
| RESEARCH ARTICLE

Mobile Technologies to Improve Graduate Students' Communication Abilities

Dr. Wijdan Abdelgadir Abdelwahab Abdalla¹ ✉ and Dr. Malladi Revathi Devi²

¹Omdurman Ahlia University, Department of English, Sudan

²Associate Professor of Applied Linguistics, King Khalid University, Saudi Arabia.

Corresponding Author: Dr. Wijdan Abdelgadir Abdelwahab Abdalla, **E-mail:** wijdan1973@hotmail.co

| ABSTRACT

Every person has an ingrained desire to learn. Human beings have developed new approaches, methods, and tools for acquiring the language using their intellect and experiences from the prehistoric era to the modern, technologically advanced era. According to the Encyclopedia of Language Learning, since the dawn of human civilization, everyone has developed and learned in their immediate surroundings, which includes politics, economics, education, and technology. Such a setting molds and shapes human minds to act for development at every level and become motivated to accomplish goals. Through some transitional phases of English language learning, such as moving from the grammar-translation technique to more modern communicative language teaching and from computer-assisted language learning to mobile-assisted language learning, this human psychology of language learning can be realized. The subject of current education has emerged as a technology and innovation representative. The rapid advancement of technology has made it more important than ever for people to use it effectively in their daily lives. In this stage of evolution, users place a high value on finishing their tasks successfully, whether through social interaction, informational learning, or language acquisition. The rapid advancement of computer-assisted language learning and the abundance of software and web pages have led to the emergence of the acronym "MALL" (mobile-assisted language learning). A tool that is available anywhere, at any moment, has been required to access this software and websites. The fast advancement of mobile technology and the creation of ever-more-advanced features enabled mobile devices to begin aiding in and offering the resources for software and website accessibility at the same time. The laptop has taken the place of the desktop, which is now progressively being replaced by the use of a cutting-edge palm top. People can now study and acquire information thanks to technological advancements and inventions like Android smartphones, tablets, iPhones, and iPods. Any scholar who looks into determining its efficacy during the transition phase is alarmed by the context of such current, emerging issues in the study and teaching of languages. As a result, a lot of research is being done in the area of mobile technology to determine the value and efficacy of different portable devices in general and mobile-assisted language learning in particular.

| KEYWORDS

Language learning, MALL, Technology, Technological advancement, software, Electronic devices.

| ARTICLE INFORMATION

ACCEPTED: 02 April 2023

PUBLISHED: 12 April 2023

DOI: 10.32996/ijahs.2023.3.2.1

1. Introduction

Students now have access to handheld devices that are more capable and well-connected than traditional desktop PCs. Mobile technology can present fresh learning possibilities that go beyond the conventional teacher-led classroom setting. Mobile learning, also known as "m-learning," is a new approach to technology-enhanced learning that was created as a result of the effect that mobile and wireless technology advancements have had on educational settings. Mobile education is evolving quickly. Numerous learning activities, including language acquisition, can be supported by mobile devices. Mobile technologies have a wide range of useful applications in language acquisition. Mobile phones are more portable than computers, but computers are better at handling different kinds of information like visual, aural, and textual information. They can be used outside of the classroom just as readily as inside; students can practice or study manageable chunks of information anywhere at any time, taking advantage of

their convenience. The use of mobile learning is growing in popularity as a new trend that supports the education and learning process in the twenty-first century. According to research, using mobile devices as teaching tools has many advantages, including better expense and time management, improved student motivation and engagement, knowledge creation, language learning and development, collaborative learning, and global awareness. UNESCO is currently conducting a study on the efficient application of mobile learning in various fields.

1.1. English Teaching and Learning Procedure Transition

Since it was recognized as an international language, English language learning has been advancing in the modes of adaptation, innovation, modification, and continuous change. English language learning is now widely thought of as an international language rather than a lingua franca due to development and modernization in the fields of politics, industry, globalization, and technological digitalization. Users and learners have shown an extraordinary ability to adjust to new situations and give up tried-and-true methods in order to maintain the space in this altered scenario. Politics, globalization, and technology have evolved into key pillars through which the transition of language learning has been realized, either directly or indirectly, through the need for education that has caused a change in methodologies and approaches in the English language learning process. In this regard, Kelly is correct when she states that the approach to any discipline in a coherent educational system is determined by four factors: the system's overall goal, the discipline under discussion's relevance, the scientific theories upon which the discipline is based, and the accessibility of research findings to teachers in the classroom. (Kelly 15). These Kelly facts can be understood by moving from linguistic learning to the teaching process, i.e. From "Grammar translation method to Communicative language teaching".

1.2. Using Grammar Translation to Teach Communicative Language

When learning a foreign language was equated with studying Latin and Greek in the 17th, 18th, and 19th centuries, human beings made constant efforts to adapt methods, approaches, techniques, and tools for doing so. Starting with the "Grammar Translation Method," the first organized path towards acquiring a language has been set in motion. When learning a foreign language was equated with studying Latin and Greek in the 17th, 18th, and 19th centuries, human beings made constant efforts to adapt methods, approaches, techniques, and tools for doing so. The "Grammar Translation Method," which incorporates learning fundamental vocabulary and grammatical structures, is where the first methodical path for learning a language has been established. Less emphasis is placed on speaking ability when using this technique to learn a language. (Louis 34). Because the English language did not have any international recognition from the seventeenth to the nineteenth centuries, grammatical translation was still used up until the turn of the twentieth century. The systematic examination of the grammar of classical Greek and Latin texts acquired traction in European classrooms at the very beginning of the 19th century.

The systematic Grammar Translation Method, which was used to teach Greek and Latin, was thought to be the best way to teach any modern language, according to the language teachers. Between the practical aspects of teaching a language and their analysis, there was occasionally uncertainty. The functional feature prevailed over the other features by the close of the 19th century. This approach relies on the student's participation in speaking and listening to the foreign language in normal, daily contexts. As a result, there is a great deal of oral communication, impulsive language use, no translation, and little examination of grammar norms and regulations. The Direct Method gained widespread acclaim at the end of the 19th and the beginning of the 20th centuries, but it was challenging to implement due to limitations on funds, time, and classroom size, as well as a dearth of fluent speakers of the intended language. Until the 1940s, this approach was prevalent.

1.3. Utilize One's Mother Language

Word groups are used to teach vocabulary words. Detailed grammar examples concentrate on grammar and morphology. Early in training, difficult texts are read.

Exercises that translate texts or sentences from the mother tongue to the target language and vice versa are the main emphasis of practice. It is surprising to see that some classes were still using the Grammar Translation Method in the latter part of the 20th century. Perhaps this is so because it has some benefits.

1.3.1 Advantages

The quickest and simplest method of elucidating word and sentence meanings is through translation. Due to the lesson being taught in the learner's mother language, there are no comprehension issues for the students. Since the instructor conducts everything in the student's mother tongue, it saves time.

1.3.2 Criticism

Instead of teaching the language, the approach excels at "teaching about the language." Speaking and other types of unplanned creative production were not included in the curriculum. The absence of student participation in the classroom. Communication receives very little consideration. The substance is given very little consideration. Sometimes a translation can be deceiving. This mode has been updated following a time of fall, resulting in the introduction of the Audio-lingual mode.

The "Audio-lingual method," also referred to as the "Army Method," was developed in response to the urgent need to teach English to American soldiers fighting in World War II. Based on language and psychological theory, the Audio-lingual mode teaches structural samples through rhythmic exercises without grammatical explanation. Framework was used to teach vocabulary. To help the students visualize and memorise the taught structures and vocabulary, the teacher used tapes and pictorial aids. Tools that aided in exploring language learning tasks included the use of audio recorders, VCRs, TVs, and OHP. Using technology was done to actually enhance accents and pronunciations.

The Audio-lingual Method, which was widely used in the 1950s and 1960s, placed more stress on learning the structures and patterns of everyday speech than it did on comprehending words. These patterns are elicited, practiced, and tested until the student's answers are automatic in the target language.

These are some Traits of this Approach

To explain structural patterns, drills are used.

With an emphasis on intonation, memorizing set lines is done.

Few grammatical justifications are used.

Context is used to teach vocabulary

There are audio-visual tools.

The accent is on intonation.

Positive Reinforcement for Appropriate Answers Happens Right Away

Following this, in 1955, Chomsky's movement in linguistics called attention to the "deep structure" of language while psychologists considered the affective and interpersonal aspects of learning. Noam Chomsky promoted cognitive theory by asserting that sentence structures and language knowledge are products of experiences and observations rather than something that can be taught through a series of drills and repetitive actions, as proposed by behaviorism. (Lyons 12-18) As a consequence, innovative techniques like Suggestopedia and Silent Way were developed in an effort to capitalize on the importance of psychological traits in language learning.

If users use their brainpower and inner potential, Suggestopedia guarantees great outcomes. According to Lozano (1979), we are capable of learning a lot more than we think. The researcher developed a method of learning that used relaxation as a way of acquiring new information and material, drawing on Soviet psychological research on yoga and telepathic perception. It makes sense that music was important to this technique. Lozanov and the subsequent scholars made an effort to teach vocabulary, readings, and role-plays while classical music played in the background and the students were seated comfortably. Students then developed susceptibility.

1.4. Importance of Second Language

The second method, known as the Silent Way, was characterized by an investigative approach to learning and depended more on cognitive than emotional reasoning. In order to address language-related issues, Gattegno (1972) asserted that it is in the learners' best interests to increase their independence, autonomy, and interdependence. The method's name refers to the teacher's role as a silent observer, and the instructor must break the habit of telling students what to do. During the final years of the 20th century and the first years of the 21st, Communicative Language Teaching (CLT) emerged. The most cutting-edge and well-liked approach to teaching English as a second or foreign language. The communicative approach focuses on enhancing the learners' ability to communicate, which includes helping them acquire the language's various communicative functions as well as the linguistic tools needed to carry them out. (Venkateswaran p.66) This method's goal is to improve your ability to communicate in the target language. The importance of interactive communication in connection to the critical skills of Listening, Speaking, Reading, and Writing has begun to be emphasized by educators. (LSRW). These abilities offer a foundation for a suitable framework of the approach, methodology, tasks, and course content. As a result, communicative competence—which carries the same grammar rules and practical competence—emerges as a prerequisite of the technology-determined era. The syllabus designer must combine all four language skills while choosing a suitable course for any level in order to meet this criterion. Communicative language teaching today can trace its origins to the changing nature of the global economy. For those who see the US and Europe as their ultimate career and economic destinations, the English language serves as their passport. Only solid English proficiency and Communication skills help people become acquainted with the social and cultural situations in Western markets. Being aware of the need to time the curriculum The "Functional-Notional" approach (Venkateswaran.68) was chosen by the designer to develop the syllabus. During this time, there has been wonderful advancement as proponents of language instruction have focused on developing appropriate course content and creating instructor resource materials. The classroom should only be seen as a location

to practice, not as a real-world setting for applying the skills. As a result, the development of the curriculum must concentrate on the genuine requirements and interests of the students. In addition, the curriculum needs to give students more opportunities to grow so they can perform well in real-world circumstances. Language exponents accept the technology-driven materials and tools to speed up the language learning activities in a more convenient and comfortable manner in order to satisfy the aforementioned motivations and goal to explore skills (LSRW). Computers have expanded the possibilities for language acquisition by providing new resources and techniques. It is necessary to discuss some historical events, such as the introduction of computers into the language learning environment, various helpful computer tools and techniques to learn languages more effectively, the advantages of computer assisted language learning, and its drawbacks, which may prompt language designers to consider developing new language learning tools.

1.5. Mobile-assisted Language Learning Has Replaced Computer-assisted Language Learning

For many linguists and researchers, computer-assisted language learning (CALL) was a topic of study in the 1980s and 1990s. The CALL was endorsed and approved as a superior teaching and learning aid by academics, educators, and linguists. The CALL idea first emerged in the 1960s. The process of teaching and acquiring a language went through many ups and downs as it changed to fit the needs of different age groups and environments. With CALL, the same thing has taken place. Behavioristics CALL, Communicative CALL, and Integrative CALL are the three stages that Warschauer (1996) divided the CALL expansion into. Every stage produced new rules, procedures, and ideas that simplified and streamlined language acquisition. These phases did not become popular overnight; rather, they acquired popularity over time, much like all innovations.

1.6. The Behavioral CALL

The Behaviouristic CALL was only available in universities where large "main frame computers" were used to create programmers. Students completed repeated assignments after receiving materials. As a result, the CALL programme for this age group gave an incentive, and the learner responded. At first, writing could be used to accomplish this. It was discovered that the computers were analyzing mistakes and providing input in more complex programmes that were highlighting the students' errors. Programmed Logical Learning for Automated Instruction Operations was the first and most significant application of the time for language instruction and learning. This application, which was founded on the principles of Grammar Translation Methods, was primarily created to educate Russian.

1.7. Statement of the problem

The term "mobile assisted language learning" (MALL) refers to a strategy for learning a language while using a mobile device, such as a smartphone, camera phone, iPhone, or tablet. It is a wireless, practical device that can be used whenever and wherever. A new discipline called mobile assisted learning (m-learning) combines computer-assisted language learning with mobile learning (m-learning). (CALL). Wherever a computer facility is not accessible, a mobile device can be used in its place. Teachers and students must become familiar with new teaching and learning methods as a result of the introduction and rapid development of technology. Learners require transformation and new approaches to learning. In this situation, it is essential for the English teacher to use cutting-edge instructional methods to improve the communicative skills of the students. With large classes, the instructor must deal with many difficulties and problems, including inadequate teaching materials, time constraints, and a lack of technological assistance. Mobile phone technology-based activities can help with this issue because they give students the freedom to express themselves creatively and imaginatively in a variety of engaging and enjoyable contexts, both inside and outside of the classroom.

2. Literature Review

C.R. Kothari (111) states that secondary material can either be published or unpublished. These data can be found in a variety of publications, including local, state, national, and international research papers, books, magazines, and newspapers; technical and non-technical journals; reports of submitted theses produced by research scholars, universities, etc. The analysis of this volume of data reveals the discrepancy between the researcher's current study and related studies that investigate similar or unrelated aspects of the same subject. In light of this, the researcher has chosen to conduct a thorough literature review of a variety of sources, including books, websites, dissertations, or theses, research papers, and more for the current study.

2.1 Communication-based CALL

The more advanced computer-based technology replaced the behaviorist method of language learning slowly and gradually. The computer's shape and technical appearance have altered. The absence of authentic communication in behaviorist CALL became the driving force behind the transition from behaviorist CALL to interactive CALL. New hardware and applications began to hit the market. Instead of drill practice, students and instructors insisted on skill practice. The availability of novel software and language-learning programmes are also related. Pace reading and language activities, for instance, have become the main motivators for language learning on computers. Numerous initiatives have been created to cultivate skills, including implicit grammar instruction, the debut of a module on proper pronunciation, and student motivational programmes. The fact that these programmes were used to avoid student complaints was a successful result. The "knower-of-the-right-answer" was the machine.

2.2. The Comprehensive CALL

By incorporating the instruction of language skills into tasks or projects to provide direction and coherence, the integrative CALL movement, which first emerged in the 1990s, attempted to address these criticisms. Integrated approaches were made possible by the two significant technical advancements of the previous ten years, multimedia computers and the Internet. Integrative CALL methods could be accessed on a single machine and were built on multimedia technology. The multimedia was enhanced by hypermedia technology more potent instrument. This means that learners could navigate their own route by simply pointing and clicking a mouse as the multimedia materials were linked together.

Multiple benefits of using hypermedia in language acquisition. The learner could first demonstrate the reliability of their sources. The variety of media made it easy to combine reading, writing, speaking, and listening in a single action, which made the skills secondarily easy to integrate. Third, students have complete control over their education. They can not only follow their own unique route but can also jump ahead and backwards in the program, focusing on certain components while omitting others entirely.

The principle of hypermedia facilitation focuses on the content without forgoing a secondary emphasis on language form or learning strategies, which is the main benefit of multimedia as its final aspect.

2.3. Multimedia Usage

Initially, sets of educational materials that included a book, audio cassettes, and video cassettes were referred to as multimedia. Without question, these packages have a tendency to be referred to as manifold media or diverse media since the introduction of computer-based materials. Multimedia nowadays refers to computer-based materials that are capable of carrying out a wider range of duties than just audio-mixed media. In addition to producing original audio and video files, it can play prerecorded audio and video materials. In addition, it has the potential to integrate the four basic skills of listening, speaking, reading, and writing while also providing students with immediate feedback. The world wide web (www), which was also introduced along with multimedia, has expanded the possibilities for language learning on a global scale and given all language students and instructors a platform for interaction.

2.4. The World Wide Web (WWW)

The World Wide Web was introduced in 1992, and the general population had access to it by 1993, creating new opportunities for CALL. Online software and computer-mediated communication are two very different types of internet pursuits. Today, there are so many different websites available to those learning a foreign language, especially those learning English, that it can be difficult to know where to start. By enabling email, the internet has significantly altered the way people communicate. Nowadays, people favor email over more traditional post service options when communicating. Nowadays, people favor email over more traditional post service options when communicating. Along with Email, online browsers like Google Chrome (2008), Mozilla Firefox (2004), Mozilla Navigator (2002), Mosaic (1993), Internet Explorer (1995), Opera (1996), and Mozilla Navigator have fundamentally altered how electronic communication is produced. The general introduction of Web browsers has already started to draw a concentration of language instructors. It is promising to set up non-sequential structured reading tasks for language learners where they can point to passages of text on a page displayed on a computer screen and branch to any new pages because many language instructors are familiar with the concept of hypertext on computers. For instance, a teacher can provide a number of hyperlinks on a website or blog, effectively guiding students into the realm of knowledge. Through this service, teachers and students now have access to thousands of real websites in foreign languages that can be used in a variety of ways. Davies (2015) provides a list of more than 600 websites that include connections to online drills as well as links to online dictionaries and encyclopedias, translation tools, and other useful resources for language teachers and students. Hot Potatoes software was released as free software during EUROCALL 1998, and this sparked the utmost amount of online instruction and learning activity.

Language instructors have begun to design their own interactive online exercises, and the online teaching and learning process has gained enormous popularity throughout the entire globe.

2.5. Web Versions

CALL, which also has a DVD and a CD-ROM. On CD-ROM and DVD, the video and music have already been downloaded, so the poor quality and slow interaction are no longer a problem, whereas these problems are frequently experienced in areas with low bandwidth.

There has been a flurry of activity in the creation of so-called Web 2.0 apps since the early 2000s. Contrary to popular belief, Web 2.0 does not represent a completely new version of the internet; rather, it refers to a shift in emphasis from web browsing, which is essentially a one-way process (from the web to the end user), to using web applications similarly to how one would use desktop applications. Additionally, it implies increased sharing and conversation. According to Walker, Davies, and Hewer (2011: Section 2.1), language instructors use the following Web 2.0 tools: Storage and sharing of images, discussion boards, blogs, wikis, social networking, chat rooms, and MUVes (virtual worlds), as well as streaming, audio tools, video sharing programs, and screen capture

software are all examples of image-related technologies. The obvious importance of using technology in this context has largely been recognized, along with its various difficulties that cast doubt on its true benefits. The expense is the first difficulty with it. Although some non-granted institutions can afford the hardware and can set up a good multimedia center, they cannot afford the multimedia software, and some of these institutions lack computer-literate faculty who are fully aware of the benefits of multimedia. The majority of modern theories on language acquisition suggest that instructors should be the ones providing pupils with guidance. It has control over what they do, how quickly they do it, and the capacity to recognize and fix any mistakes made by a person. Foreign language proficiency, technical proficiency, budget management skills, and the ability to combine all of these into creative methods to capitalize on technology are necessary for successfully managing a multimedia language centre. Although a powerful tool, the computer cannot provide students with a social, cultural, anywhere, anytime, and instant language learning setting due to some limitations. Amative Maitra, an independent edutech consultant, and Manish Upadhyay, co-founder and COO of LIQVID, claim that it is impossible to provide excellent infrastructure and computer capabilities to all of India's 31,000 colleges and 1.30 million schools. Here, it is necessary to select cutting-edge educational technologies that can offer practical remedies.

2.6. Mobile Technology Integration into Language Study

The twenty-first century is characterized by the invention, globalization, and the digital age. The field of education has encountered some adorable difficulties and changes in its process of teaching-learning activity as a result of technological explosion and digitalization. The possibilities for language learning through technology have expanded thanks to the ongoing creation of computer assisted language learning (CALL) materials, which have progressed from extremely simple plain text gap-filling exercises and programming exercises to extremely sophisticated interactive tools and multimedia applications. The idea of "mobile learning" was created concurrently with the emergence and rapid advancement of mobile technology, the instantaneous learning habits of the digital generation, and the introduction of more advanced mobile devices. Additionally, as information technology and telecommunications have advanced, more people are using mobile devices and being inspired to use them in language instruction and learning situations. It has been established that interaction and independence are essential components of effective language acquisition, and a mobile device has these qualities in spades. Education professionals, researchers, and investors have been inspired to find more applications for mobile devices in language teaching and learning processes by the phenomenal trends and quick advancements in bringing advanced features. The advancement of mobile technology in the twenty-first century has been so intense that the current generation of digital natives uses these devices extensively in every aspect of their daily lives, including PDAs, tablets, and smartphones. Mobile devices are used as the primary learning aid in a process known as mobile assisted language learning. A mobile phone integrates a book, paper, pencil, camera, video camera, radio, computer, and, of course, telephone. It is the modern term for the digital version of a very ancient educational technology. (Pachler, Norbert, Kukulka, Hulme Agnes 2009 P.2-3)

2.7. Mobile Devices' Early Stages in Language Acquisition

Mobile aided language learning, unlike computer-assisted language learning, also went through a transition period. The emergence of mobile devices can be divided into two stages: low-end mobile and high-end mobile. The first 2-KG low-end mobile was created by Motorola's John F. Mitchell and Martin Cooper in 1973. It first entered the society in a business capacity for telephonic use only. Since its invention in 1983, mobile devices have changed significantly in size, shape, and functions, going from low-end to high-end and from high-end to the most recent Android and Windows Smartphones. Considering the early capabilities of mobile devices, only a small number of studies have been conducted by academics to use mobile devices for educational purposes.

Twarog and Pereszlenyi Pinter used a mobile device for the first time in teaching in 1980. To give comments and assistance to language learners who were far away, the researchers used telephones. This experiment was carried out to assist Ohio University students in their efforts to become more autonomous and self-learners. After that, in the 1990s, instructors at Brigham Young University-Hawaii offered an open education English course via telephone and computer from Hawaii to Tonga. (Green). One of the first projects utilising mobile phones in language learning was created by the Stanford Learning Lab in the UK and the USA at the beginning of the 2000s, and it investigated their use in a variety of situations. This is according to George M. Chinnery in his article published in *Language Learning & Technology*, 2006.

2.8. Major MALL Ideas and Definitions

The meaning of MALL should be clarified prior to explaining and exploring more about mobile assisted language learning. The acronym MALL stands for mobile assisted language learning, which is an edited form of computer-assisted language learning and, more generally, the technology-based Language Lab of the 1960s to 1980s. Because of its built-in features, which include audio and video recording, picture editing, and a gallery, they make us think of the language labs from the 1960s to the 1980s. The term "mobile learning" is both new and has some established meanings. It is undoubtedly concerned with the student movement in the sense that they ought to be able to participate in educational activities without being constrained by the need to do so in a physically isolated area [Kukulka-Hulme & Traxler, 1-6]. Additionally, according to Kukulka-Hulme, "mobile technology can support students where they are most in need and in ways that work with their mobile lifestyles." (162). So, as Sharples, Taylor, and

Vavloula (2005) note, the mobility of learning also generates new forms of educational freedom, such as personalized, learner-centered, situated, collaborative, omnipresent, and lifelong learning.

3. Research Methodology

In this investigation, the researcher tried to use MALL to determine the critical difference at the conclusion of the trial. On a group of first-semester graduate students, research was done to examine the group's proficiency in technical language on mobile devices. The researcher found that students today do not possess online research skills or 21st-century competencies. This technique entailed encouraging students to actively use mobile applications in order to accomplish real learning objectives even outside of the classroom. Research Approach The study's goal is to determine whether mobile devices can help engineering students communicate more effectively. The instructional plan was made to accomplish it. Each teacher's efficacy was evaluated after the lesson. Pre-testing was done to determine the student's skill level, and post-testing was done to determine how well the models worked.

Variables: Variables are crucial in an experimental study. The researcher's level of independence is important. It is a circumstance or sign that a student can influence, manage, or take note of. Two different kinds of variables have been chosen for the current study.

(1) Independent Variable: The researcher has control over or can witness this variable. This allows for the determination of the variable's relationship to the trial. The experimental group's use of mobile devices for instruction is the research's independent variable.

(2) Dependent Variable: A dependent variable is a circumstance that has an impact on the research. The outcomes of research can alter if the dependent variable changes.

4. The Gathering and Analysis of Data

On the basis of the research's goals and hypotheses, the interpretation of the analysis is included in this paper. The paper's primary emphasis is on the study and interpretation of pre- and post-test results. The proper statistical techniques were used to analyze the data that was obtained. But it is best to grasp some analysis and statistical calculation theory in order to learn more about a specific practical aspect of statistical analysis. These activities were designed to examine how treatment affected the groups. The results of the trial may or may not be presented in numerical or quantitative form, which is represented by numbers. The data was collected and then transformed into a graph. Analyzing data is, to put it simply, the process of looking at each part of the data that has been given and assessing it using logical and analytical reasoning. Information gathered from various sources is reviewed and then examined in order to draw a finding or judgement. The findings from surveys, experiments, or other methods of data gathering can be organized using data analysis. In a study, analysis helps the researcher come to a conclusion. Data analysis is the process of organizing and arranging raw data in order to extract valuable information from it. Understanding what the data contains and does not contain depends on how the data is organized and thought about. Raw data can be in the form of measurements, survey answers, experiments, and observations, among other things. The purpose of this study experiment is to examine how speaking and writing abilities affect MALL.

4.1. Techniques for Data Analysis

One kind of statistical analysis is data analysis. Data analysis techniques fall into two categories: quantitative statistics (frequency, test, rate, scores, survey findings, percentage) and qualitative statistics (hard data, high-quality information). In this study, the researcher collected data using a quantitative technique. Descriptive study is a quantitative discipline. Descriptive statistics are numerical representations of the test-taking performance of a set of students. (Brown 93). Learning a new language becomes more interesting, worthwhile, and difficult.

Students' speaking and writing abilities improved after starting the new therapy. They can successfully communicate because of that. Students agreed that MALL had improved language learning by making it creative, engaging, and efficient. Their use of mobile devices will motivate them to explore the various educational applications available.

Many group or peer tasks were completed by the students, which helped them to reflect more thoroughly on the exercise, recognize other people's points of view or criticism, and learn how to offer constructive criticism to peers.

4.2. Ideas for Additional Study

It is assumed that teachers have some familiarity with MALL. Language instructors who are adept at navigating technological advancements are needed for the acquisition of language skills.

It is advised that teachers use more innovation when incorporating mobile devices and other interesting technologies into the classroom. This will draw students and increase their involvement. A similar study in other colleges and universities involving more participants can be conducted, taking into account the limitations of the study and bearing in mind that MALL is a new and

developing area to be explored in the modern age of technology. The same research may also be conducted in other classes, such as those in the sciences, commerce, the arts, and business, among others. The study I conducted needed to be put into practice for a longer amount of time in order to yield more concrete findings that could be extrapolated or used in other ways. It is possible to test out MALL to improve reading and writing abilities. It is possible to compare the efficacy of CALL and MALL technology in improving writing abilities.

5. Conclusion

The research looked at how well MALL helped degree students improve their speaking and writing abilities. The findings indicated that MALL has immediate, significantly positive impacts on students' achievement scores, which may well be a result of the excitement factor. MALL is the way of the future and should be seriously considered for language acquisition. Participants also showed enthusiasm for using MALL in the lab or classroom rather than CALL to improve their speech and writing abilities. Numerous conclusions from the aforementioned study urge academia to support mobile devices as tools for efficient teaching across a range of educational fields. For instance, according to the pedagogy of prestigious institutions, they instruct their students' pupils using case study techniques. Now that technology has broadened its scope, new features and helpful mobile device apps will also be released. On this basis, it introduces completely new concepts of learning if the trainer requests the students to link directly to the institute's customized mobile application or website during class; the sophisticated phones are progressively

Utilizing a variety of helpful applications and software improves and expands the possibilities for all of its users. Research in the area of MALL indicates that various mobile technologies are used sparingly or not at all. They do not prioritize the improvement of linguistic abilities. They placed less value on speech and writing abilities.

It has been discovered that primary source study comprises the majority of theses, papers, and articles. Students in higher education appear to be the target audience for applications of mobile-assisted language learning. These specifically pertain to communication abilities.

This thesis investigates the possibility of supporting undergraduate English language learning through the use of mobile learning exercises created using social constructivist learning principles. According to Pachler, Bachmair, and Cook (2010), MALL focuses on the application of mobile technology in language acquisition. It's not always required for students to learn a second language in class. They might have the chance to study it using mobile devices at their convenience and in their current location. One of the strategic educational goals is to improve student achievement and support the differentiation of learning needs by creating a more convenient environment for people to learn English, which is seen as a key component of professional success and a requirement for receiving an education in many communities.

References

- [1] Brown, H. D (1993). *Principles of Language Learning and Teaching*. Englewood Cliffs: Prentice Hall Regents, 1993. Print.
- [2] Brown, E. (Ed.), (2015). *Mobile learning explorations at Stanford Learning Lab*.<http://sll.stanford.edu/projects/tomprof/newtomprof/postings/290.html> 20 01 Web.21 May 2015.
- [3] Graham D. (2015). *Favourite Websites*. N.p., n.d. Web. 1 May 2015. [Csoftpartners.co.uk/websites](http://csoftpartners.co.uk/websites). N.p., n.d. Web. 24 July 2015. 12. N.p.,n.d.Web. 24 July 2015.
- [4] George, C M. (2006). *Emerging Technologies Is Going to MALL: Mobile Assisted Language Learning*. *Language Learning & Technology* 10.1 (2006): 9-16. Web. 1 Mar. 2015.
- [5] John L (1978). *Noam Chomsky Harmondsworth*. Westminster London: Penguin, n.d. 12-18. Print.
- [6] Kelly, L G. (1976) ."Introduction." *25 Centuries of Language Teaching. 2nd ed.* United States of America: Newbury House. [.http://flteducation.wikispaces.com/file/view/kumaraPosmethod.pdf](http://flteducation.wikispaces.com/file/view/kumaraPosmethod.pdf)
- [7] Kelly, L G. (1976). "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](http://flteducation.wikispaces.com/file/view/kumaraPosmethod.pdf)
- [8] Kukulska-Hulme, A and Shield, L. (2008).An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL*, 20-3(2008), pp. 271–289.Web.2nd June 2015.
- [9] Kothari C. (2004). *Research Methodology Methods and Techniques. 2nd ed.* New Delhi: New Age International Limited, 2004. 111-13. Print.
- [10] Mark, W. C. (2001). *Computer Applications in Second Language Acquisition*. Cambridge: Cambridge University Press in print Slough, Thames Valley University http://www.ict4lt.org/en/en_mod2-2.htm
- [11] Manish U and Amitava M (2012). *Familiar Bridges to New Technologies*. *Education World Human Development Magazine*. 8 August.
- [12] Pachler, N and Kukulska H. (2009). Preface. *Researching Mobile Learning: Frameworks, Tools and Research Designs*. By Vavoula, Giasemi; N.p.: Oxford: Peter Lang Verlag., 2009. 2-3. Print.
- [13] Pachler, N and Kukulska H A (2010). Preface. *Researching Mobile Learning: Frameworks, Tools and Research Designs*. By Vavoula, Giasemi; N.p.: Oxford: Peter Lang Verlag., 2010. 2-3. Print.
- [14] Sharples, M., Taylor, J., & Vavoula, G. (2005). *Towards a theory of mobile learning*. In H. van der Merwe & T. Brown (Eds.) *Mobile technology: The future of learning in your hands* (p. 58), Cape Town: mLearn.
- [15] Twarog, L., and Pereszlenyi-Pinter, M. (1988). *Telephone-assisted language study and Ohio University: A report*. *The Modern Language Journal*, 72, 426–434. (1988) Web 16 May 2015.
- [16] Venkateswaran S. (1995). *Principles of Teaching English*. New Delhi: Vikas Publishing House Pvt Ltd.