are explanations and examples; on the right page there are exercises. In fact, a general description of each point of grammar and its examples are explained on the left-hand page of each unit and exercises to check understanding on the right.

The exercises of each unit are presented in different ways and they are essentially one of the following types:

- Multiple-choice
- Drag and drop
- Pairing
- Word ordering
- Fill in the blank
- True/ False

About the answers to the exercises, at the back of the book there is a key for learners to check their answers to the exercises.

Now in full color and with updated content, the fourth edition retains the simplicity, clarity and ease-of-use that have made the book so popular with learners and teachers alike.

In addition, it is available with an access code for an interactive eBook, which has the same grammar explanations and exercises found in the printed book, plus other great features such as audio recordings of example sentences, interactive exercises, and options to bookmark, highlight and add notes.

All in all, the book has clear instructional procedure and methods, that is, the teacher and students are able to understand what is expected in each lesson and for each activity. Also, learning strategy of the book is based on authenticity, and a focus on the learner.

Developing Reading Skills

Developing Reading Skills- intermediate is a self-study reference and practice book for intermediate learners of English. The target users of the book are mostly adults or young learners who want to strengthen their reading skills. This book is perfect for independent studying.

Developing reading skills is a textbook designed to strengthen reading skills by exposing readers to material which promotes vocabulary development, structural analysis, and relational and inferential analysis.

The book is a collection of texts emphasizing guided reading practice and the development of reading speed, for those who want to strengthen their reading skills for academic, personal, or career purposes.

In fact, it presents selections from magazines, newspapers, and other sources designed to strengthen reading skills including speed. So, the book can be suitable for group instruction as well as self-instruction.

All in all, authentic, high-interest passages are paired with reading, writing, comprehension, and discussion activities that integrate new skills and ideas into students' knowledge and experience are considered as the great potential of this book.

So, learning strategy of this book is based on authenticity, realism, context, and a focus on the learner.

Discussion

First Research Question

This study was concerned with describing major features of mobile apps developed specifically for the purposes of language learning. In doing so, traditional ELT materials were also considered. As the results of analyses demonstrated, the mobile apps and traditional materials turned out to be different in certain ways. The differences can be discussed, based on the analysis in the following way.

Theory and methodology

Second language learning theory does not seem to be of great importance to app developers. In fact, most of the apps' websites did not mention any particular theory the app was built on. Although more commonly the developers described the methodology they applied, but they didn't mention any particular methodology they use and only offer variety of different ways to learn English (Hakimi, 2013).

Generally, in this kind of material the developers make an effort to convince the user that their method will work or their language course will make learning English easier or more fun.

But in the traditional materials a particular methodology is applied and the authors did not use various theories and methodology in a book.

Motivation and feedback

To keep the language learner motivated can be difficult and to give the learner a meaningful and intelligent feedback is a problematic area in the language learning process.

As motivation is one of the vital aspects of language learning, the developers of language apps use various approaches and methodologies which all are supposed to guarantee a fun and easy learning process to engage and motivate learners. In fact, the programming capacity of smartphones can provide different resources and tools for language learning that encourage learners to be more motivated.

Compared with downloaded apps the web-based apps fare better than the in motivation and feedback. These issues are dealt with various ways in the apps. These apps offer study reminders, progress reports and personal advice to the user (Andersen, 2013).

All in all, in the web-based apps and the downloaded apps which have sync with the website the user can follow his/her progress in a personalized report and the app provides the user with personal advices built on progress history. So in these apps this feedback helps the user see where he/she stands and what he/she needs to work on and moreover can help motivate the user to keep on studying.

The personalized feedback in web-based apps is detailed with explanations on errors and correct answers as well as additional reading material that might be helpful for the user.

On the other hand, motivational aspects and feedback lacking from traditional materials. In these types of materials there is no attempt to encourage learners to be more motivated. Considering these features, ELT mobile apps are more motivating than traditional materials and they are effective in encouraging learners to communicate and in creating a positive attitude to the subject.

Common feature and exercises

Regarding the information presented about the selected traditional ELT materials and mobile apps, I found a variety of features such as a rich mix of text, audio, graphics, images, music and even videos in language learning applications. The apps employ various modes and functions of multimedia for personal, perceptual, and field-independent learning while there is a lack of tools and study materials in traditional materials.

The apps offer very varied study materials. Flashcards are the general way the apps use for memorizing vocabulary, that is to say, the flashcards usually come with image of the term and its pronunciation. All of apps include texts for the user to read which are usually short or around two to ten sentences and often accompanied by audio. Also, in some of the apps the listening practices in most cases come with script for the user to follow, as in the case with Cambridge Discovery Readers app.

ELT mobile apps brought a variety of activities in lessons, pupils' involvement, active participation, easy and fun way for language learning, but these characteristics are not consisted in traditional materials. The majority of applications deal with short language data information such as word lists, pronunciations, grammatical elements, or sample dialogues or essays etc.

On the other hand, the traditional materials (book) consisted mainly of long explanations. They are unable to include these features and their data information is different with the apps.

The variety of exercises the apps offer is different in each app. In fact, the exercises might be presented in different ways within each app. Although most of the apps rely on a pre-programmed list of possible activities and cannot judge anything unexpected beyond that list, some of them offer very varied activities and all kinds of activities are used in these apps. In contrast to the apps, traditional materials consist a limited number and recurring activities. The exercises they offer are generally very much alike.

The development of vocabulary is the most common skill area the apps apply themselves to. That is to say, most of the apps present language learning of lexical level or facilitate the users with glossaries often including one-sentence examples or pronunciation sound files. On the other hand, the traditional ELT materials show language primarily from the rule-governed point of view and concentrate on the knowledge of grammar and items of vocabulary. It would appear that this type of material provides the learner much more progress in the field of spelling, grammar, vocabulary and knowledge of rules.

Popularity

Popularity is a feature which is related to the user's choice of material. There are many factors which influence an app's popularity such as visibility within the Google Play store, users' comments, amount of free material, and app's quality.

First of all, an app's visibility on Google play is the best evidence of its popularity, namely, in each app description on Google Play there is a scored ranking list related to download rate of the app. In fact, the more visible the apps are the more likely they are to be downloaded (Fiksu, 2012). Yet the fact remains that the download rate refuse to say how many actually use the app they downloaded.

Users' positive or negative comments can also influence the app's popularity and the user's choice of app. In contrast to the apps, traditional materials are lacking this feature. The learners are incapable of finding the book's popularity or its rating.

Accessibility

Another difference between traditional materials and mobile apps is their accessibility. We know that learning becomes more real and permanent when tied to learner's lives outside the academic environment. In addition, successful language learning occurs mainly in immersion type environments. Mobile apps are a great way to achieve that goal. In fact, one of the mobile apps' differences compare to traditional materials is their accessibility. Doubtless, ELT mobile apps enable learners to more easily and more promptly access them anywhere and anytime. So,

mobile apps bring more exposure and engagement with the language than just the time spent in the classroom using traditional materials.

Price

The next difference between the traditional materials and the apps is their prices. Smartphone penetration will likely gain worldwide in coming years, but not at the same pace everywhere. In fact, smartphones are expensive and their pedagogical apps are high cost too. There are three times more paid apps than the free ones, which, generally, are so-called “trial or lite versions” The price ranges vary depending on data capacity amount and the number of bells and whistles the devices feature.

As a result, we are far from seeing universal ownership of smartphones; they are still too expensive for many learners. Designing exclusively for smartphone usage will necessarily exclude many users.

The last difference between traditional materials and mobile apps is that unlike the traditional teaching materials the apps are much more learner-centered. Here the learner is the most active element in language learning process. In fact, the apps provide a personal and learner-centered learning opportunity which encourage learner to develop a sense of individuality for independent studying. Briefly, the app’s main role is to help learning to happen which includes involving learners in what is going on by enabling them to work at their own speed, by encouraging them to instruction.

Compared with ELT mobile apps, it may reasonably be doubted whether the traditional ELT materials are completely learner-centered. As in these materials there is a lack of tools and multimedia functions and they can’t provide rich language data, the learners won’t be able to access language learning easily, promptly and independently. With respect to this problem, the traditional materials are unable to completely be perfect for independent studying for learners to use without a teacher.

Research Question Two

As summarized in the literature, “Mobile” could refer to the technology and this technology could be understood in terms of time shifting or boundary-crossing. Vavoula and Sharples (2002) suggest that there are three ways in which learning can be considered mobile: in terms of space (the workplace, at home, at places of leisure), in terms of different areas of life (work demands, self-improvement, or leisure), and in terms of time (during the day, night, week days, and weekends).

In this understanding, learning and mobility really are understood to occur anywhere, at any time, in any facet of life. What is powerful about mobile devices such as personal smart phones is that many people tend to carry these devices with them all the time, and accordingly they are available for use for learning anytime and anywhere.

Smartphone applications moreover, seem effective in that they enable the language learning to be independent from any location and time. Also, they develop a level of confidence and competence that enabled learners to realize the potential of their mobile devices beyond that of an electronic organizer.

What is more, they provide a personal and learner-centered learning opportunity with ubiquitously accessible and flexible resources and activities. This could encourage learners to develop a sense of individuality and improve their language learning autonomy. Learners can more easily and immediately access language learning materials and tools on their own anytime and anywhere; consequently, enhancing their language learning motivation.

Conclusion

Mobile apps language learning is a new field of study and the growing app development is an area that offers many possibilities for investigation. This study was considered the great potential of mobile language learning and reminds us where these apps stand in term of technology and pedagogy. In view of the fact that the technology moves fast and we are heading for a mobile future, the common and distinctive features of mobile apps in terms of their effectiveness need to be improved as a more situated, field-dependent, and collaborative form of learning. The best thing to do might be to combine both of the materials and keep them in balance for language learning. Also, the effective design and use of ESL mobile applications should continue to be studied in order to suggest the right directions which might lead toward effective development of ESL mobile applications.

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