Abstract
In the modern era, mobile devices are transforming the way we communicate, live and learn. We must ensure that this digital revolution becomes a revolution in education, promoting better teaching and learning everywhere. Mobile learning and mobile technology has now become a part and parcel of a innovative learning landscape created by the availability of technologies supporting flexible, accessible, personalized education, creative and divergent thinking. Learners’ can make use of context specific resources which could help in in-sighted learning. The advent of mobile technologies has created opportunities for delivery of learning via devices such as PDAs, mobile phones, laptops and PC tablets. In the present study the investigator has taken a sample of 160 senior secondary school students from three different types of schools. The data was analyzed using various statistical techniques. The investigator found from the results that the girls were having more awareness on the utilization of mobile phones in comparison to their counterparts. Further analysis of the data revealed that rural senior secondary school students were having less awareness on the use of mobile phones as compared to their urban counterparts. From the results it was also found that the government-aided and private senior secondary school students were having more awareness of mobile phone usage as compared to Government senior secondary school students. Thus, the results of the study revealed that in the current scenario of formal education and in the era of Information and communication technologies, mobile technologies hold the key to turning today's digital divide into digital dividends, bringing equitable and quality education for all and thereby making the present society an egalitarian society. The teachers should engage themselves now in mobile-enabled education or m-learning if they have to hone their ICT and its related competencies as it is the only viable solution to all our academic and non-academic problems.
I. INTRODUCTION

The invention of the fixed telephone since the late nineteenth century in the United States changed the way that people interacted and communicated. This has been paralleled in the early twenty first century by the advent and invention of the mobile phones. The mobile phone was originally created for the purpose of business. During the last few years extraordinary growth has take place worldwide especially in the sector of Information and Communication Technology, a sector tied to mobile communications, as has been evidenced by the more than two billion handsets sold around the world in the years 2013 and 2014. Mobile and other light weight devices that are sometimes small enough to fit in a pocket or in the palm of one’s hand have now become part and parcel of every day’s life.

Nine in ten people (more than 5 billion individuals) around the world are carrying a powerful computing device in their pockets and purses. They don’t realize it, but today’s mobile phones have the computing power of a personnel computer from the mid-nineties, while consuming a fraction of the energy and are made at significantly lower cost. In India, the mobile phone has revolutionized communication and India is now one of the fastest growing markets for mobile and cell phone service, with growing usage and increasing penetration. According to Telecom Regulatory Authority of India (TRAI), there are 286 million wirelesses subscribers in India, June 2008, of which 76 million were capable of accessing data service. The increasing ubiquity of the mobile phone begs for it to be used as a learning tool.

Internet browsers are now built into an increasing number of phones, especially those that take advantage of 3G or 4G or any other enhanced networks such as GPRS. Having a browser installed on the phone opens up all the learning resources available on the Internet including Google, Learning Management System (LMS) applications, typical e-learning courseware and other tools/applications.

The Biju Patnaik University of Technology started a service in collaboration with SMS Gup Shup called the BPUTALERT, which distributes information, academic notice and calendars through SMS to students. Voice tap is another service by using this people can send their queries through SMS, and the company messages back names of experts on the subject, and then users can connect to the right expert. The field of mobile learning is in its infancy phase and developers are still fumbling with products. The new mobile technologies can be used in mediating the relationship between schools and parents. The discourses of participants with regard to use of mobile technologies have been analyzed in order to mediate the relationship between the school and the parents.

Mobile Learning

Mobile education is defined as any service or facility that supplies a learner with general electronic information and educational content that aids in the acquisition of knowledge regardless of location and time (Chen and Kinshuk, 2003). Mobile learning or e-learning tools are the result of two converging technologies----computers and mobile phones.
In recent years, the promise of ICT solutions has shifted from laptops to newer and more mobile technologies, namely Tablet computers and mobile phones. During the past few decades there has been a surge in the number and types of physical devices that can support digital platforms. It was once possible to categorize devices into three broadly delineated ‘classes’----mobile phones, Tablet computers and desktop computers----the lines between these devices have shifted and blurred. Today, technology that fits comfortably in a person’s pocket or handbag can open a plethora of educational opportunities previously restricted to stationary technology (UNESCO, Broadband Commission, 2013).

After a slow diffusion during the late 1980s and early 1990s, the mobile phone technology has boomed recently in ownership and use. There are now more mobile phones in the world than personal computers, why global sales exceeding one billion (Beckett, 2000).

In formal education settings in the developed world, the transition to digital textbooks is one of the established mobile learning trends. As e-readers and e-reading applications continue to improve which now termed as m-readers and m-reading applications, the experience of reading electronically is rapidly becoming more pleasurable and conducive to learning. If mobile learning apps are mapped to curriculum targets and designed for use in classroom or homework settings, in future rather than investing in the same textbook set or software solution for an entire classroom, school, district or country, educators will be able to choose from a variety of apps that are tailored to each individual learner, powering the personalized learning that is expected to characterize formal education. Mobile technologies will play an increasingly important role in educational assessment. Advances in how learning practices are recorded and evaluated, using different types of data collected across multiple settings and contexts, will allow researchers to monitor the various activities learners engage in and better determine the effectiveness of mobile learning interventions. Mobile technologies will also enable more self-evaluation and reflection throughout the learning process.

Mobile phones which were introduced nearly two decades ago in 1995-96 in India are becoming the dominant means of accessing communications. At the end of 2005-06, there are over 90 million mobile subscribers in India in comparison to 50 million subscribers for landlines. The increase in mobile phones has been phenomenal in comparison to landlines since the introduction of mobiles in the country (Singh, 2006). The mobile density (number of mobile phones per 100 inhabitants) in India will increase from 36.5 in 2010-11 to 81 in 2016-17. Consequently, mobile subscriber base is projected to increase form 433 million in 2010-11 to 900 million in 2016-17 (Singh, 2006).

II. NATURE OF THE STUDY
The present study examines the attitude of students’ especially senior secondary school students towards the awareness in their utilization of mobile phone services. The study also enumerated the usage patterns and thereby tries to find out the peculiarities in the utilization pattern. The researcher through this research tries to enumerate the way the young people
relate to the functionality of mobile phones as well as assess the observable phenomena. In this context, the researcher attempts to study the influence and awareness towards utilizing the mobile phones among senior secondary school students.

III. NEED OF THE STUDY

Most of the people are using mobile phones in their daily lives. Mobile phones are used to send the message and communicate the information easily. Also college students are using the mobile so as to clear the doubts on their subjects and to translate the language of the subject matter in their own medium of instruction or language from teachers and peers. Hence this study is most important to identify the awareness of the mobile phones among the senior secondary school students.

IV. REVIEW OF RELATED LITERATURE

According to Guerra (2010), although most of the people are accustomed to using frequent textures, not all of them apply shorthand texting when writing. She said that students say it does affect their writing proficiency, and it has no impact at all. Nevertheless, texting is still a problem to most people. Edwards (2011) said that texting contributes to people’s indolence when it comes to writing. In his own experience, he himself developed changes on his writing abilities ever since he engaged in text messaging. According to him, it helps in speeding up the process of communication and because of frequent usage of shorthand messages in texting, it becomes a “habit”. He sometimes caught himself using the shorthand method of writing even in doing his projects in school, which goes to show that text messaging has really affected his writing ability. When he researched on the Internet, he found that many people also believed that texting affects the writing skills of students. Edwards always feel that using the “original way” of writing when doing his school project is more difficult than using the “text messaging language”. Because of this, he became lazier. He also said that most people are hooked up to texting that they send text messages even when they are doing several activities like driving, when in a function or in a graduation ceremony. Myhra (2012) concluded that frequent sending of text-messages could affect the student’s way of writing. Students have developed the habit of writing in shorthand form, which caused them to write informally. Texting has affected the students writing and grammar proficiency negatively.

V. OBJECTIVES OF THE STUDY

The present study has the following objectives:

i.) To find out the level of significant difference between boys and girls senior secondary school students in the awareness of utilizing the mobile phones.

ii.) To find out the level of significant difference between rural and urban senior secondary school students in the awareness towards utilizing mobile phones.

iii.) To find out the level of significant difference between government, government-aided and private senior secondary school students in the awareness towards utilizing mobile phones.
V. HYPOTHESES OF THE STUDY

i.) There is no significant difference between boys and girls senior secondary school students in the awareness of utilizing the mobile phones.

ii.) There is no significant difference between rural and urban senior secondary school students in the awareness towards utilizing mobile phones.

iii.) There is no significant difference between government, government-aided and private senior secondary school students in the awareness towards utilizing mobile phones.

VI. RESEARCH METHODOLOGY OF THE STUDY

The present study was done with the use of normative survey method.

- **Samples for the Study**
  The researcher used random sampling technique for the selection of the sample. A sample of 160 senior secondary school students was collected from three different types of schools in Aligarh district that is government, government-aided and private senior secondary schools. Out of these one hundred sixty students, 75 of them are boys and 85 of them are girls.

- **Tool Used for the Study**
  In order to assess the awareness of utilizing mobile phones among the senior secondary school students, the investigator constructed a tool which is ‘**Awareness towards Utilizing Mobile Phones**’ (ATUMP) which consisted of 50 statements with four point rating scale. This tool was developed and standardized by the researcher.

- **Scoring Procedure**
  The students were asked to put their responses against the given statements by placing a (✓) tick marks. The tool consists of 28 positive and 22 negative statements. The negative statements were scored as 1/2/3/4 and positive statements were scored as 4/3/2/1 and they are strongly agree, Agree, Disagree and Strongly Disagree.

- **Statistical Techniques used**
  For the analysis of data of the present study following statistical techniques were adopted. They are:
  (i) Standard deviation;
  (ii) Arithmetic Mean;
  (iii) ‘t’-test

VII. ANALYSIS OF THE DATA

The result of the analyzed data is presented below in the following tables:

**Table 1: Difference among senior secondary school boys and girls on awareness towards Utilizing mobile phones**

<table>
<thead>
<tr>
<th>S.NO.</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>‘t’ value</th>
<th>Significant at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Boys</td>
<td>75</td>
<td>77.86</td>
<td>7.07</td>
<td>1.56</td>
<td>1.97**</td>
</tr>
<tr>
<td>2.</td>
<td>Girls</td>
<td>85</td>
<td>79.74</td>
<td>7.84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Not Significant**
From the above table 1 it can be seen that the calculated ‘t’ value is less than the tabulated ‘t’ value at 0.05 level of significance. Hence the null hypothesis that, there is no significant difference between boys and girls senior secondary school students in the awareness of utilizing the mobile phones is accepted.

**Table 2: Difference between Rural and Urban senior secondary school students on the awareness towards utilizing mobile phones**

<table>
<thead>
<tr>
<th>S.NO.</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>‘t’ value</th>
<th>Significant at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Rural</td>
<td>90</td>
<td>77.73</td>
<td>8.35</td>
<td>2.09</td>
<td>1.97*</td>
</tr>
<tr>
<td>2.</td>
<td>Urban</td>
<td>70</td>
<td>80.07</td>
<td>6.12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant

The above table 2.0 show that calculated ‘t’ value is more than the tabulated ‘t’ value at 0.05 level of significance. Hence the null hypothesis is accepted. Thus, there is significant difference between rural and urban senior secondary school students on the awareness towards utilizing mobile phones.

**Table 3: Difference between Government, Government-aided and Private senior secondary school students on the awareness towards utilizing mobile phones**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Types of School</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>‘t’ value</th>
<th>Significant at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Government</td>
<td>50</td>
<td>75.70</td>
<td>9.05</td>
<td>3.77</td>
<td>1.98*</td>
</tr>
<tr>
<td>2.</td>
<td>Aided</td>
<td>50</td>
<td>81.50</td>
<td>6.02</td>
<td>1.82</td>
<td>1.98**</td>
</tr>
<tr>
<td>3.</td>
<td>Aided</td>
<td>50</td>
<td>81.50</td>
<td>6.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Private</td>
<td>60</td>
<td>79.35</td>
<td>6.32</td>
<td>2.41</td>
<td>1.98*</td>
</tr>
<tr>
<td>5.</td>
<td>Private</td>
<td>60</td>
<td>79.35</td>
<td>6.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Government</td>
<td>50</td>
<td>75.70</td>
<td>9.05</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant **Not Significant

From the above table 3.0 it can be revealed that the Government and aided senior secondary school students and Government and Private senior secondary school students are having significant difference on the awareness towards utilizing mobile phones. But aided and private senior secondary school student’s ‘t’ value is less that the table value. So, there is no significant difference between Government-Aided and Private senior secondary school students on the awareness towards utilizing mobile phones. Hence one part of the null hypothesis is rejected, but the other part of the hypothesis that there is no significant difference between the Government-aided and Private senior secondary school students on the awareness towards utilizing mobile phones is accepted.

**VIII. Major Findings of the Study**

The major findings of the study are as following:

i.) There is no significant difference between boys and girls of senior secondary schools and between government-aided and private senior secondary school students on the awareness towards utilizing mobile phones.

ii.) There is a significant difference between rural and urban senior secondary school students between Government and Aided and Private and Government senior secondary school students on the awareness towards utilizing mobile phones.
IX. EDUCATIONAL IMPLICATIONS OF THE STUDY
The present study has the following educational implications:

i.) More measures could be taken at rural and Government senior secondary school students so as to create awareness towards utilizing mobile phones.

ii.) More programmes are to be conducted to create awareness of using mobile phones for the benefit of senior secondary school students, parents and teachers.

iii.) The teachers may be trained to teach their lessons by using the mobile phones.

iv.) Government should introduce the in the curriculum about the awareness of utilizing mobile phones.

v.) The present study could also be conducted at the level of secondary as well as on primary school students so as to create more awareness regarding the usage of mobile phones.

X. CONCLUSION
The present study concluded that the awareness towards utilizing mobile phones is more among girls than the boys of senior secondary schools. Because the girls are more enthusiastic to work and use mobile phones and they are having more using more mobile phones as used to talk on mobile phones more as compared to their counterparts. Awareness towards utilizing mobile phones is found more among urban senior secondary school students as compared to their rural counterparts because, the urban senior secondary school students are having more opportunities to use the mobile phones. But the rural students are having fewer opportunities to use the mobile phones.

Awareness towards utilizing mobile phones is found more among Government-aided and private senior secondary school students, as most of the Government-aided and private schools are mostly connected with their parents on the progress, fees, results, attendance and relevant information’s. So they have more awareness than the Government senior secondary school students. In line with the Education for All agenda, the concept of 'mobile learning for all' focuses on the need to develop mobile learning interventions for those of all learning abilities around the world, irrespective of their current access to formal education. Mobile learning has the great potential to support people who are currently marginalized from education due to socio-economic circumstances or disabilities. The potential of mobile learning is to bring educational materials and support to resource-poor communities. One key measure of success in the promotion of mobile learning for all will be the development of mobile learning interventions that are designed to directly address the Education for All goals. As commercial interest play an important role in educational technology over the next fifteen years, policy-makers will need to make sure that equity of opportunity is not eclipsed by a market-driven agenda. In the worse-case scenario, the main beneficiaries of mobile learning are those who can afford to pay for educational content and access to technology and connectivity. Policy-makers will need to ensure that marginalized communities are not excluded from mobile learning opportunities, and that initiatives are designed to address the needs of all learners, not just those who can pay for services.
The present research is about awareness on the utilizing mobile phones among senior secondary school students and the results obtained are new on this area of research. In future M-teaching and M-learning are a new creative approach and technique to apply in education and for futuristic developments and requirements of the society.

XI. REFERENCES


To Cite This Paper