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Degree of Doctor of Philosophy in English

**“A Critical Evaluation of the Efficacy of Digital Teaching and Learning
of English Language through Mobile-Assisted Language Learning
(MALL)”**

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INTRODUCTION

With the changing times and demographic, India has witnessed a change in education patterns along with rapid developmental strides in the education system. With these developments, the English language has become an integral part of education in India and is considered essential since learning of English language is a need of the hour as well as a pre-requisite for many growth-driven sectors of the Indian economy.

The methods of English language Teaching (ELT) are varied and diverse. The traditional classroom method is an ancient method for language learning, but with technology and digitalization, language learning methods have also become advanced and high-tech. Through the years, there have been huge upgrades in technological advances, from radio to television, floppy discs, CD drives, flash drives and now cloud storage and from projectors to computers, laptops, and mobile phones. English is one of the widely read and written languages in India. Students from any corner of the country can learn English easily, in their comfort with the help of ICT. ICT stands for Information and Communication Technology refers to learning a language digitally. "ICT refers to forms of technology that are used to transmit, process, store, create, display, share or exchange information by electronic means. This broad definition of ICT includes such technologies as radio, television, video, DVD, telephone, satellite systems, projectors and computer and network hardware and software, as well as the equipment and services associated with these technologies, such as video conferencing, e-mail and blogs". (Alkamel & Chouthaiwale, 30).

Though ICT was introduced in India long ago it was not very advanced until the introduction of computers in education. "ICTs are defined as a diverse set of technological tools and resources used to communicate and to create, disseminate, store, and manage information. These technologies include computers, the internet, broadcasting technologies (radio and television), and telephony" (Ghasemi & Hashemi, 3098). India has seen many phases of ICT since the beginning of radio and television when just one-sided audio-based recorded lectures were broadcasted. "The integration of technology in ELT has undergone a dramatic shift in the past 25 years. Initially, it was limited to rudimentary word processing and gap-filling exercises, but mass access to the internet, the development of Web 2.0 tools and platforms, and the arrival of the social web and mobile technologies now enable teachers and learners to be globally connected, and globally educated" (Dudeny & Hockly, 533).

Mobile phones have made language learning easier. In mobile learning one doesn't need to be physically present at a particular place, thereby eliminating the accessibility barrier to education. Nowadays people from all walks of life know how to operate mobile phones, so anyone regardless of their age can educate themselves and learn the English language on their mobile phones. Mobile Learning or m-learning makes learning simpler because one can record lectures and watch videos during their spare time, it reduces the dependency of students on the classroom, and one is not restricted to the school hours for learning. One can easily download audio-visual lectures and revisit them at leisure. The omnipresence of mobile phones promotes the virtual mode of learning which is commonly known as m-learning that saves time, resources, and energy. M-learning encourages educators and scholars to explore further the use of technology and digital media in language teaching and learning. With the development of technology, the portable devices like laptops, then the invention of notebook computers, tablets, I-pads and the latest technology, "Mobile devices' include smart-phones, games consoles, media players, netbooks and handheld computers" (Traxler & Wishart, 04).

Mobile phones have provided new methods of teaching and learning to educators and learners. This use of mobile phones for teaching and learning a language is known as Mobile Assisted Language Learning (MALL). Learning the English language according to one's own time, learning with the audios and videos which can be played, paused and rewind several times, people living in rural areas can also learn from their places without going to metro cities thereby saving time, money, and energy are some great advantages of MALL and these advantages reduce the dependency on the classroom.

In India, there is a large market of foreign universities so with the help of mobile phones and the web, Indian students could be connected with any tutor in the world, connect instructors and learners globally, teach and learn online and can explore wide options. The widespread reach of the internet has given birth and promoted virtual classrooms paving way for Computer Assisted Language Learning (CALL). The Internet has worked as a revolution in technology and in the field of education. "Internet is the interconnection of hundreds of thousands of local networks, 'the mother of all networks', the mechanism which allows one computer to exchange information with another, whatever the type of computer or its physical location" (Eastment, 01). The introduction of the internet in the 90s helped the education system to make learning easier. "Easier access to interesting online resources and more synchronous tools allowed for (at first) text-based chat and email exchanges between classes and learners in different parts of the world....Today, voice chat programs such as Skype, incorporating more collaborative features such as video chats, screen sharing, and application sharing, means that international class projects are more accessible and popular than ever before." (Dudeny & Hockly, 536).

"The use of the Internet in all aspects of ELT has grown rapidly between 1996 and 1998 and continues to accelerate. The number of ELT sites on the Web has tripled" (Eastement, 01). The Internet made education accessible, flexible and portable, it doesn't need physical presence to teach, learn and communicate. "An internet is a connection between two or more computer networks. When capitalised the word refers to the global 'network of computer networks' which allows computers to share information, text and graphics, and to be accessed from any part of the world" (Eastment, 03). Internet helped learners to connect with tutors from any part of the world "learners and teachers in one part of the world have access to authentic and up-to-date material" (David Eastement, 01).

Access to the internet and wireless devices has increased and the use of mobile devices for anything and everything has been a common scenario in the present situation, also, the use of mobile devices for education and language learning has become a more common scenario than ever before. M-learning is the fastest-growing mode of learning at present. "Collaborative speaking and listening activities could be successfully supported by mobile devices" (Kukulka & Sheild L, 281).

"MALL encompasses the use of mobile devices like cell phones, personal digital assistants (PDAs), smartphones, pads, and pods for language learning purposes. Especially with the advent of smartphones and interactive mobile 2.0 technologies, MALL began to gain a remarkable momentum." (Yaman & Ekmekçi, 26). A mobile phone is the latest version of the computer which has a smaller screen and is pocket size, so, it could be carried anywhere these features make mobile phones one of the most important tools of ICT. "The ubiquity of mobile or handheld devices, particularly mobile phones, has already seen them appearing in mainstream education teacher training." (Dudeny & Hockly, 540).

“We already see an increase in the development of mobile-friendly apps for smartphones by publishers and by educational institutions” (Dudeney & Hockly, 540). There are increasing numbers of webinars, and e-conferences that one could participate in them digitally and physical attendance is not mandatory, also there is an increase in the number of e-courses, e-books, and e-work sheets that can be downloaded on learner’s mobile phones and after completing worksheets, it could be sent back to the teacher or can be uploaded to the respective websites. This allows easier access to learning material outside the traditional classroom and school.

Research by Yiannis Laouris in 2005 states that within 5 months there was an increase in 21,460 definitions of Mobile learning on Google, “We ran a Google search in January 2005 using [+"mobile learning" +definition] and received 1,240 items. We ran the same search at end of June 2005 and it resulted to 22,700 items.” (Yiannis Laouris, 01). This shows that number of mobile learners is increasing with time.

A study was conducted by Azli, Shah & Mohamad about learners’ perception regarding mobile learning and they find students are comfortable using mobile phones for learning the English language and considered mobile phones as a useful learning device, according to their survey, “The findings of this study reveal that most of the respondents had positive perceptions toward the usage of MALL” (Azli, Shah & Mohamad, 95). “Levy & Kennedy (2005) cited a study by Dias (2002) surveyed to investigate whether students practice English using their cell phones if they were trained to do so. The findings of the survey found that 57.9% of female students responded positively and 47.4% of male students replied favourably. Thus in general, it proved that mobile-assisted language learning has gained a wide acceptance as studies result in a positive attitude among students and teachers.” (Azli, Shah & Mohamad, 88). Lawrence Barry surveyed to predict learners' attitudes towards using mobile phones for language learning purposes at a Korean University in various manners and contexts. The survey was conducted of 159 L2 learners within a college of English program, “Results indicated that nearly half of the participants demonstrated positivity towards integration, while others were ambivalent, with only a small proportion actively against integration” (Lawrence, 03). Hence, mobile phones are changing the process and method of language learning and the young generation might get more inclined towards it as mobile phones are personal devices and give flexibility to the learners.

Online learning and virtual classrooms are also supported and promoted by the Ministry of Education (MoE) along with its various bodies such as the University Grant Commission (UGC), All India Council for Technical Education (AICTE), National Council of Education Research and Training (NCERT) and many more. M-learning is not limited to language learning or ELT but it has various streams. Various programs provide technology-based education along with ELT to the citizens of India and come under MoE, such as Study Webs of Active Learning for Young Aspiring Minds (SWAYAM) and the National Mission in Education through Information and Communication Technologies (NMEICT). The courses can be easily accessed through their application on mobile phones and post-completion of the course, the learner gets the certificate of the course.

Several MOOC courses were introduced in India by the government and Ministry of Education (MoE) which also include courses related to language learning. An ELT course comes under the SWAYAM platform named An Annual Refresher Programme in ELT, introduced by Gujarat University. Indian Sign Language Education and Recognition System or ISLERS is an online language learning program for hearing-impaired students. Such MOOC courses have

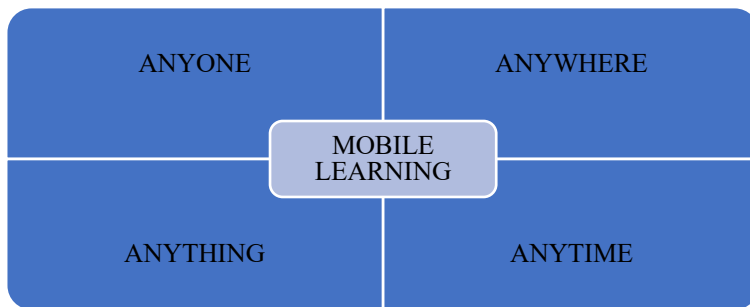
mobile application-based learning and can be learned with the help of m-learning, mobile phones play an indispensable role in spreading knowledge. With the ubiquity of mobile phones, a learner can just not learn anytime and from anywhere but also can play audio and videos several times.

“The three principles of Education Policy viz., access, equity and quality could be served well by providing connectivity to all colleges and universities” (NMEICT). Mobile and its application-based learning help students living in both rural and urban areas to get higher education through digital devices. MOOC courses help people in all areas to get an education and it shows that everyone has a right to get an education and also shows the equality of education. “E-Gyan” education is a special initiative the government of Gujarat took to enhance digital learning. “e-Gyan” is distance learning with the help of mobile phones. Gujarat government has also supported students to learn via mobile phones by distributing tablets to first-year college students named Namu E-Tablet which is known as New Avenues of Modern Education through tablets.

Millions of people possess mobile phones in India and the number of mobile users is increasing every day. “Among all modern communication devices, mobile phones are the most powerful communication medium even richer than email or chat as it can act as a learning device despite its technical limitations” (Miangah & Nezarat, 310). Also, majority of Indian students want to speak the English language so learning English in India has become easier with mobile phones. Most college-going students possess mobile phones in India and mobiles can be used as a tool for education; teaching and learning can be done effectively with mobile phones.

There are many advantages of learning English on a mobile phone

- Learning the English language with a mobile phone promotes the concept of flexible learning which can take place anywhere, anytime.
- It saves time.
- It can help language learners to be more productive as it promotes students–centric classes.
- A learner can enrol in national or international English language learning courses, even if the learner belongs to the remotest part of the world.
- It is cost-effective learning as it saves the cost of travelling, and cost of living in other cities also mobile phones are available at a cheaper price than laptops and desktops.
- Lectures and online materials such as pdf and audio files can be downloaded and saved on the mobile phone of a learner which can help the learner for future reference.
- Exams can be conducted online as institutions can use online examination software for students to appear in exams virtually, without going to the educational institutes.
- Learners of any age can enrol in online learning along with their jobs.
- Female students who live in rural areas and are not allowed to travel to other places for educational purposes can learn the English language while staying at home and it can boost their self-confidence.
- The mobile phone can always have an internet connection with its data cable on.
- The battery of mobile phones can last for 10-12 hours.
- People of all ages including people with disabilities can learn the English language with a mobile phone without going anywhere.



Along with these advantages, there are also challenges related to MALL, such challenges include:

- Low storage on mobile could create problems for learners
- Network issues can sometimes disconnect the online classes or deliver poor-quality audio and video.
- Learners may lose concentration and can easily be distracted.
- The students may lack self-discipline.
- Introvert students may not be able to connect with other classmates as online learning requires extra effort to befriend a classmate
- There are chances of losing data mistakenly with few clicks.
- One should be technologically adept.

There are some common myths about MALL for people who have never attended m-learning classes ever before:

- It is difficult to adapt to the digital mode of learning as it would be difficult to learn about the technical skills related to m-learning.
- Certified m-learning courses that are International may be too expensive to afford.
- One has to study on one's own in m-learning, as there might be nobody to help or clear doubts.
- There might be no interaction in online classes and it could be just teacher-centric.

During the Covid-19 lockdown, the complete education sector had to shut down along with the entire nation. Students couldn't attend classrooms or even commute to the nearest library. This is when mobile phones and other devices stepped in to fill the void. With mobile phones the process of learning was uninterrupted. Without going to actual classrooms, most classroom activities were conducted online through the means of online lectures and exams were also conducted on mobile phones and digital devices. Students from kindergarten to Doctor of Philosophy (PhD) levels, all were glued to their mobile phones and digital devices to fulfil the traditional education system's vacuum. Written and viva exams were also conducted online. Online learning has changed things irreversibly as seminars became webinars, speeches became blogs and vlogs, and classroom presentations and meetings have started going online. The testing times forced educational institutions like schools, colleges, classes, and coaching centres to shut down; the online mode of learning was the only saviour that kept the education sector running smoothly. During these difficult times, many students were learning on mobile phones. It kept the education system afloat and students were able to learn without any gap years. Education was possible only because of the ongoing digital revolution. M-Learning made this indelible mark on lives and had a tremendous impact on the mode of education.

This research which is a checklist-cum-questionnaire based includes the opinion of teachers on MALL. During the COVID-19 pandemic when m-learning played an essential role in the field of education, research had been carried out. The research includes a checklist-cum-questionnaire related to the impact of MALL and the pros and cons that one faces while teaching and learning with mobile phones. The research is conducted to get the opinion of teachers about teaching the English language using mobile devices.

RATIONALE OF THE STUDY

The research is needed to understand the perspective of teachers about MALL, the behaviour of their students towards mobile learning for learning the English language, if the Covid-19 lockdown has aided m-learning and MALL for the English language, and if learners are aware of digital libraries and MOOC learning. If students are not aware of MALL and MOOC courses, the research study aims to understand the reasons which cause a barrier between English language learners and mobile phones. The research also tries to promote government initiatives and MOOC learning programs.

RESEARCH HYPOTHESES

1. There is a paucity of evaluative studies in the Gujarat region to understand teachers' perception of digital teaching and learning of the English language through Mobile Assisted Language Learning (MALL).
2. Teachers may find a significant difference between digital learning and traditional learning and may find it easier to deliver lectures through mobile phones for the teaching of the English language.
3. Wireless digital devices such as mobile phones can be an effective, convenient and flexible mode for teachers and students for teaching and learning of the English language through the web.
4. Learning of English language with mobile phones can generate more interest of students in learning, and have a better impact on the outcome and results.
5. Students impromptu use mobile phones and their audio-video features to access study materials, find the meaning of words, learn pronunciation and for understanding new concepts for English language learning.
6. More variety of study material for English language learning are available online than traditional learning methods and libraries, and also, easily accessible through mobile phones.
7. Post Covid-19 lockdown, due to mandatory online teaching, the technical skills of teachers have become more advanced related to online teaching and it may have promoted mobile learning.
8. Various measures can be taken by teachers and institutes/ colleges/ universities to promote mobile learning and MOOC learning.
9. There are a few major challenges and limitations in teaching and learning of English language using mobile phones, such as small screen sizes.

RESEARCH QUESTIONS

The research questions' framed aim to understand the perception of English teachers regarding the effectiveness of teaching English with Mobile Phones and if the Covid-19 lockdown promoted English language learning with mobile phones.

1. What is the perception of teachers on mobile education for English language learning and its impact?
2. What are the significant differences between traditional learning and Mobile Assisted Language Learning for teaching and learning of English language?
3. How effective is the teaching and learning of the English language through Mobile Assisted Language Learning and what are its outcome?
4. What are the various digital devices and digital mediums used by teachers and learners for the teaching and learning of the English language?
5. Are students tend to watch videos or listen to audio/ podcasts to understand the concepts related to English language learning than raising questions in class?
6. Do teachers and students access online study materials? Are teachers aware of online digital libraries? Do they access them and what steps are taken by teachers to promote online digital libraries among students?
7. Are English language teachers comfortable adapting mobile learning post-Covid-19 lockdown and what is the impact of the Covid-19 lockdown on ubiquitous language learning through the web?
8. What is the role played by the management of various education institutes/ colleges/ universities in teaching and learning of English language through online mode and mobile phones, and in promoting MOOC learning?
9. What are the advantages and limitations of mobile learning for teaching and learning of the English language?

RESEARCH OBJECTIVES

1. To evaluate teachers' perception of the efficacy of digital teaching and learning of the English language through mobile-assisted language learning.
2. To analyse the significant difference between digital learning and traditional learning and the potential of Mobile Assisted Language Learning (MALL) for the English language.
3. To understand and analyse if teachers and students find teaching and learning of English language through mobile phones more effective, convenient and flexible.
4. To analyse, the impact of mobile phones for English language learning on students' results and outcomes.
5. To understand the perception of teachers about students' dependency on mobile learning for learning the English language and if students are more comfortable learning through the web and using mobile phones than traditional learning.
6. To understand the accessibility of a variety of study materials through mobile phones.
7. To understand the impact of the Covid-19 lockdown on m-learning, if teachers and students became more comfortable using mobile phones for teaching and learning of English language after the Covid-19 lockdown.
8. To understand if any measures are taken by colleges/ Universities/ Educational Institutes to promote mobile learning, MOOC learning and digital libraries among students.
9. To analyse the limitations and challenges of m-learning and teaching of the English language through mobile phones. 8

RESEARCH METHODOLOGY

Research methodology is the procedure by the researcher for carrying out the research. The research study includes a structured questionnaire for the teachers of the English language in the Gujarat region for collecting relevant data. The research has been carried out in a checklist-cum-questionnaire form for teachers. The analysis of the collected data will be done with qualitative and quantitative research methodologies.

The research uses statistical tools to analyse the data collected from the samples through a questionnaire. The study attempts to analyse the opinions of teachers about teaching and learning of English language using mobile devices.

The samples for research are taken from the English subject teachers of colleges and universities in the Gujarat region only, though it covers both rural and urban areas of Gujarat state.

THEORETICAL FRAMEWORK

The research is related to the MALL for the English language and proposes to analyse and examine the role of mobile learning as an ICT tool in ELT to address the above research questions and to achieve the objectives, the broader framework employed would be of the theory of mobile learning as elaborated by Sharples, Taylor and Vavoula and also reflect the theory of connectivism.

“Mobile learning theory is to recognize the essential role of mobility and communication in the process of learning” (Sharples, Taylor & Vavoula). Mobile learning gives flexibility to learners about time and space, learners can learn in and out of classrooms. In mobile learning theory, it is a learner who is mobile, not technology. In the time of digitalisation and mobile learning, there is no barrier of age and culture, anyone can learn English from anywhere. It saves costs of building infrastructure and resources for teachers and learners related to travelling or relocating from their places. Mobile learning has the potential of teaching and learning of English language without going to classrooms which results in lifelong as well as self-regulated learning.

Connectivism theory accepts learning with the use of technology, this theory promotes the idea of learning with digital channels and social media such as online forums, videos, blogs and podcasts. M-learning emphasizes the design of the curriculum using technologies that can create new learning opportunities for learners and promote effective learning.

CHAPTERIZATION OF THE STUDY

The thesis will be divided into five chapters which are as follows:

Chapter 1: Introduction

Chapter 2: Review of Literature

Chapter 3: Research Methodology

Chapter 4: Result and Discussion

Chapter 5: Conclusion

CHAPTER-1 INTRODUCTION

This chapter gives the introduction of the thesis along with the general idea of the thesis by briefing about its background, objective and significance of the study. The chapter focuses on the emergence of ICT in ELT, and MALL. The chapter reveals the importance of the research work and its relevance in the modern-day education system and relevance with NEP 2020. This chapter also briefs about the objective, methodology, scope and limitations of the research work.

CHAPTER-2 REVIEW OF LITERATURE

The second chapter is about the review of relevant literature and discusses the key concepts of the research and m-learning skills, its benefits and misconceptions related to digital learning. The chapter briefs about a gradual shift from traditional to m-learning classes, opportunities in MALL and various studies related to the MALL. Theses, articles, research papers, UGC and MoE documents are taken up to review and identify the research gaps.

CHAPTER-3 RESEARCH METHODOLOGY

The third chapter explains the methodology of the proposed study in detail including its design, procedures and detailed explanation of the research context. The chapter gives a description of the research method and data collection of checklist-cum-questionnaire for collecting relevant data. The data is analysed using qualitative and quantitative methods. The research sample for the questionnaire is collected from a randomly selected group of teachers who teach the English language in a college or university in Gujarat state.

CHAPTER-4 RESULT & DISCUSSION

The fourth chapter illustrates the result of the sample collected through the checklist-cum-questionnaire form. This chapter focuses on a detailed evaluation of the sample by analysing hypotheses, by analysing results through statistical tools such as graphs, charts and tables along with the theoretical explanation of questions from the checklist-cum-questionnaire about mobile-assisted language learning.

CHAPTER-5 CONCLUSION

This chapter is the sum- part of the whole study based on the findings of the sample result with analysing hypotheses. The chapter gives recommendations and suggestions for further research.

RELEVANCE OF THE STUDY IN THE CONTEXT OF NEP 2020

In July 2020, National Education Policy (NEP) was introduced by the Ministry of Education (MoE) with its vision to digitalise the country's education system. NEP 2020 is a comprehensive policy framework that aims to strengthen the nationwide education system. NEP 2020 focuses on the integration of technology in education. According to NEP 2020, the Digital India Campaign helps the entire nation to transform into a digitally empowered society and knowledge economy. Education can also play an essential role in this transformation as technology plays an important role in the improvement of educational processes and outcomes; thus the relationship between technology and education at all levels is bi-directional. NEP 2020 emphasizes introducing technology into education and it becomes relevant in the current education system, post Covid-19 pandemic lockdown when virtual learning became the new normal.

1. According to NEP 2020, the e-education unit and National Education Technology Forum (NETF) will be set up to promote digital content.
2. "New technologies involving artificial intelligence, machine learning, blockchains, smart boards, handheld computing devices, adaptive computer testing for student development, and other forms of educational software and hardware will not just change what students learn in the classroom but how they learn, and thus these areas and beyond will require extensive research both on the technological as well as educational fronts" (NEP, 2020; 56). Among many technologies evolving for education, the handheld computing device will also be incorporated into education. The advantage of such technologically advanced devices is this kind of education focuses on 'how' students learn than 'what' students learn which improves classroom processes. Though this area needs more research on both technological as well as educational grounds and hence this research is much more relevant to NEP, 2020.
3. Emphasis on creating digital infrastructure with the rapid advances in technology.
4. Pedagogy for online teaching-learning, digital tools will be provided to teachers for holding online classes as "online classes are a real necessity as the present pandemic has shown" (NEP, 59). "There will be emphasis on the teacher's role in facilitating active student engagement with the content and with each other" (NEP,2020, 59).
5. NEP 2020, focuses on technology as an aid for teachers and creating digital libraries which can be more accessible for students, especially for differently abled children.
6. It also emphasizes the integration of online learning in education and Higher Educational Institutes (HEIs) to get equality in education and achieve 100% literacy.
7. The existing digital platforms and ongoing ICT-based educational initiatives must be optimized and expanded to meet the current and future challenges in providing quality education for all.
8. Planning of disseminating many university courses such as 'Machine learning' as well as multidisciplinary fields through online platforms like SWAYAM.

9. It focuses on the role of the teacher and stated that teachers too need training for online/digital teaching. Hence, teachers will undergo the training program in learner-centric pedagogy and become high-quality online content creators themselves using online teaching platforms and tools. It also focuses on the needs of teachers as they need two-way audio and video interference tools for conducting online classes.
10. The National Educational Technology Forum (**NETF**) is set up to serve as a platform for the free exchange of ideas on using technology to enhance learning, assessment, and administration.

NEP 2020 states that the recent pandemic of Covid-19 which led to the lockdown necessitates an alternate mode of learning which can provide quality education whenever and wherever the traditional mode of education is not possible. This research is relevant to the NEP 2020 as NEP 2020 focuses on digital learning and digital infrastructure and mobile phone learning is a part of digital learning. NEP 2020 also focuses on the role of teachers and teacher training which is an essential part of this research study. The research focuses on mobile learning, the role of the teacher as a facilitator, the Covid-19 pandemic which changed the mode of teaching and learning and, the importance of MOOC learning.

According to NEP 2020, the area of online teaching needs more research on technology and educational grounds. This research focuses on understanding the opinion of teachers about online learning and mobile phone, which is essential as teachers are designers of the content and they understand the needs of students. The research which aims to understand the outlook of teachers will help to mould the online learning design as per teachers' perspective, the role of mobile learning and can make students aware of MOOC learning and its importance, which can set paths for further research. Hence, the research study is truly relevant to NEP 2020.

LIMITATIONS OF THE RESEARCH

Limitation means restrictions and shortcomings in research that might be beyond a researcher's control. The research has a few limitations in the study:

The main limitation of the research is, the study is conducted in the Gujarat region only. The research has not been conducted in any other state of India. So, the result includes the state of Gujarat only. However, the researcher believes that the teaching methodology is similar in other parts of India as well.

Another limitation of the study is, the research is about mobile-assisted language learning and there are many devices that are considered mobile devices for learning but the thesis only conducts the research about mobile phone devices for English language learning.

The study is based on responses from teachers of the English language only from the colleges and universities of Gujarat state. The researcher tries to cover the maximum number of teachers from various institutes/ colleges/ universities in Gujarat state but the researcher might be unable to cover a few institutes/ colleges.

The study is limited to the questionnaires as a main source of data collection tool. The researcher tries to understand the responses thoroughly and if any response is found with any kind of discrepancy, it has not been included in the data collection.

SCOPE OF FURTHER RESEARCH

The research studies the role of MALL in the English language and the perspective of teachers on it which analyses mobile phones as a tool of ICT in language learning. The research is conducted in the Gujarat region only, in future the research could be conducted in other states also. In future, there is also scope for conducting research on tablets and i-Pads as a tool of ICT or on other tools of ICT in Gujarat state or in other states also.

There is also scope for conducting research on the impact of other ICT tools on English Language Teaching after the Covid-19 lockdown.

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