

# An Empirical Study on Mobile Technology to Augment English Vocabulary of Computer Science Students

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**Abstract:** *The study is empirical which is based on 'Mobile technology to augment English vocabulary of the computer science students' vocabulary is referred to the progress towards learners' communicative proficiency in English. The base for learning or acquiring a language is vocabulary. A student can master a language only when he builds his lexis and this can be made uncomplicated by using the modern technology i.e. mobile phone. The ultimate seek of the study is to eliminate the anxiety of the students towards English and this can be made possible by using a mobile phone which everyone is acquainted in the present scenario. This is moving from identified to unidentified. The students will grasp the words easily by using mobile phones in the classroom and this will pave way to involve them in learning English with interest. A strong base can be given to the students by enhancing their vocabulary. The purpose of this study is to make the students to acquire vocabulary than learning vocabulary. By this the learners will be attentive in when and how to use the words appropriately and to respond in English without any uncertainty by comprehending instantaneously. Activities are given by using mobile phones to improve their vocabulary level. Students, whose medium of instruction was not English, fail to grasp the vocabulary used during lectures in the class or among their friends. Most of the students hail from schools in which their medium of instruction is not English and are also first generation learners and it leads as a failure in their life when English is given importance in this competitive world. Getting a job should not become difficult because a student is not able to comprehend the words. The present study, therefore, gains social vitality as it provides enough insight on vocabulary enhancement. The combination of mobile phone [updated technology] can effectively facilitate the learners to build their vocabulary at faster phase. The amalgamation of mobile phone will create an interesting ambiance in classroom for developing vocabulary among the learners.*

**Key Words:** *Mobile phones, English vocabulary, learning, Computer science students.*

## I. INTRODUCTION

The mobile phone plays a vital role among the students and it has undergone a sea change over the years. The focus is on bringing a new notion into the field of learning with mobile phone as an aid. This study aims at assessing and improving vocabulary skill that gives the competitive edge in today's world. The cost of computers will be so low that they will be

available in most schools and homes in the future [4]. By denoting vocabulary the emphasis is given on the three sub skills in vocabulary that is synonyms, antonyms and homophones. Songs were taken from animated movies (Frozen, Tinker Bell series and Tangled) Students who are not native speakers of the language find it difficult to attain proficiency in comprehending the vocabularies with ease. This study focuses on a contemporary method that is used to comprehend a vocabulary effortlessly. It aims at presenting mobile phone as an effective means to acquire vocabulary. It also provides evaluation strategies to assess the proficiency of students based on the evaluation; the study will provide suggestions to effectively train students in comprehending English vocabulary through mobile phones and which will also improve their communicative competence. The study from Saudi Arabia defines the effects of by means of self-study MP3 L2 English lessons on oral skill growth [1]. Compared to a control group of 44 university students who acknowledged only classroom training, an experimental group of 46 used Talk English for 12 weeks as a course supplement.

The program was available through mobile phone, MP3 player, or computer. Students in the experimental group outperformed the controls in listening and speaking, which was ascribed to the extra practice they established through Talk English.

## II. METHODOLOGY

The research design of the study is experimental based. The test is carried by means of sub-tests to assess the vocabulary ability of students. Mann-Whitney U test is selected for testing the students' proficiency level of learners' vocabulary aptitude. The current study is tracked in the below stated order.

### Preparation of Questionnaire

Questionnaire method was used (one self-report questionnaire for social information and the others to test the students' vocabulary skill (synonyms, antonyms and homophones). A pilot study was piloted in the field and centred on the outcomes drawn through the pilot study; the questionnaire was decided for data assemblage.

### Selection of informants

It was examined that the final year computer science students' found it difficult to answer the questions asked in competitive exams.

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They were technically strong but they were unable to comprehend the vocabularies, so the target group chose for the study was final year computer science students.

Another reason was that the students were unable to comprehend the vocabulary as their medium of instruction was in English in colleges and 50 students are selected for the present study.

**Experimentation**

The activity implemented was individual activities. The learners’ were given activities and it was divided into three streams. The first stream consisted of activities based on synonyms, here the song from the animated movie frozen was played and students were asked to listen and then locate the answers. The second stream consisted of activities based on antonyms, here the students were asked to use mobile thesaurus and mobile dictionary and then answer the queries, followed by the third stream consisted of activities based on homophones, here the students were given crossword puzzle which are there in their mobile and were asked to find out the answer. The learners were allowed to use mobile thesaurus or dictionaries for clarifications in classrooms. Then the learners were tested.

**Method for the study**

The method implemented for the study is eclectic method. This method was opted, since the class was heterogeneous group as well as the students hailed from different background and half of the population was from the village. The primary importance was to identify the need of the students’ and then the method was selected. This method thus provided flexibility and the importance of enhancement towards vocabulary.

**Data analysis and processing**

The data collected was processed and analysed separately. The responses of the students recorded in written form during the activities was recorded was evaluated. The students’ vocabulary comprehensible ability and vocabulary non-comprehensible level was assessed with the help of mobile phones followed by pre-test and post-test evaluation.

**III. MODALITIES OF TESTING**

- A simple self- reporting questionnaire was given to the students to get the demographic information and the educational background of the informants.
- Vocabulary materials are presented to the students and the standard questionnaire is given to the informants.

Written multiple – choice response mode using mobile technology to assess learners’ vocabulary ability details and appropriateness of a response to a question.

**IV. VOCABULARY MATERIALS**

These materials are used to assess as well as provide remedies for the second language learners with regard to vocabularies with the help of mobile phones.

- English songs
- Mobile applications
- Mobile dictionaries
- Digital word games
- Vocabulary puzzles in mobile phones

- Mobile phone pictures with songs
- Digital short story songs

These above materials aim at evaluating the ability to comprehend the vocabularies quickly. This will enhance the students’ understanding and will remain as an exposure towards a novel view of learning a language.

**V. STATISTICAL ANALYSIS**

Statistical analysis provides a clear insight towards research in multiple angles [3]. In class half of the learners’ hail from village and their environment matters when it comes to learning second language vocabulary because they are not much open to the English language and have less alertness. So this stands as an obstacle. Fear dominated more among the learners who hailed from villages.

**Mann- Whitney U test**

The performance of urban and rural learners on vocabulary building through mobile phone activities

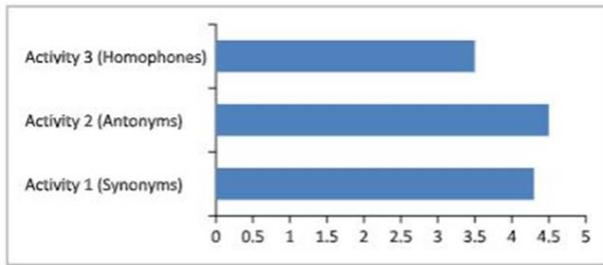
Ranks				
Test in regard to vocabulary building through mobile phone and music activities by urban and rural learners’	Locality	N	Mean Rank	Sum of Ranks
	Rural	32	24.41	781.00
	Urban	18	27.44	494.00
	Total	50		

Test Statistics	
	Test in regard to the performance on vocabulary building through mobile phone and music of rural and urban learners’
Mann- Whitney U	253.000
Wilcoxon W	781.000
Z	.891
Asymp.Sig. (2-tailed)	.373
Grouping Variable : Variable	

The above table shows the level urban and rural learners’ performance in regard to vocabulary building through mobile phone, the distribution of sample mean rank, Wilcoxon Signed Rank test, Mann- Whitney U, Z value and Significance level in the performance of vocabulary of the urban and rural learners’ of the experimental group. The sample of 50 was given an individual test in respect to vocabulary (Synonyms, antonyms and homophones). The mean rank of the rural learners’ is 24.41 and urban learners’ is 27.44. The sum of rank of rural learners’ is 781.00 and urban learners’ is 494.00. The Z value is .891, Wilcoxon Signed Rank test value is 781.000, Mann-Whitney U test value is 253.000 and asymptotically significance value is .373 which is lesser than 0.05, the assumed level of significance. Hence there is difference in the scores on learners’ performance in vocabulary building in regard to locality.

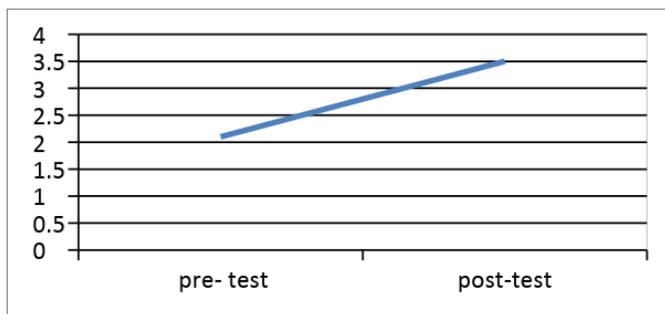


**VI. PICTORIAL REPRESENTATION OF THE DATA**



**Figure1 - Percentage Analysis of learners' performance during activities**

The above chart represents the learners' performance during the activities. Even though fear dominated the slow learners, they could quickly get indulged into the activity. It was easy for the learners to locate the synonyms and antonyms but they found homophones a bit confusing comparatively. It was found that 4.3% of learners performed well in synonyms activity and 4.5% in antonyms followed by 3.5% of homophones activity. Mobile learning made them feel comfortable during the activity.



**Figure: 2 - Percentage Analysis of pre-test and post-test results**

The above chart represents the learners' pre-test and post-test performance. The learners whose performances were 2.1% before the activity in spite of using thesaurus where as their frequency rose up to 3.5% after the activity. The activities were beneficial to the learners'.

The above charts denote a view that the primary importance can be given to students' needs before selecting a method to teach. Active teaching enhances the learners' performance than passive teaching. More of activities can favour the learners to learn not only vocabularies, but also the other linguistic skills [5].

**VII. SOCIAL RELEVANCE**

Mobile phones have become a necessary gadget in the present world. Wearing headset has also become a part of life. Multiple applications like notepad, e-books saving facilities, educational videos are easily accessed through mobile phones and the younger generation find it interesting to use such applications [2]. Encouragement and proper guidance and innovative ideas will aid the learners learn the language than the traditional way of teaching. When mobile phones are found all over, the classroom is not an exception [6].

**VIII. CONCLUSION**

This study tries to find out whether mobile phones can be effective for vocabulary enhancement. Mobile phone is not only a tool of comprehending vocabulary in second language easily, but also a great force which activates every individual to become well-informed. Mobile phone opens as wide world before the readers [8]. When a student is good in vocabulary, his ability to attain communicative competency will become easy. In today's scenario comprehending English language plays a vital role [7]. A strong foundation must be given to the students in English. Students, whose medium of instruction was not English, fail to comprehend what's been lectured in the class or among their friends. It leads as a failure in their life. Getting a job should not become difficult because a student is not able to comprehend the words. The present study, therefore gains a social vitality as it provides enough insight to understand a language and excel in it.

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