Synopsis on
A Study of the Effectiveness of Mobile Assisted Language Learning among
Engineering Students of Gujarat

Submitted to
Controller of Examination

Gujarat Technological University, Chandkheda, Gujarat 382424

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Introduction:

Advancement and development in almost every field has brought enormous change in the current practices all over the world. Education field is not an exception to it. As far as the language teaching-learning is concerned, the technological advancement has entirely built up innovative and creative methods in the process of teaching-leaning which has ultimately shaped new dimensions and methodology. Such procedural engineering in teaching-leaning methods have opened up new areas of research and inventions in the field of education. In this context, learning of language with the mobile technology has brought new paradigm shift.

The present research study is focused around the use of technology in teaching-leaning process of language. The background of the study stipulates the integration of technology in learning language through Computer Assisted Language Learning (CALL) followed by Mobile Assisted Language Learning (MALL).

Computer Assisted Language Learning (CALL) was the emerging area of research for many researchers and linguists in eighties and nineties. Researchers, Educationalists and linguists supported and approved the CALL as a better tool for teaching and learning language. Mobile assisted Language learning popularly known as MALL is the edited version of Computer Assisted Language Learning in particular and technology based version of Language Lab of 1960s to 1980s in general. Because of its various inbuilt features it has made learners to learn language easily and effectively.

After the introductory part of introduction of technology in the teaching-leaning process of language, the study poses research problems, raises research questions and addresses various research objectives.

Review of Literature:

Kukulska-Hulme & Traxler (2005) explored that the mobile learning is mediated by the assistance of small portable devices available most of the time and that can be adapted to the learner's immediate context.

Keegan (2005) argued that mobile learning should focus on the mobility of the device, and he defined it as learning on electronic devices small enough to fit in a pocket or purse.

Kamlesh Joshi, and Akash Thakkar(2013), the study explored the use and benefit of mobile device in education. To confirm this assertion, the researcher has prepared an application with the help of online application designer apps.

Suneetha Yedla (2013), the study dealt with how to make an effective, appropriate and interactive use of mobile-related technologies at University level and at professional college level teaching system. The study has suggested some classroom procedure where mobile device helped students to learn language as well as to make their work easy and comfortable.

Shanmugapriya and Tamilarasi (2015), the study was informative as well as quasi experimental in nature. Researcher reviewed few related literature review and advocated to use mobile device in language learning situation. The research concluded that mobile device in learning is the best tool to develop LSRW skills.

Valarmathi, K. E.(2015), the study explored numerous activities and possibilities of using mobile device for English language learning with the help of inbuilt features of mobile device such as SMS, Camera, Video –recording and text to speech. The study has suggested activities such as creating short dialogue through audio –recording feature; Reading of recorded audio stories with the ability to follow along with the printed text while listening to develop both listening and reading skills.

B. Velangini Kumari (2017), the study explored the mobile device as an effective tool for learning communication skills. The study concluded with finding that mobile device is a powerful tool for to examine the level of communication and their problems in developing LSRW skills.

Binny Vaghela (2019), study provided the significance of mobile assisted language learning and in 21st century by comparing mobile assisted language learning procedure with traditional ways of teaching and learning procedure of classroom situation. Researcher advocated usefulness of mobile device for the education purpose and depicted the detail information of literature review as well as the Framework for the Rational Analysis of Mobile Education (FRAME) The study concludes the need of mobile –learning in developing LSWR skills.

The Problem Statement

The advent and rapid advancement of technology has compelled teachers and learners to be acquainted with new techniques of teaching and learning methods. There are numerous challenges and issues that the teacher has to face with large classes such as inadequate instructional materials, limited time and lack of technological support. The tasks based on Mobile device can alleviate these problems and develops the smooth learning and teaching process. It also makes learners and teachers to adopt and implement innovative methods and methodology in teaching learning process. Keeping in mind such issues the present study has been explored to find out the use and application of mobile technology in learning and teaching process. But, the question arises in the mind of anybody as to how such technological integration brings the effectiveness in learning process. It is quite important to find out the significant effectiveness of the use of mobile device in learning language so that the integration of technology in learning process can be justified. Hence, it prompts a researcher to carry out a study on practical implementation of MALL. Consequently, the study clearly intended to find out the effectiveness and significance of Mobile device as a tool of learning language amongst the engineering students.

Objectives

- To analyse the mobile device usage habits of students of selected engineering colleges of Gujarat.

- To examine the effectiveness of mobile device in developing Listening Skills of students of selected Engineering colleges, Gujarat

- To examine the effectiveness of mobile device in developing Speaking Listening Skills of students of selected Engineering colleges, Gujarat.

- To examine the effectiveness of mobile device in developing Reading Skills of students of selected Engineering colleges, Gujarat

- To examine the effectiveness of mobile device in developing Writing Skills of students of selected Engineering colleges, Gujarat

Hypothesis

H_{01} : The students of engineering are not considerably acquainted with Mobile assisted language learning.

H_{11} : The students of engineering are considerably acquainted with Mobile assisted language learning.

H_{02} : There is no significant impact of effectiveness of mobile device on developing Listening Skills of selected Engineering colleges of Gujarat

H_{12} : There is significant impact of effectiveness of mobile device on developing Listening Skills of selected Engineering colleges of Gujarat

H_{03} : There is no significant impact of effectiveness of mobile device on developing Speaking Skills of selected Engineering colleges of Gujarat

H_{13} : There is significant impact of effectiveness of mobile device on developing Speaking Skills of selected Engineering colleges of Gujarat

H_{04} : There is no significant impact of effectiveness of mobile device on developing Reading Skills of selected Engineering colleges of Gujarat

H_{14} : There is significant impact of effectiveness of mobile device on developing Reading Skills of selected Engineering colleges of Gujarat

H04 : There is no significant impact of effectiveness of mobile device on developing Writing Skills of selected Engineering colleges of Gujarat

H14 : There is significant impact of effectiveness of mobile device on developing Writing Skills of selected Engineering colleges of Gujarat.

Conceptualization

CALL (Computer Assisted Language Learning)
Computer Assisted Language Learning is computer device based language learning.

MALL (Mobile Assisted Language Learning)

Mobile assisted Language learning popularly known as MALL is the edited version of Computer Assisted Language Learning in particular and technology based version of Language Lab of 1960s to 1980s in general.

The Transitional phase of MALL

The transitional phase of MALL is the introduction and appearance of mobile device in two phases i.e. evolution of low-end mobile device technology in terms of weight, size and shape in the year 1973 and high-end mobile device technology in the year 1983 to till date.

Mobile Device:

A mobile device is a handheld tablet or other device that is made for portability, and is therefore both compact and lightweight. New data storage, processing and display technologies have allowed these small devices to do nearly anything that had not previously been done with larger personal computers.

Listening Skills:

It is a receptive skill. People hear something to understand sounds of language and comprehend the same.

Speaking Skills:

It is the utterance of speech or use of uttered sounds for auditory communication as well as exchange of spoken words.

Reading Skills

Reading skill is a receptive and a complex cognitive process of decoding symbols intended towards decoding.

Writing Skill

Writing skill is a dynamic and the representation of language in a textual medium through the use of words and sentences.

Usage habits:

Usage habits are behavior expressed by the individual on a regular basis. In context to mobile device, it is recurrent and often unconscious patterns of behavior for the use of mobile device for communication and is acquired through frequent repetition.

Edmodo

Edmodo is a powerful, inexpensive and secure platform for creating educational learning network. It offers a simple way to teachers to create and manage an online classroom community.

Edmodo classroom and Moodle Classroom

Edmodo is an online classroom platform but it is different from Google-classroom and Moodle. Edmodo as an online support platform was chosen keeping in mind its usability, technology usage, connectivity, and accessibility on mobile device. Edmodo has a cloud-hosted solution. The institute doesn't need any expense and resources for maintaining the solution. The only expense of Edmodo is the premium plan (if desired) and any onsite or online training. While in the case of Moodle, the institute needs to think the expenses of maintaining the solution, such as purchasing the server or hiring dedicated IT staff to perform maintenance.

Research Design and Methodology

This research study is experimental in nature and entirely based on primary survey. Keeping in mind the nature of study and magnitude to test the effectiveness of language learning through mobile device, the researcher has adopted following two methods of collecting primary data from respondents.

1) Implementation of LSRW activity module on Edmodo Application

Pre test was conducted before the implementation of LSWR activity module on Edmodo and post test after the implementation of LSWR activity module on Edmodo. Moreover, to evaluate the effectiveness of learning language through uploaded modules on Edmodo, various exercises were conducted on completion of each activity of the said module. Activity module were devised keeping in mind total 80 respondents from Shankersinh Vaghela Bapu Institute of Technology, Vasan Gandhinagar and Gujarat Power institute of Engineering and research, Mevad ,Mahesana.

2) Developed structured questionnaire and collected data with the help of Google form.

The step-wise research process for collecting primary data through the structured questionnaire in the present study is described as under:

Sampling design:

The samples have been taken from each zone such as Ahmadabad, Vidyanagar, Surat, Rajkot and Gandhinagar.13 (thirteen) Engineering colleges affiliated to Gujarat technological University (GTU) which were randomly selected have been considered as samples of the said study.

Sample Unit:

The sample unit for the said study is identified as 'Android mobile user students of engineering colleges'.

Sampling technique:

Random sampling method is adopted with a view to obtain balanced and systematic information from respondents.

Sample Size:

Keeping in mind the total population of Android Mobile users, 512 students of 13 randomly selected engineering colleges from five zones of Gujarat Technological University are considered as sample size for the said study.

Construction of Questionnaire:

In order to identify various language related activity via Mobile phone by various respondents, sampling design was planned out for adopting survey method in 13 randomly selected Engineering colleges of Gujarat.

The questionnaire has been made to find out the learners' Mobile device usage habit and its effectiveness for language learning. Respondents were randomly selected from the engineering colleges affiliated to GTU. For collecting primary data through structured questionnaire, thirteen colleges were selected from five different zones of Gujarat i.e. Gandhinagar, Ahmedabad, Rajkot, Vidyanagar and Surat.

*Statistical Tools***:**

In order to achieve the objectives of the study, researcher has applied descriptive statistic i.e. mean, mode, median and frequency distribution. In inferential statistics tools such as frequency distribution, Chi-square and factor analysis were applied. For finding the difference between pre-test and post test, paired 'T' test has been conducted for LSRW activities. During the learning through Edmodo application for data analysis purpose, cross tabulation, Measures of Central Tendency & Dispersion and two way ANOVA were applied.

Findings and Recommendations:

Chapter 1 provides the detail introduction of study focusing on the evolution of language learning process from traditional grammar translation method to latest communicative approach, role of technology in language teaching-learning process, journey from Computer Assisted Language Learning (CALL) to Mobile Assisted language Learning (MALL) and other recent developments. It has also enfolded the explanation and conceptualisation of various terminologies used in the study and covered the objectives and its relevant hypothesis. The research methodology as a science of the study has been done scientifically to describe the step-wise process encompassed with relevant statistical tools used for analysis of data. The chapter ended with accentuating the significance of the study, major features and limitations of mobile device and a brief chapterisation scheme.

Chapter 2 has explicated the detail review of literature. The review of literature encircles the conceptual literature concerning the concepts and theories, and the empirical literature consisting of studies made earlier which are similar to the said study. The first aspect of the basic objective of this review was to develop the understanding and knowledge regarding the relevant concepts and theories so that the collected information and data can help to specify the research problem in a meaningful context. The second aspect of the basic objective of this review was to identify those studies made earlier which can facilitate in knowing the trends of thoughts and can enable to justify the research gap. With both the aspects, the study can research in pointing out the specific area which can streamline the objectives, underlying hypothesis and develop the appropriate research design so that the plan of work for the entire study can be done scientifically and systematically.

Chapter 3 explores detailed conceptual notes on Listening, Speaking; Reading and Writing (LSRW) activities. The present study focuses on developing the said skills for learning language effectively through the use of mobile device. Hence, the explanation comprises the nature and learning dynamics of skills.

Chapter 4 explores the usage habits, patterns and purpose of using mobile device for developing LSRW skills. While investigating the usage habit of the respondents, it has been found that out of total 512 respondents, 5.86 % respondents on an average spends 30 minutes a day on mobile device whereas, 36.52% spends 1 hour, 35.16% spends 2 hours and 22.46% spends 3 or more than 3 hours on mobile device. For the quality usage of mobile device it has been investigated that 31.1% respondents are using their mobile device before and 51% after college hours. It has been recorded that 5.6% respondents use mobile device during the college hours and 41.6% respondents use the mobile device in their leisure time and 33.9% respondents uses their mobile device at late night. While studying the multiple responses for using mobile device, it has been found that 31%, 25.3% and 20.6% respondents' use mobile device after college hours, during leisure time and at late night respectively.

Investigating the purpose of using mobile device it has been found that 99.4% use their mobile device for routine phone calls, 80.1% use for noting down notes, memos and calendar, 41.6% use for surfing internet, 54.1% and 54.7 % use for accessing YouTube and Social media respectively. While finding out the multiple usage purposes of mobile device, respondents' usage analysis showed the use by 99.6% for routine phone calls 80% for education and 64% for chatting through WhatsApp, 54.8 % for social media, 54.2% for YouTube 38.2% for clicking pictures and 24.1% for access of vocabulary and dictionary.

Chapter 5 has evaluated the effectiveness of mobile device in developing LSRW Skills of the selected respondents from Engineering Colleges of Gujarat. The findings have been presented in four different sections.

Section – I of the chapter provides the preliminary information analysis of the 512 respondents and has mostly covered the number of mobile users, number of Android mobile users, amount of time spend by the Android mobile users, the time preference for using mobile device for the purpose of learning language, General purpose of using mobile device and specific purposes such as education purpose, language learning purpose and LSRW skills development purpose, learning of LSRW skills through downloading various application and duration of learning through applications. It has been found out that 86.33 % respondents have downloaded various applications related to language learning. Out of which 50% respondents have downloaded at least 1 application, 38% have downloaded 2 applications 7% respondents downloaded 3 and 5% have downloaded 4 or more than 4 applications. On investigating digital acquaintance and the learning duration of the respondents through

applications, it has been found that 26.17% respondents have been learning the language through applications since 6 months, 40.82% since 1 year and 10.16% for more than 2 years.

Correlating the multiple responses, it has been found that 67.5% respondents use English as a medium of communication 9% use the Gujarati as a medium of communication, 1% respondents use Hindi as a medium of communication 22% use the Bilingual language as medium of communication. Positive correlation between the learning through application and use of medium of communication has helped in finding out the effectiveness of language learning skills.

Section – II of this chapter finds out the usage effectiveness of mobile device in developing LSRW skills of 512 respondents and has derived the inferences with the help of Cross Tabulation and Chi-square analysis. On evaluating the effectiveness of mobile device on developing the Listening Skills based on cross tabulation analysis, it has been found that out of 512 respondents 66% could develop their listening skills based on regular use of mobile device. The same has been also significantly investigated with the help of Chi-square at 5% significance level with the calculated value i.e.40.9969 which is greater than the table value i.e. 3.841. The resulted analysis could test the hypothesis that there is significant impact of effectiveness of mobile device in developing Listening Skill of students of selected Engineering colleges of Gujarat.

On evaluating the effectiveness of mobile device on developing the Speaking Skills based on cross tabulation analysis, 70% respondents could bring the effectiveness in developing their speaking skill due to the regular use of mobile device. The similar findings were also obtained through Chi-square and tested the hypothesis that there is significant effectiveness of Mobile Assisted language learning in the Speaking Skill of Engineering students of Gujarat. Even in case of reading skills, 69% could develop their skills due to mobile device and tested hypothesis that there is significant impact of effectiveness of mobile device on developing Reading Skill of selected Engineering colleges of Gujarat. Moreover, 62% of the total respondents could bring the effectiveness in developing their writing skills due to the regular use of mobile device and the similar was significantly proved by accepting the hypothesis that there is significant effectiveness of Mobile Assisted language learning on the Writing Skill of students of selected Engineering colleges of Gujarat.

Section – III of this chapter envisages the detail analysis to find out the effectiveness on improving the English learning process, the ease of using mobile device compare to desktop, use of the inbuilt features of mobile device such as, Internet browsing/Applications/ Music/

text messaging/ Gaming/ Camera and other utilities in providing exposure for learning English, Surfing websites and social network applications such as, WhatsApp face book adding in to learning and use of mobile device easier than surfing the same on desktop and laptop. The inferences drawn with the help of cross tabulation, it has been investigated that 45.31% and 39.65% respondents have strongly agreed and agreed that there is strong effect of mobile device in English learning process. While examining the relationship between the usage of mobile device and improvement in the process of learning English with the help of Chi-square found that there is significant effectiveness of Mobile device in improving the English learning process.

On finding out the Ease of using Mobile device compare to English learning process through desktop, 80% respondents have been found using mobile device easy compare to desktop for the learning process of the English. Studying the use of various inbuilt features of mobile device in improving the learning process, it has been found that 84.96% respondents have been strongly agreed that all features significantly adds in improving learning process. Analyses of surfing websites and social network applications such as WhatsApp, Face book etc. through mobile device is easier than surfing the same through the desktop and laptop, it has been found that 81.64% respondents strongly agreed that all these has contributed significantly in improving the learning process.

Findings on the regular use of Mobile device in reading messages and listening to informative videos depicted that 87.70 % respondents have been agreed and strongly agreed that the regular use of mobile device has substantially improved their listening as well as speaking skills. Whereas, 79.30% respondents have been agreed and strongly agreed that the regular use of mobile device has substantially improved their reading as well as written skills. Investigating the use of mobile device in English language learning Apps, 83.60% respondents have agreed and strongly agreed that there is a positive and significant relationship between the English language learning Apps and improving the learning process.

Section – IV of this chapter has rated the Mall Contribution in improvising learners' learning skills such as listening, speaking, reading, writing, improving vocabulary, improving pronunciation, improving presentation, developing entrepreneurial spirit, reasoning, developing learning habits, improving logical thinking, improving general knowledge, improving competitive aptitude with the help of factor analysis. The findings have concluded that the 3 factors such as Listening, Speaking and reading with its Initial values i.e. 10.520, 1.456 and 1.410 respectively have been found that there is significant contribution of MALL.

Chapter 6 of this study has evaluated the effectiveness of mobile usage for learning language with the help of Edmodo application. Examining the pre-test and post-test results for LSWR activities has found with paired 't' test that the mean value of Post test listening skills is 10.7375 and pre-test is 7.7750 indicated the positive difference. Such findings have tested that there is significant impact of effectiveness of mobile device in developing Listening Skills of selected Engineering colleges of Gujarat. The paired samples correlation of pre and post test has also found positive correlation.

In case of evaluating the effectiveness of mobile device in developing Speaking Skill, the paired sample statistics of pre-test and post tests samples of speaking skills indicated the mean value 7.8375and 10.4375 respectively which has also positive correlation and the hypothesis tested that there is significant impact of effectiveness of mobile device in developing speaking Skill of selected Engineering colleges of Gujarat.

The evaluation of pre and post test for reading skill, the paired sample statistics that the pre-test samples of reading skills indicated the mean value 7.7250 and post test mean value 10.6250 that also indicates positive correlation and the hypothesis that there is significant impact of effectiveness of mobile device on developing Reading Skills of selected Engineering colleges of Gujarat is tested.

While examining the effectiveness of mobile device in developing Writing Skill, the mean assessment score of paired samples in case of pre and post test found out the mean value 7.7750 and post test mean value 11.4375. This is also positively correlating the hypothesis that there is significant impact of effectiveness of mobile device on developing writing Skills of selected Engineering colleges of Gujarat is tested.

Chapter 7 has provided conclusion from various inferences drawn from the said study and recommended the academia to aid mobile device as one of the tools for effective teaching in various disciplines of education. Concluding remarks are as under

- Based on the analysis between number of respondents having mobile device, their usage and pattern as well as usage habits indicates very good digital acquaintance of among the respondents in learning the language and they are making the optimal use of mobile device.
- Comparing the use of desktop with the mobile device in learning language, it has been found that 80% of the respondents found the mobile device is easier than desktop

indicated that in the regular pedagogy learning, application of the use of mobile device will bring more effectiveness in learning process.

- It has been found among 83.60% respondents that there is relationship between English learning and English language learning application through the use of mobile device which indicated a positive and significant relationship leading towards developing learning process.

- While rating of Mall Contribution in improvising learners' learning skills, it has been concluded with the help of factor analysis that three Mall contribution has been found highest in three major factors Viz. Listening, Speaking and Reading in developing the learners' learning skills.

- Examining the effectiveness of mobile device on developing LSWR skills of the respondents through Edmodo, it has been found that the mean assessment score of paired samples statistics of pre and post test for developing LSWR skills, the mean value of in all analysis in the post test indicated the positive and strong correlation in developing LSWR skills of respondents through mobile device.

Significance of *the* Study

Conceptual and fundamental base of Language becomes the sound base in teaching-learning process. Such base has a direct correlation with the sound process of teaching and learning. In relation to the same, the present study has unique contribution in the current era of rapid inventions and innovation of technology and its integration in the field of education. In fact, the integration of technology in teaching and learning has become inevitable. The current generation is highly influenced by the use of technology and upcoming generation will not remain away from the digital application. In this scenario, Mobile Assisted Language Learning brings enormous influence in teaching– learning processes.

Moreover, the rural India can't contemplate e-learning and even some notable urban areas are not well equipped with language labs. Every student cannot afford personal computer. The introduction of mobile technology is seen to alleviate these issues. The present study has direct addition in English language teaching and learning to a higher end in India.

Students of Engineering especially of Gujarat are very innovative and goal oriented but they are lacking soft skills. In order to develop these soft skills, it becomes inevitable necessity for them to learn English. Students are conscious about it but they are not getting constant exposure of English language. Some practice has been given in the form of Communication

skills subject which has been offered once in the course of eight semesters. This limitation of University can be cured if the positive usage of Mobile device has been revealed to the Engineering students of Gujarat.

References:

Kelly, Louis G. *25 Centuries of Language Teaching*. 2nd ed. United States of America: Newbury House, 1976. .Print

Kelly, Louis G. "Introduction." *25 Centuries of Language Teaching*. 2nd ed. United States of America: Newbury House, 1976. 15. Print.

http://flteducation.wikispaces.com/file/view/kumaraPosmethod.pdf

Brown, H. Douglas. *Principles of Language Learning and Teaching*.   Englewood Cliffs: Prentice Hall Regents, 1993. Print

John Lyons. "Noam Chomsky Harmondsworth." 1978. Westminster London: Penguin, n.d. 12-18. Print.

Venkateswaran S. *Principles of Teaching English*. New Delhi:Vikas Publishing   House Pvt Ltd, 1995.Print

Sarat Chandra Y. *How to Teach English in Indian Schools.* Machilipatnam: Smt. B. K. Purushotham, 1992.Print

Venkateswaran S. *Principles of Teaching English*. New Delhi:Vikas Publishing House Pvt Ltd, 1995.Print

Prof.Mamta Amin, "Mobile Assisted Language Learning: Considerations and Benefits." Indian journal of applied research 3.4 (2013): 27-28. Web. 21 Jan. 2016.

Prof.Kamlesh Joshi, and Prof.Akash Thakkar. "Open Educational Mobile Application Development and Implementation for Teaching English Based Course." Role of ICT in English Language Teaching and Learning (2013): print.

Sisodiya, Kuldeepsinh J., and Dr.Vikas M. Raval. "MALL To Enhance Communication Skills of Technical Students." Englishes Today 1.1 (2015): n. pag. Web. 11 June 2016.

Shanmugapriya M., and Dr.Tamilarasi A."Design and Development of Mobile Assisted Language Learning (MALL) Application for English Language Using Android Push

Notification Services." International Journal of Research in Computer and Communication Technology 2.6 (2013): 329-38. Web. 18 Dec. 2015.

Dr. Suneetha Yedla. "MALL (Mobile Assisted Language Learning): A Paradise for English Language Learners." International Journal of English Language & Translation Studies 1.2 (2013): 90-98. Print.

Valarmathi, K. E. "Mobile assisted language learning." Journal of Technology for ELT. 1.2 (April 2011): n. pag. Web. 20 Dec. 2015.

Chen, I. J., Chang, C. C. & Yen, J. C. "Effects of presentation mode on mobile language learning: A performance efficiency perspective". Australasian Journal of Educational Technology, 28.1 (2012): 122-137.web.20thJuly 2015, http://www.ascilite.org.au/ajet/ajet28/chen-ij.html

Ahmad Jameel. "Effectiveness of Internet Capable Mobile-Phones in Learning Vocabulary with Special Reference to Working Class Saudi EFL Learners." Assr Archives De Sciences Sociales Des Religions 66.161 (2013): 533-45. Web. 21 July 2015.

Kim Heyoung, and Kwon Yeonhee. "Exploring Smartphone Applications for Effective Mobile-Assisted Language Learning." Multimedia-Assisted Language Learning. Chung-Ang University, 2012. Web. 21 July 2015.

Moreno, Ana Ibáñez, and Anna Vermeulen. "Using VISP (VIdeos for SPeaking), a Mobile App Based on Audio Description, to Promote English Language Learning among Spanish Students: A Case Study." Www.sciencedirect.com. Procedia - Social and Behavioral Sciences, 2015. Web. 21 July 201

Azar, Ali Sorayyaei, and Hassan Nasiri. "Learners' Attitudes toward the Effectiveness of Mobile Assisted Language Learning (MALL) in L2 Listening Comprehension." International Conference on Current Trends in ELT, 2014. Web. 14 July 2015

Demouy, Valerie; Eardley, Annie; Shrestha, Prithvi and Kukulska-Hulme, Agnes (2011). The Interactive Oral Assessment (IOA) project; using Talkback R for practice and assessment of listening and speaking skills in languages. In: ICL 2011 Interactive Collaborative Learning, 21-23 September 2011, Pieˇsˇtany, Slovakia.

Joseph, Samuel R. H., and Maria Uther. "Mobile Devices For Language Learning: Multimedia Approaches." Research and Practice in Technology Enhanced Learning Res. Practice Tech. Enhanced Learning 04.01 (2009): 7-32. Web. 27 Dec. 2015.