Investigating the impact of Mobile Apps for language learning at the University of Information Technology

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Abstract: As it is proper to use mobile apps for the effectiveness of English Language learning, the researchers suggest that mobile technologies become more affordable and more advanced in function. There are a lot of applications developed and used by English language learner like second language. But, personal use of mobile phones and the benefits of learning mobile applications have been still opening to conduct research. This paper investigated the impact of mobile apps on language learning. 176 Second Year Students from University of Information Technology participated in this study. There are five groups with forty-four students in each depending on the choice of their work. The research methodology is a case study analysis of students’ needs. The collected data is mentioned statistically. The teacher facilitated the students’ need and their learning in use of apps. Such learning is continuously designed the need of students. Moreover, the authors figure out the result of utilizing the mobile apps serving as an appropriate complementary method to other forms of course delivery. In addition, these apps are designed to facilitate meaningful language learning. Some of the mobile apps offer learners a massive
achievement both online and offline by focusing on oral production and auditory reception to increase language learners' communicative competence.

**Keywords:** mobile assisted language learning; mobile learning; mobile apps; and language skill, needs analysis; students' performance;

**I. Introduction**

In applying modern technology, a systematic and organized processes mark the improvement of educational quality in the context of teaching and learning. Technology in the realm of education is a systematic way to conceptualize the implementation and evaluation of the educational process that is learning and teaching. It helps with the application of modern educational teaching techniques including teaching material, methods and organization of work and relationships.

Nowadays, in foreign language learning, mobile technologies and mobile applications (apps) are becoming an indispensable part of learning. The learning and teaching environments of English language learning are changing very fast because of unprecedented opportunities and the rapid evolution of mobile apps. It is opening up a whole world of new learning experiences with technology. There also have certain benefits for language classes as well. Mobile learning allows to offer communicative language practice, authentic content access, and task completion for language teachers (Chinnery, 2006). Moreover, by utilizing mobile technology and appropriate learning strategies, educators strive to facilitate learning for the achievement of their educational goals. Todays, mobile devices like smart phones, tablet, portable devices could be provided varieties of multimedia learning content for respective educational purpose.
Memorization and practicing of a large number of vocabulary and grammatical structures involve in learning a foreign language. According to Hulstijn, 2001, words need to be encountered and noticed in speaking, reading, writing, and listening tasks for a learner and then deliberately practiced or rehearsed to facilitate the formation of a lasting memory trace. Over time, there might have a lot of goals for a foreign language learner. One of them is to have enough exposure that is activation and recognition becomes relatively automatic (Genesee 2000). But, in many educational universities around Myanmar, the amount of class time is very limited.

II. Mobile Apps for Language Learning: A Literature Review

Many researchers around the world have acknowledged that technology is widely used in many universities, but there are still many teaching processes dominated by traditional methods. In the classroom when students are in different knowledge and never pay enough attention, these differences are often hampered by teacher assessment work and how to transfer knowledge to students with different knowledge.

Teachers choose to maintain good teaching averages where students with insufficient or sufficient knowledge will get the required knowledge without temporary humiliation, unpleasant feelings of ignorance, and no frustration. This is why technology in the teaching and learning process is very necessary to overcome and develop the learning and teaching process in the world of education.

For educational activity, the availability of mobile apps has provided the learners what to do, how to do, where and when just only with a single device. In language teaching and learning, the potential benefits are combined with the principles and evidence of the theories from the subfield of MALL (Mobile-
Assisted Language Learning). Yet, most of language-learning applications provide exercises, audio and vocabulary which test learners first without providing some instructions. They support just only a few very brief usages of examples. Moreover, feedback of learners’ performance is likely to be limited to, a check mark or a cross that indicate whether an answer is correct or incorrect.

In accordance with Kim and Kwon (2012), most of the mobile applications focus on the processes called cognitive processes and receptive language skills. Cognitive process is somewhat known as recognition, recall, and comprehension. They note the lack of socio-cognitive activities or opportunities for collaborative learning. Nowadays, as classroom practice has been moving towards more advanced methods and approaches, more grammatical reinforcement in the form of drilling may be needed. Since individualized feedback on performance is something many learners rarely get outside formal tuition, getting answers correct in quizzes, or using the apps to memorize verb forms and vocabulary, the students are afforded the satisfaction of knowing as they got something right. Some examples of good practice are now available whilst some apps continue to offer drilling with little teaching and lack of meaningful feedback or support.

2.1. Needs analysis of students’ at UIT

The use of mobile apps is effective in the teaching of language at UIT, especially for the preparation of IELTS test. The second-year course from UIT provides extensive practice material for the exam-type exercises clearly signaled. So that students know which part of the exam is being practiced. The lack of practice for supplementary activities in the four skills (with time limits) in advance is one of the most serious weaknesses in their learning of English.

Therefore, the teachers have to try out a new method of teaching, the
so-called blended learning. To meet the objective of the course, the teachers try to familiarize the students with practice for the IELTS Exam Tasks and understand clearly and reliable grammar explanations with lots of examples.

Due to the period limitation, they could exploit mobile apps at the learning and practicing of English for the IELTS Exam Tasks. The teachers must make difficult choices about how to use that limited time to promote language learning. Due to the fact that students from UIT usually have opportunities to speak and listen the target language only in the classroom, it makes sense to use as much class time as possible in communicative activities. It is other kinds of practice and exposure which must be provided in the English language learning in other ways.

So, the authors find the way that mobile apps for English language learning can help extend students opportunities in meaningful ways. Obviously, there are a lot of mobile apps whether paid or not referring to IELTS preparation and test practice that have an easy access to resources and materials. The purpose of the current study thus is probing into the impact of using mobile apps for language learning at UIT. In this study, the authors have chosen the most suitable mobile apps for the students to overcome their weakness. They take more practical points of view to describe how mobile apps facilitate mobile learning activity.

2.2. The selected apps for English language teaching at UIT

Referring to the needs of the students, the teachers chose the following apps. The tools of this mobile apps will be assisted in evaluating the impact of the learners by learners, teachers, and researchers. The apps shown in the figure (1,5,9) can be installed easily in mobile phones (android or IOS).

2.2.1. The Features of IELTS Prep App
2.2.2. The Features of IELTS Preparation - IELTS FREE - ILFREE

(3) the selected section

Figure (1) logo

Figure (2) Four Main Topic

Figure (4) the user review

Figure (5) the feature of the app

Figure (6) logo

Figure (7) Main Topic

Figure (8) the selected section
If you want to improve your English or want to improve your high score on IELTS Test, then this app is a must.

- Many English topics are covered...
  - grammar
  - conversation
  - listening skill
  - reading skill
  - speaking skill
  - about 3800 word flashcards divided into lessons including word and meaning and audio.

In the IELTS, you have to face the high number of vocabularies. Therefore, we offer you this totally free application, which helps you to overcome easily the difficulty of remembering numerous vocabularies.

In the app, you get:

The general reading works with more than 4000 words collected from various sources such as books, papers, and tests.

The academic reading with the numerous words also are given and explained.

This application very useful for IELTS Band 8.0 and IELTS Band 8+

All words are topics for word choice test in order to help you remember the word easily and clearly. Especially, we provide the number of hearing tests, which is the most difficult part in the IELTS in order to help you to be familiar and overcome the problems in the real test.

2.2.3. The Features of Learn English Now

![App Screenshots]

- Figure (9) The Users’ Review
- Figure (10) The Top of the App
- Figure (11) The Feature of the App

![Logo]

- Figure (9) Logo
- Figure (10) Main Topic
- Figure (11) The Selected Section
III. Research Method

This paper aims to analyze to what extent learning and teaching English is dependent on using mobile devices and applications. It is based on the analysis of the current trends and research in this field. The authors investigate the drawbacks and the advantages of application of mobile language learning, looking into how smartphones and other mobile devices may be used in class or for extracurricular activities by adults. To conduct this study, quantitative research method for classroom observations, and questionnaires are used. The reason for using such multiple data collection tools is to triangulate the data and to increase the credibility of the study.

3.1 Research Questions

This study finds out the answers of the following research questions.

Have you ever used mobile apps for educational purpose before?

How long have you learnt the chosen apps?

How many hours of a day do you use them to perform the task?

Do mobile apps improve your language skills especially for approaching IELTS test?

Do you think using mobile apps are efficient and convenient for you?
Do you appreciate the mobile apps to their needs in classes?
Do you think that mobile application is an effective means of facilitation in their language learning?
Do these apps motivate or improve their knowledge of IELTS task?

3.2. Participants

In this study, the total number of students participating were 176 second-year computer science students at UIT aged of 18-20. The students were divided into 5 groups with forty-four students each (Group A, B, C, D, and E) according to section. The authors arrange a month period as before installing the apps and after applying the apps. In the University of Information Technology (UIT), for example, teaching period is limited such as two hours of lecture; one hour of language lab; and one hour of discussion/assignment/tutorial. According to the academic curriculum, the student needed to attend one hour a week for improving all kinds of four skills especially listening skill in the language lab. They all were learning English as an essential part of a credit course named ‘English language proficiency’ which required them to go through an assessment at the end of the semester. One hour a week for two months in their first term used their mobile phones (smartphones or iPhones) and completed exercises, tasks and test at a convenient time and in a convenient location. They had to complete the tasks on their own after that the teacher assessed and initiated discussions on the issues raised at the apps lessons.

3.3 The Procedure of Data Collection

The classroom observation processes were carried out for data
Then administering the questionnaire to student participants of the study followed. Firstly, a questionnaire containing close ended questions was provided to the students as if they possessed and used smartphones, whether they used the app for learning English or not in their smartphones. All the questions could be answered in the yes, no and no comment options. Subsequently, the students were given a task of IELTS reading, writing, listening, and speaking.

Before installing the apps, the teachers provide lectures from their curriculum, including listening, speaking, reading and writing as usual. The teachers focus only on exam advice and some techniques to approach the test but not for the exam practice. It takes about a month and then the students began to take the pre-test first for assessing their skills. After applying the apps, the apps could change the regular lecture classroom. Self-regulated learning approach instead of a traditional learning approach increased the students’ interest. They were asked to do a post-test similar to the pretest. Doing each test (both pre-test and post-test) took approximately three hours.

3.4 Method of Data Analysis

In order to compare and contrast the educational achievement, the authors analysed the efficiency of using mobile apps to improve their skills. The data received from the pre-test and post-test was collected. The result of overall scored is shown in table (1.1). Firstly, it was relevant to find out whether the results of the post-test would exceed the results of the pre-test, which could indicate to the improvement of the results. Secondly, whether the results of both tests would differ in terms of academic achievement and upgrading their scores, indicating that post-test benefited from working with mobile apps.
IV. FINDING AND DISCUSSION

Table (1) shows the description of the attempt results (pre-test) by the 176 students. It is described the total/attempt number of students, and the test components with band scored. The students were taken IELTS with time limitation and specific number of item questions.

<table>
<thead>
<tr>
<th>Test</th>
<th>Total No. of Students</th>
<th>Total No. of attempt students</th>
<th>5 (Overall Band Score)</th>
<th>5.5 (Overall Band Score)</th>
<th>6 (Overall Band Score)</th>
<th>6.5 (Overall Band Score)</th>
<th>7 (Overall Band Score)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
<td>176</td>
<td>161</td>
<td>85</td>
<td>33</td>
<td>20</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>(4sec:40 items 30 mins)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>176</td>
<td>161</td>
<td>40</td>
<td>50</td>
<td>28</td>
<td>31</td>
<td>11</td>
</tr>
<tr>
<td>(3sec:40 items)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Table 1. The competence of students’ language ability in Pre-Test

<table>
<thead>
<tr>
<th>Band Score</th>
<th>Listening (%)</th>
<th>Reading (%)</th>
<th>Writing (%)</th>
<th>Speaking (%)</th>
<th>Average %</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.5</td>
<td>21</td>
<td>31</td>
<td>22</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>6.5</td>
<td>12</td>
<td>17</td>
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<tr>
<td>7</td>
<td>7</td>
<td>19</td>
<td>13</td>
<td>7</td>
<td>12</td>
</tr>
</tbody>
</table>

Table 2. summarized total band score with percentage in pre-test.

The findings demonstrate that the 176 students admit that they possess a mobile phone whether android or IOS. Among them, the overall band score of the students from pre-test is between 5 and 6.0. Over 71% of the students are weak, especially listening and speaking skills which are normally neglected in the classroom. Reading and writing skills are more focus on some extent.
In a traditional classroom, 18% of students are good at their score of 6.5 and 7.0 as they are very hard working and intelligence. 11% of students fail to take the test.

<table>
<thead>
<tr>
<th>Test</th>
<th>Total No. of Students</th>
<th>5(Overall Band Score)</th>
<th>5.5(Overall Band Score)</th>
<th>6(Overall Band Score)</th>
<th>6.5(Overall Band Score)</th>
<th>7(Overall Band Score)</th>
<th>7.5(Overall Band Score)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening (4sec:40 items 30 mins)</td>
<td>176</td>
<td>39</td>
<td>51</td>
<td>37</td>
<td>33</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Reading (3sec:40 items 60 mins)</td>
<td>176</td>
<td>24</td>
<td>35</td>
<td>44</td>
<td>29</td>
<td>32</td>
<td>12</td>
</tr>
<tr>
<td>Writing (2 tasks,)</td>
<td>176</td>
<td>30</td>
<td>45</td>
<td>31</td>
<td>27</td>
<td>36</td>
<td>7</td>
</tr>
</tbody>
</table>
Table 3. The competence of students’ language ability in Post-Test

<table>
<thead>
<tr>
<th>Band Score</th>
<th>Listening (%)</th>
<th>Reading (%)</th>
<th>Writing (%)</th>
<th>Speaking (%)</th>
<th>Average %</th>
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</thead>
<tbody>
<tr>
<td>5</td>
<td>22</td>
<td>14</td>
<td>17</td>
<td>26</td>
<td>20</td>
</tr>
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<td>5.5</td>
<td>29</td>
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<td>26</td>
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<td>25</td>
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<tr>
<td>6</td>
<td>21</td>
<td>25</td>
<td>18</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>6.5</td>
<td>19</td>
<td>16</td>
<td>15</td>
<td>14</td>
<td>16</td>
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<tr>
<td>7</td>
<td>4</td>
<td>18</td>
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<td>13</td>
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<tr>
<td>7.5</td>
<td>5</td>
<td>7</td>
<td>4</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 4. summarized total band score with percentage in pre-test.

The students’ overall band scores from post-test are from 5 to 7.5. 62% are overall score between 5.5 and 6.5, 13% for 7 and the most intelligent student get up to 7.5. There is no fail attempt as the post test is on the university Moodle system where students take their test anytime and anywhere within due date. The authors figure out the average number of students and their improvement within a month period. It is provided the fact that the mobile apps can make student motivation and students language ability.

Consequently, the teachers interview the students what is the impact of utilizing the mobile apps. The 70% students respond that mobile apps can not only enhance language skills but also increase motivation. They do regular
vocabulary practice and listening as well both in and after class. Since the students can record their speaking test with an easy access, they can check back their pronunciation. However, 33.5 % prefer reading on paper than on screen that causes them irritation. 86.5% express a positive attitude towards the different aspects concerning the use of this tool for learning IELTS vocabulary.

Due to the fact that 64% of the students agreed that they enjoy using app which are related to practice IELTS test in context through visual support, improving speaking and written production, as well as increasing students’ motivation and metacognition (interest, awareness for learning vocabulary, and autonomy).

The two apps the author have chosen are free and the app described last is paid and need to register. After the course completion, the student earns a certificate handed over by UIT. As the apps are able to motivate the students, they learn intensively. Each student can react to a specific lesson, possibly a task assigned by the teacher via his/her mobile app. The teacher can react at any time and contact the student and discuss some issue with the student. According to teaching time limitation, reading and writing activities do in lecture period and listening, speaking and vocabulary lessons have performed in language lab utilization the apps. After the intervention using the app, it could be observed that a statistically significant difference indicated the effectiveness of this tool in which had the opportunity to check their own progress, and the effectiveness.

V. Conclusion

The study was accomplished at University of Information Technology where 176 undergraduate students showed significant improvements in communicative competence after using mobile apps. The authors highlight that these apps are suitable for four skills such as reading, writing, speaking, and
listening activities at an intermediate level. Students say that these apps were flexible, convenience, portability, and the ability to personalize in their learning outside the classroom. The most advantages language area for the students were in adapting vocabulary, reading and writing practice, grammar explanation and exercises, approaching test and quiz activities.

Students mostly informally used these apps rather than in planning for study sessions. The improvement of the students could see for relatively short periods of time. This study highlighted the ability to use with ease, practice in specific areas, and access to information rapidly. However, there had concerns about usability and interface design, unreliability of content, lack of grammar explanations, software errors, advertising, and poor feedback among others. Furthermore, education apps have to fight for users’ attention, battling strong competition from other apps within the device, such as games, and from pop-up notifications, from social media, messaging, or email. In addition, the key feature of the apps meets the need of overall language ability of the students.

This paper aims to investigate the impact of mobile apps for language learning in the University of Information Technology. The authors find out the main fact that the students are

To understand the current and future situation of mobile app
To held simultaneously a positive attitude towards mobile apps
To conduct frequently a variety of learning practices and lessons in or out class
To highly motivate in accordance with updated technology
To know how to handle the tool by themselves as a part of their daily activities

VI. ACKNOWLEDGMENT

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VII. References


