

# The impact of mobile technologies on distance education

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## **Abstract**

The article shows the various uses of mobile technology-with the rapid development of mobile communication technology a new form of learning – mobile learning – has emerged. As mobile devices are being more extensive, so it has become more essential to know their uses and effects on the growing field of distance education. Mobile Phones and PDAs are currently the most widely used devices for mobile learning. Also, we get many and various applications, devices like “palms, windows CE machines even in the digital cell phones. “Technological developments of recent years can provide the ability to use innovative techniques and tools in education. Mobile technology shows many ways for learning which occurs when learners have access to information anytime and anywhere to perform various activities and helps the students to upgrade with respect to environment and achieve the goals and become success.

**Keywords:** Computer Application, Software Engineering, Mobile Learning, Mobile Education, Learning Style and Mobile Gaming.

## **Background**

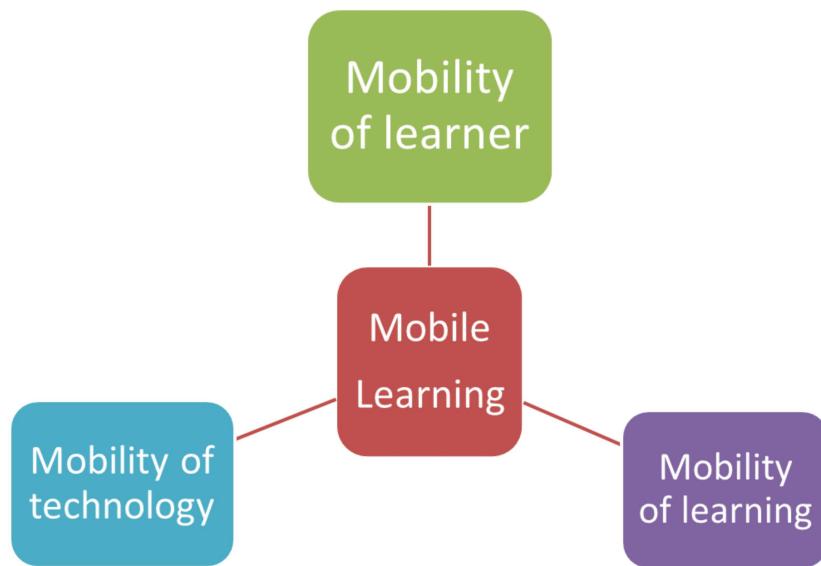
With the rapid development of mobile communication technology, a new form of learning – mobile learning – has emerged. This is also known as learning mode of future learning. Day by day the growing amount of research on mobile technologies is increasing. Those students who were using mobile devices have been increasing their scores and academic area. Research on usage of mobile technologies in education is markedly rising. Drastic improvement in scoring and academic achieving is seen in students who used mobile device. Mobile devices brought thoughtfully into pedagogy at the distance level point out traditional theories of learning in both traditional and distance settings, which are appropriate and valid to mobile learning. Learners have no limits to learn can learn at any place without traditional fixed teaching place or fixed access points of wire line network. Learners can learn while walking or travelling. Likewise, learners have no time limit without any fixed time. In addition, learners have option to access online educational resources without dependence on time and space. Similarly, educators can conduct training anytime anywhere without being limit by time or space or learning tools.

“Ubiquitous” means that anyone can use or learn anything at any time. Also, if any problem arises there will be “always online” to solve the requirements. Also, in the field of education the “Online” idea works very good which helps us in social interaction between the teacher and a student and even the mobile media to learning can increase the social interaction and capability to balance school work and other demands of lives. For technology’s entering the field of education. No matter it is e-learning or mobile learning, they are both new ways of

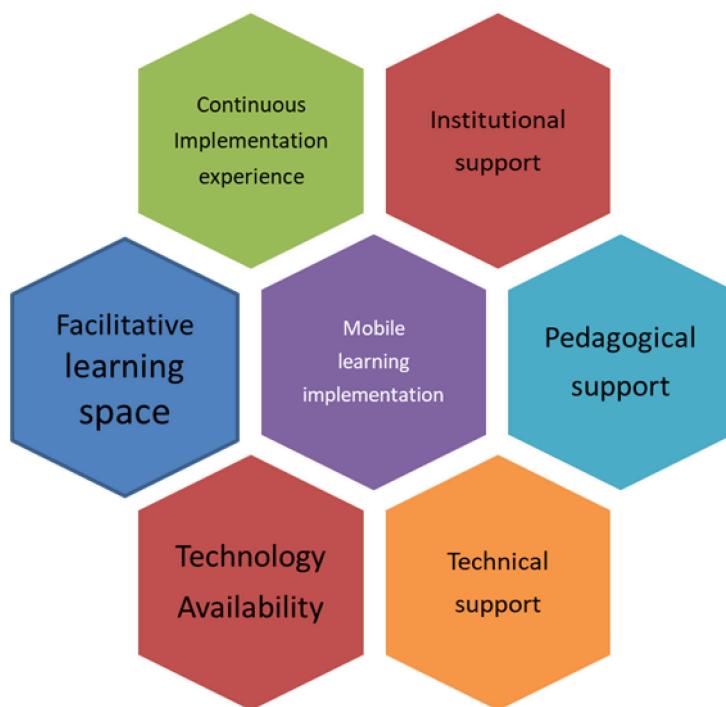
teaching and learning by combining modern education. So, the mobile learning can be used in education and can also be done in distance education.

**Figure 1** explains that the mobile learning includes mobility of technology, mobility of learner and mobility of learning. And it also contains facilitative learning space, technology availability continuous implementation experience. We get technical support also the other support from the technology. This helps us to fulfil our needs. We can search if we need some information can also play games or even watch movies or news etc...

**Fig1 (i):**



**Fig1 (ii):**



**Fig 1(i) & (ii): Technologies of mobile education.**

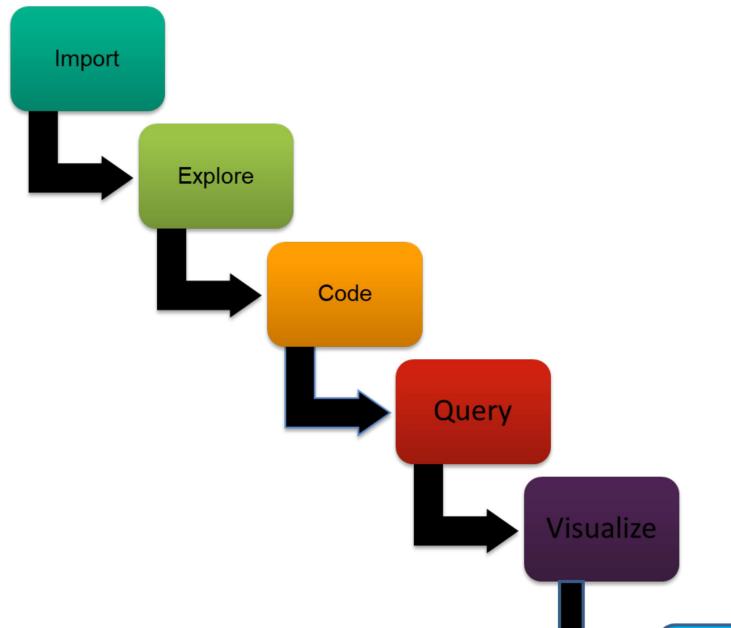
## Introduction

These points help you know the usage of mobile technologies (m-techs) to enhance academic library services. This service is also available in Ghana. We indeed must appreciate and give awareness for mobile technology-based library services. A descriptive analysis method was used to analyse the data. The total responses are taken for the final analysis. This also results / shows that the students are aware for the value of mobile technology-based library. [1] The information shows the growing quantity of research on using mobile technologies in the education. As mobile devices are being more extensive, so it has become more essential to know their uses and effects on the growing field of distance education. Our existing literatures also show that traditional theories of learning in both traditional and distance learning are applicable. For the students, flexibility, portability and accessibility contribute to a positive impression. Even the teachers would be able to teach in various ways to the students. [2]

The content explores the design and other techniques for mobile applications and many others in distance education. Which also helps the students use technology and learns how to crack the things and we can even conduct self-initiated learning tasks. So that students can work on their own without anyone's help. Also, some people prefer to work their own and remaining time they like to spend to explore new things. [3] Worldwide growth in the use of mobile phones is covered with mobile learning. Even mobile technologies are used in education too.... Also, we can get many tools in which we can modify as we prefer. Also, we can do many activities, learning roles and learning location. Learners can do much research too... Therefore m-tech is very useful in our daily lives. [4]

This paper reviews the experiences of a teacher and a student in online. This helps the users a lot to explore different things. Also, can develop and create new ideas and helping each other. Also, can develop and create new ideas and helping each other. Also helps to improve skills and engaged to participate and use various tools. They are also engaged to explore new items also research in things. [5] **Figure 2** explains that We can import using mobile technology also we can explore the various things we need. Also, we can enjoy coding also we can clear our queries etc. We can reflect by using various mobile technologies. We can also visualise the things and even store it safely in memory or other way for further or future use. So, we can conclude that mobile technologies are very helpful in our daily lives. We can fulfil all the needs by using the latest technologies.

**Fig 2:**



**Fig 2: Introduction to mobile technologies.**

### Prior Art

This content is to say that in mobile technology mediated collaboration among distributed members of the professional distance education community. 10 members worked for 4 months which was designing a master's program in information science. At first the given data is analysed by using mobile technology also density and distribution of the data. Next results in the social network analysis were interpreted to explore the uses in different social network patterns which helped them a lot. [6] This article shows how and why mobile learning is also said as next step in the evolution of distance education. The authors argue that podcasting in combination with a variety of portable MPEG layer 3 (MP3) also change the lifestyle. Also is a 'state of the art'. Also aiding the students learning of subject matter. Also improve many qualities. [7]

Mobile technology comes with a new kind of learning called here and now learning which occurs when learners have access to information anytime and anywhere. This also improves attitude, achievement compared with computer-based instructions by which we can improve our skills. As this technology has been arrived people are getting updated to the current generation. Also exploring various things. [8] The article shows the role of the network and mobile technologies in finding the solutions. By enriching the teaching or learning processes. Also exploring the opportunities, it offers. Also, the assessment requirements. Also helps to learn assessment process and solutions. Also helps in enriching both teaching and learning process. Also improves the ability of the person. [9]

Mobile Phones and PDAs are currently the most widely used devices for mobile learning. These can be displaced by emerging technologies. Which has various applications also we can get a updated version too... By using these devices in a good and useful manner we can learn many things and develop over selves and get educated too... Location showing devices are also arrived by using these applications we can come out through emergency situation too... [10] **Figure 3** explains that there are many ways in mobile technology to meet our requirements also factors like technology which makes sure of speed, accessibility etc. organisation like training support etc. environment like attitudes of users also gives impact on experience, skill development etc. So, there are many factors and even advantages that we can use and meet our requirements.

**Fig 3:**

Technology	Organization	Environment	Impact
>Ease of use >Speed >Accessibility >Service delivery	>Training support >Diversity	>Attributes of users	>Experience >Skill development >Academic performance >Degree of engagement

### **Fig 3: Factors shaping the utilisation of mobile technologies.**

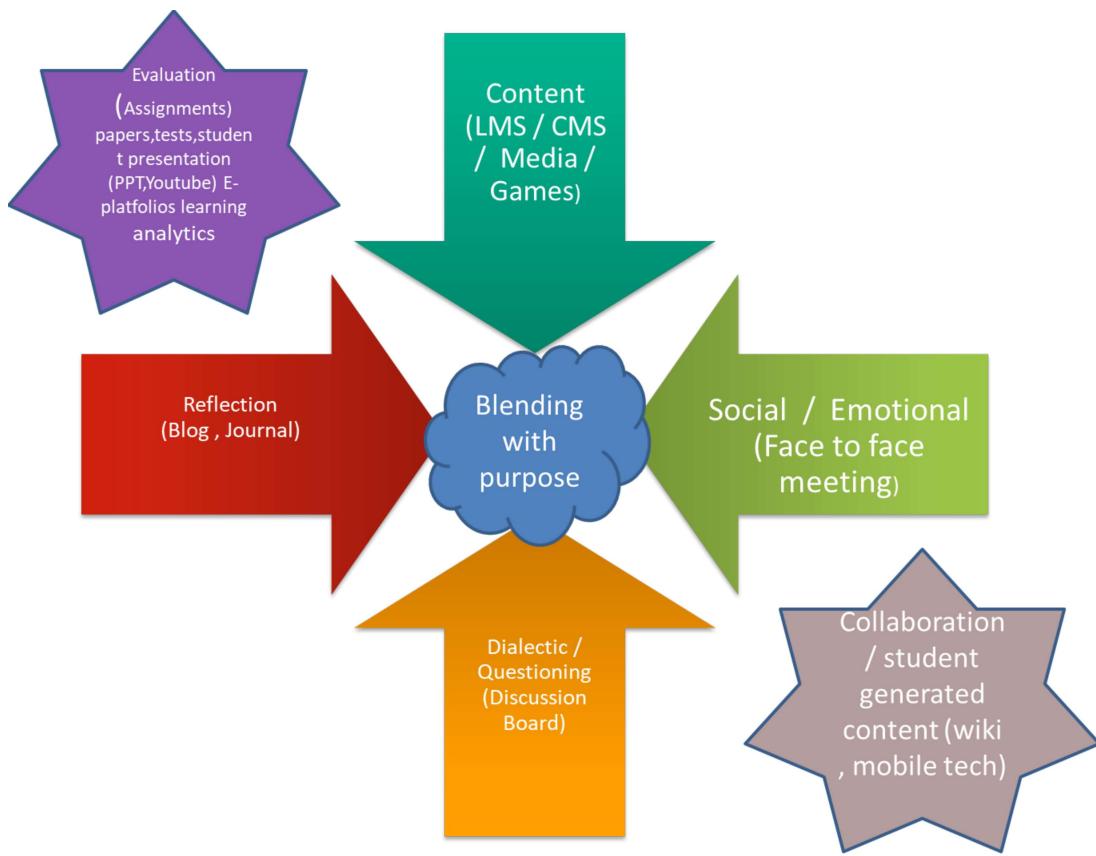
#### **Theory**

The edition of distance education is a dedicated to mobile learning. Also wish to connect 2 rather different communities and explains the work of small but growing rich on mobile learning. Which also helps us in e-learning too... Also, we get many and various applications, devices like “palms, windows CE machines even your digital cell phones.” [11] It is also said that in Christian medical college (CMC), India, and Tufts University School of medicine, USA have developed an ‘Institutional hub and spokes’ model. This is also campus-based e-learning and m-learning in this field. This helps to facilitate clinical education and training in secondary hospital sites across India. Also, they do research, design, development and testing. Mobile learning is the combination of these elements. [12]

Worldwide growth and improvement in the use of mobile phones has fostered the emergence of mobile learning. Mobile technologies are also used in the classrooms and in other industries, and other activates also. Scholarship in m-learning is scarce and lacks rigor. Learners become less consumers of information and publishers on the go. [13] The recent trends in the field of distance education shows a shift in pedagogical perspectives and theoretical frameworks with the help of student interaction. The purpose of this article is to explore the benefits of using various technology tools such as wikis, blogs and podcasts to encourage student interaction in online learning. It also reviews social software applications such as write board, Instacoll and Imeem TM. By emerging technologies offer a vast range of opportunities for promoting collaboration in both synchronous and asynchronous learning which influence to update with respect environment. [14]

In increase of mobile device usage among college students has been documented in different countries. This provides a very good platform and foundation for mobile learning. This research focuses on deeper understanding of how learners use mobiles as learning tools outside the classroom. Which contribute to the generalization to the education field and information system designers who need m-learning applications. [15] **Figure 4** explains that the mobile technology has been increased a lot and being increasing day by day and, we can access various things like content, blogs, social media, evaluation, creating various things in online as well as offline also inventing new things using technology. Also, we can create more things which is based on technology. This way it can be useful to others also.

#### **Fig 4:**



**Fig 4: Theory of mobile technologies.**

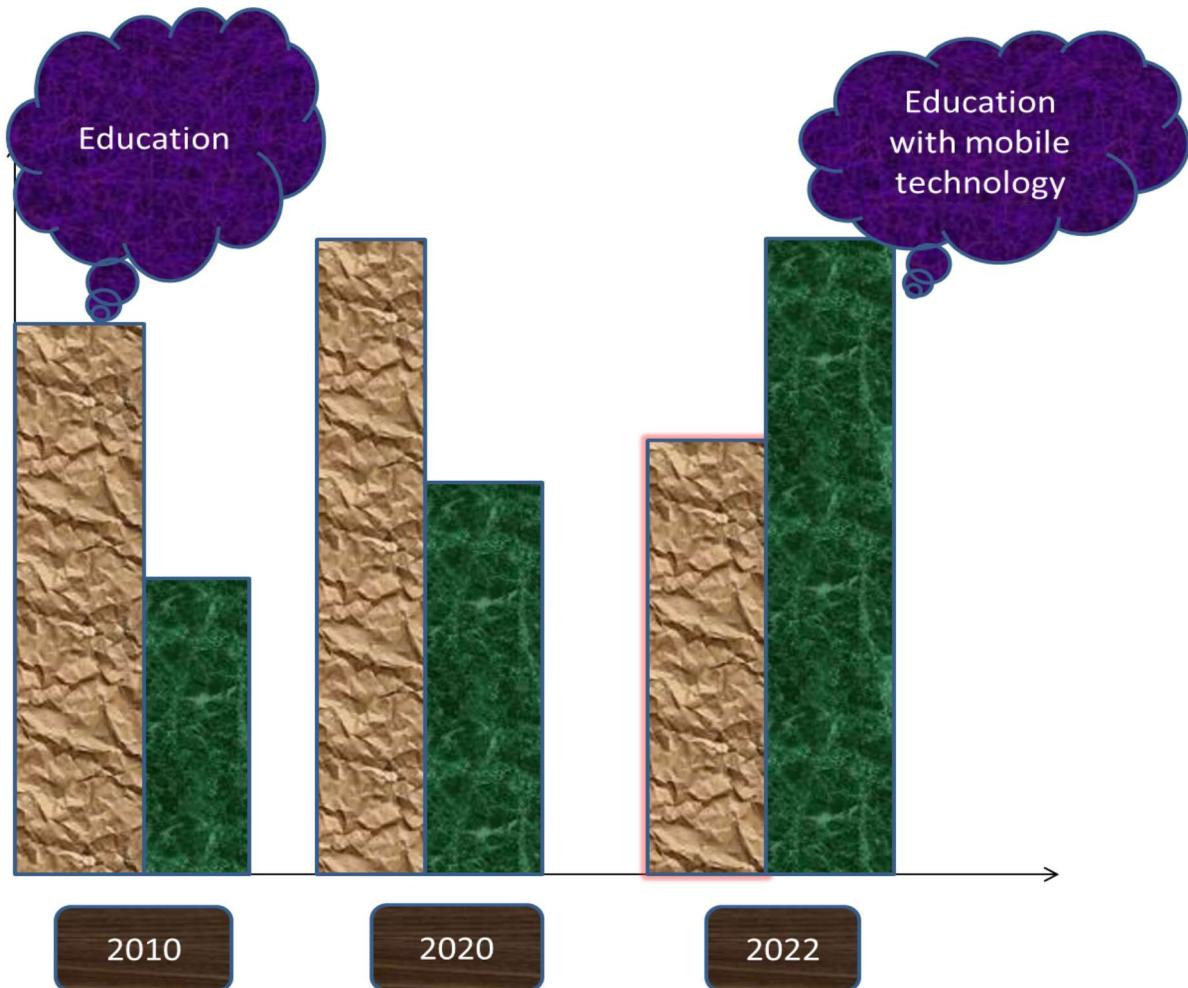
## Current Status

Mobile technologies such as iPhone apps make it easy for learners to freely access course content management systems, library websites, as well as reference services from anywhere and anytime. Also, mobile app design as well as how libraries can expand their services to support a new generation of mobile learners. This also influences the future generation too... [16] Technological developments of recent years can provide the ability to use innovative techniques and tools in education. This helps to enable users to enrich the real world with virtual content using mobile computing. Mobile augmented reality (MAR) and its distinct characteristics provide an opportunity to remedy the situation to address their specific needs to create a fully inclusive experience in education. Which describes the current limitations, gaps in research and exploring key areas future studies so that MAR technology can reach to its full potential for scope in distance education. [17]

In this world online education in the various modes has been growing constantly due to the confluence of new technologies, global adoption of the internet and intensifying demand for a workforce trained periodically for the ever-evolving digital economy. Online education will become mainstream by 2025. This editorial document country level factors that impact quantity and quality of online education. Such factors include industry, governments at local, state and country laws, ICT capacity, Internet or mobile technology diffusion etc. [18] This case study shows the effects of covid-19 pandemic on teaching and learning at universities. It examines the question of whether the current practice of emergency remote teaching in the online team 2020 will lead to the improved version which means the digitalized of teaching and learning which we can build upon in this development. This also brings a positive view in people and increases the expectations. [19]

In the people response to the demand for high quality electronic information talents in the mobile network industry also in the situation of artificial intelligence (AI) to promote technological innovation, this lines shows the overall design in target system and other modes even engineering practice , innovation practice and enterprise practice. This aims to improve student's ability. Therefore, the probability of the edge computing platform provides good conditions for long distance education. [20] **Figure 5** explains that in current day the mobile technology is increased a lot compared to past years. From this we can conclude that now-a-days the mobile technology usage has been increased. Also it is getting very useful to everyone.

**Fig 5:**



**Fig 5: The impact of mobile technology in current status.**

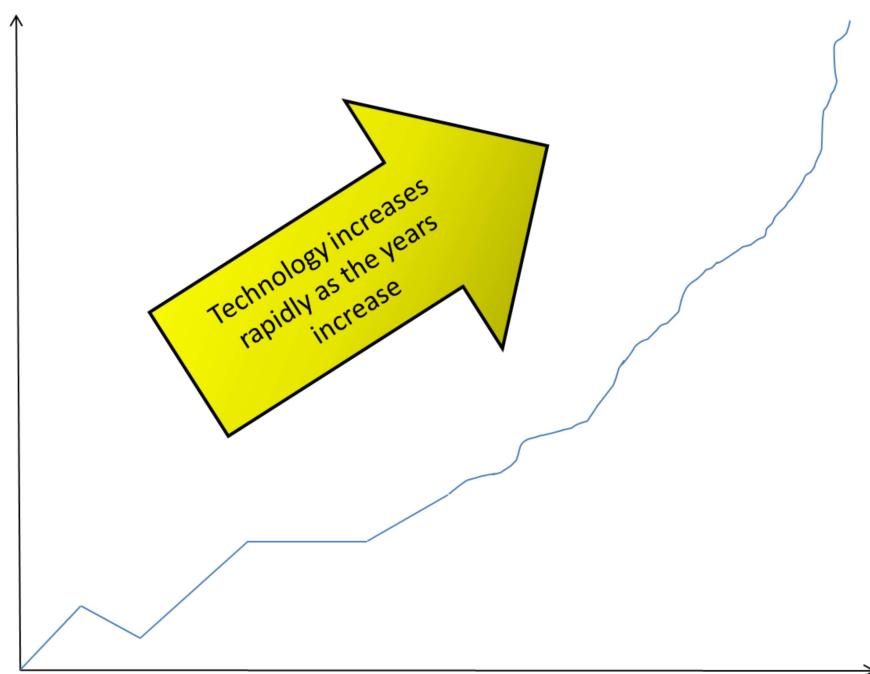
### Future Scope

In the context of the rapid growth of mobile phone penetration in developing countries, mobile telephony is currently considered to be very important for development. The information and communication technology for development (ICT4D) program of the international development research centre (IDRC), Canada has played a critical role in filling some of the research gaps through partnerships. There is much evidence also from completed projects as well as the foci of new projects. The point shows the key findings and suggests possible avenues for future research. [21] Mobile technology shows many ways for learning which occurs when learners have access to information anytime and anywhere to perform

various activities and helps the students to upgrade with respect to environment and achieve the goals and become success. The mobile technology also increases the IQ level of the person. It also depends on the person how they use and for the current situation the mobile technology is very useful and has spread around the world. [22]

Here we can know that in Chinese classrooms, whether on school grounds or online, have long suffered from lack of interactivity. Most of the online classes simply provide recorded instructions which only reinforce the negative effects of passive non participatory learning. This shows the non-importance and less usage of m-technology. From this we should know that it should be engaged in learning processes in m-technology. [23] This study represents the first research effort to explore the transition from traditional teaching into distance education. In early day when the mobile technology had been started the usage was less as many of the people did not knew or had knowledge on the technology as the days past the amount of mobile technology increased day-by-day and this technology will also increase in the future. [24]

Mobile learning has become much popular and even more in the future. As it has become an umbrella term for the integration of mobile computing devices within teaching and learning. The purpose of this article is to critically examine the principles of mobile learning. The relationship to distance education and e-learning. Exploitation of devices and technologies. Mediation with technology. Nomadic nature of learners and learning. Which shows and contributes to the field of mobile learning by providing research more precise was to identify and describe the characteristics of mobile learning environments also to describe the attributes of successful mobile learners. [25] **Figure 6** explains that we know that the impact of mobile is used very much and has been increased rapidly. And this will be increasing for future generation also. And there will be much scope on mobile technology in future too... As the mobile technologies are increasing briskly and would be identical and increase rapidly this is shown in the graph below.



**Fig 6:** The impact of mobile technology for future scope.

## **Conclusion:**

By this article we get to know various automation like research on usage of mobile technologies in education is markedly rising. The information shows the growing quantity of research on using mobile technologies in the education. Mobile Phones and PDAs are currently the most widely used devices for mobile learning. Worldwide growth and improvement in the use of mobile phones has fostered the emergence of mobile learning. In this world online education in the various modes has been growing constantly due to the confluence of new technologies, global adoption of the internet and intensifying demand for a workforce trained periodically for the ever-evolving digital economy. Mobile learning has become much popular and even more in the future as it has become an umbrella term for the integration of mobile computing devices within teaching and learning.

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