The Use of Mobile Devices for Collaborative Learning in High Schools: is it Possible in Namibia?

Osakwe Jude Odiakaosa, Nomusa Dlodlo and Norbert Jere

This study aimed at investigating if the use of mobile devices for collaborative learning in High Schools of Namibia is possible. The population of the study was made up of learners from six out of the fourteen regions of Namibia. Three schools from each region were selected and a total of seven hundred and twenty (720) learners (forty (40) learners from each school) were randomly selected. A mixed method approach which involved the use of survey questions and interviews was employed and data collected was analyzed using the SPSS. The findings among others revealed that the majority of learners in Namibian high schools are mobile ICT literate. Many of the learners can access the internet, download education materials and applications from the internet using mobile devices, access social networking sites, conduct searches for material, send emails, read assignments and post comments on blogs. Finally recommendations were made based on results found.

Keywords: Mobile technology, collaborative learning, devices, High schools, teachers, learners.

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Manuscript History
Received on 17th August, 2017
Revision Received on 19th September, 2017
Accepted on 20th September, 2017

Journal Webpage:
http://www.zeeztarz.com/africa-education-evaluation

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Introduction

Over the years, there has been increasing attention to the development of mobile applications which has led to rapid mobile networks development. The spread and proliferation of mobile devices and wireless technologies have come with huge prospects to e-learning, in the area of ubiquity, extensiveness, personalization and flexibility as suggested by (Caballe, Xhada & Baroli, 2010). This helps individuals to make use of the glaring opportunity provided by this technology to share information. The mobile technology has also brought out a variety of learning resources on numerous subject areas. This information sharing has triggered key changes in peoples’ daily lives in the way communication is done, how information is shared and retrieved, interact and collaborate and socialize with one another. Socialization using mobile technology plays a great role in teaching and learning. This is so because; the use of mobile devices for collaborative learning provides a medium in which learners can link up and interact with their classmates and teachers (Caballe et al., 2010).

Bearing in mind that there are possibilities of seamless communication between mobile devices and other devices of similar technology, it has become very easy for learners to share files, simple messages and other essential information necessary for their academic achievement. There is also the possibility of learners collaborating with their classmates or teachers when they are connected to a shared network. Komakech (2017) noted that mobile devices are efficient in delivering high quality education to a large number of students. This will further enhance prospects for interaction and shared experiences using mobile devices.

Furthermore, enormous increase in the use of smart mobile devices such as; smartphones and tablets have obviously made them a choice of technology for learning. The generation of learners in this 21st century are always with mobile technology of various types and have passion for it to the extent that they find it difficult to do without it. This is due to the pleasure the learners derive from the seamless connectivity and the interactive features in the devices which makes them to prefer group-based activities (Cobcroft, Towers, Smith, & Bruns, 2006). These technological group-based activities are far more attractive than the traditional modes.

In the traditional type of interactivity, the teacher passes knowledge to a group of learners through face-to-face method and within restricted time frame. This is a common type of teaching not minding its limitations. One substantial limitation of this type of method is that learners are passively engaged in learning. Even though there are varieties of activities used to engage the learners, many of the activities are not reflective to the kind of learning experience they would have hitherto gained compared to technology enhanced learning. Furthermore, the traditional mode is time consuming and can only be carried out in a specific learning setting unlike the use of a technology driven lesson which encourages and encompasses ubiquitous learning. A good example of a technology driven system are the clickers, the classroom response system, learners response system or class communication system (Beatty, 2004; Caldwell, 2007; Fies & Marshall, 2006). Clickers are used by learners in the classroom for responding to multiple choice questions. Clickers are known to be useful when engaging learner during lessons (Beekes, 2006).
Research Problem
Mobile devices have been seen to be of great importance in the area of academic achievement of learners. It has proven to be one of the learning tools that will facilitate learning capabilities because of its ubiquitous mode of usage. In Namibia, much has not been known about its usage, particularly in the area of collaborative learning. High schools in Namibia are still grappling with using the normal stand-alone computers found in most computer laboratories. This paper intends to find out if using mobile devices for collaborative learning will be possible in Namibian high schools.

Research Objectives
Some basic aspects are needed to be considered if learners are to achieve coordinated collaboration. The learners should take cognizance of who is around (social awareness)? What is going on (action awareness)?, and how are things going (activity awareness)? The main objective of this study is to ascertain if the use of mobile devices for collaborative learning among learners in high schools is possible in Namibia. Specifically, this study intends to

- Assess the usage pattern of mobile devices in 6 (six) out of the 14 regions of Namibia.
- Assess the various ways mobile technology is being used by Namibian high school learners both for educational and none educational purposes.

Theories of Collaborative Learning
Collaborative learning generally encompasses a variety of methods learners can use to achieve positive learning. It is a transformation from the conventional or traditional shift from traditional teacher-centered approaches to present-day learning approaches, including learner-entered, social learning, active learning, and the constructivist type of learning (Kirschner, 2001; Komakech, 2017). Furthermore, collaborative work broadly refers to “what learners do together, to explore a solution to a problem or to prepare a project, and may refer to a variety of strategies in which students interact with each other” (Osman, Duffy, Chang, & Lee, 2011, p.549) which enhances metacognitive awareness and problem-solving abilities (McLoughlin & Luca, 2000).

Extensive literature and research have shown the benefits of peer and collaborative learning. For instance, Boud, Cohen and Sampson (2002) noted that interactive engagement takes place in groups by where learners work and learn through exchange of ideas, experiences and skills. Learners are challenged to think in different ways, fostering critical reflection and reassessment of views.

Another area where collaborative learning can facilitate group learning is social interaction. According to Vygotsky’s theory of (1978), “social interaction plays a fundamental role in the development of cognition of an individual since knowledge is constructed through interaction with others (social constructivism)”. Habermas’ theory of communicative action specifies that “meaning emerges interactively” Habermans’ (1984), while Garrison’s (1992) suggests that “meaning is created through communicative actions”. This means that there is a connection between critical thinking, social interaction and deep learning since cognitive skills are developed in a social context.
Methodology

This study utilized a mixed methods design. Kothari (2004) noted that mixed method, as mode of data collection and analysis, uses both qualitative and quantitative methods. It therefore provides better outlook on the data rather than using either one of the methods. Open-ended response question on survey instrument, discussions and interviews carried out with learners were used to obtain qualitative data.

Research population

A population is described as a group of individuals/item who possess specific characteristics and from which a sample is drawn to determine the parameters or characteristics (Creswell & Plano Clark, 2007; Maree & Pietersen, 2007; Singh, 2007). The population used for this study consists of all the learners in high schools of Namibia. Since studying the entire population will not be possible, there are evidences from numerous sources that supports that a portion of the population known as a sample being selected to participate in the study (Babbie & Mouton, 2010; Brynard & Hanekom, 2006; Maree & Pietersen, 2007; Strydom, 2011). The benefits of using a sample, according to Bergman (2008) as well as Mitchell and Jolley (2007), is that sampling save costs and time. With the use of a random sampling procedure, three schools were selected from each category of regions. These regions are Hardap, Oshana, Khomas, Erongo and Otjozondjupa. Convenience sampling technique was used to select the regions which were categorized as Central, South, Coastal and North. Convenience sampling were used by virtue of its accessibility (Bryman & Bell, 2003). Convenience sample also “allows for a less expensive, less time consuming and geographically wide data collection” (Saunders et al., 2012).

Participants

A sample of high school learners was be drawn from eighteen (18) high schools that meet the criteria explained above on sampling procedure. The students were selected primarily from grades eleven (11) and twelve (12). This is because they (grade 11 and 12) have spent more time in the schools and are more mature. Twenty (20) students were randomly drawn from each grade, giving a total of forty (40) students per school and one hundred and twenty (120) students per region. This made a total of seven hundred and twenty (720) students from all the schools. This is explained in the table below.

Table 1: Sample Size

<table>
<thead>
<tr>
<th>SCHOOLS</th>
<th>LEARNERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of selected regions</td>
<td>Number of learners per school</td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Number of Schools per region</td>
<td>Number learners per region</td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total number of schools in selected regions</td>
<td>Total number of learners in selected regions</td>
</tr>
<tr>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>
Data analysis

The questionnaire captured quantitative data generated from the question. The questionnaire was aligned to the objectives of the research. The Statistical Package for Social Sciences (SPSS) was employed for the analysis. Numerical tables and charts were used to discuss the finding while audio tapes were used for a detailed verbal description of the characteristics, cases, and settings through interviews. Each interview was transcribed from the audio recording as it is (verbatim). After the transcription process, editing was done to improve the readability of the transcript.

Analysis and discussion

This section discusses and analyzes studies conducted by researcher on the use of mobile devices for collaborative learning. The data collected was analysed using the SPSS. In the end the findings were discussed.
### Table 2: Usage pattern of Mobile Devices by Learners in the Six (6) Regions

<table>
<thead>
<tr>
<th>ITEMS ASSESSED</th>
<th>ERONGO</th>
<th>HARDAP</th>
<th>KHOMAS</th>
<th>OTJOZOJO</th>
<th>OSHANA</th>
<th>OSHIKOTO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you use the device for academics purpose?</td>
<td>24.6</td>
<td>75.4</td>
<td>23.6</td>
<td>76.4</td>
<td>9.6</td>
<td>87.7</td>
</tr>
<tr>
<td>Do you use any application related to your status as a learner?</td>
<td>31.9</td>
<td>63.8</td>
<td>34.4</td>
<td>60.9</td>
<td>17.6</td>
<td>82.4</td>
</tr>
<tr>
<td>Do you have computer labs in your school?</td>
<td>8.3</td>
<td>91.7</td>
<td>6.7</td>
<td>93.3</td>
<td>17.8</td>
<td>82.2</td>
</tr>
<tr>
<td>I know how to access the internet from mobile device</td>
<td>9.7</td>
<td>90.3</td>
<td>4.0</td>
<td>96.0</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>I know how to download educational materials on a mobile device</td>
<td>21.4</td>
<td>78.6</td>
<td>17.6</td>
<td>82.4</td>
<td>13.5</td>
<td>86.5</td>
</tr>
<tr>
<td>I can to download mobile educational applications on a mobile</td>
<td>25.0</td>
<td>75.0</td>
<td>24.3</td>
<td>75.7</td>
<td>13.5</td>
<td>86.5</td>
</tr>
<tr>
<td>I can find definitions of a word I don't know on a mobile device</td>
<td>5.7</td>
<td>94.3</td>
<td>1.4</td>
<td>98.6</td>
<td>4.1</td>
<td>95.9</td>
</tr>
<tr>
<td>I know how to use a mobile device as a calculator</td>
<td>15.5</td>
<td>84.5</td>
<td>14.9</td>
<td>85.1</td>
<td>5.4</td>
<td>94.6</td>
</tr>
<tr>
<td>I know how to access social networking site on a mobile device</td>
<td>12.7</td>
<td>87.3</td>
<td>13.5</td>
<td>86.5</td>
<td>5.4</td>
<td>94.6</td>
</tr>
<tr>
<td>I know how to use mobile device to look up something that I didn’t know or didn’t understand during class</td>
<td>14.1</td>
<td>85.9</td>
<td>19.2</td>
<td>80.8</td>
<td>17.6</td>
<td>82.4</td>
</tr>
<tr>
<td>I know how to send e-mail on a mobile device</td>
<td>42.3</td>
<td>57.7</td>
<td>36.5</td>
<td>63.5</td>
<td>18.9</td>
<td>81.1</td>
</tr>
<tr>
<td>I can post a comment to a blog or respond to a post on a mobile</td>
<td>12.7</td>
<td>87.3</td>
<td>9.5</td>
<td>90.5</td>
<td>9.6</td>
<td>90.4</td>
</tr>
<tr>
<td>Use mobile device for educational and non-educational purpose</td>
<td>9.9</td>
<td>87.3</td>
<td>11.0</td>
<td>89.0</td>
<td>8.1</td>
<td>91.9</td>
</tr>
</tbody>
</table>

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Use of mobile device for academic purposes by learners

Researchers have validated prospects of mobile devices as they have been found to enable engagement (Rossing et. al, 2012). Usage of mobile devices for academic purposes is not only about being in a formal environment only but also about informal learning outside the classroom environment. Majority of the learners in all the regions indicated that they use mobile devices for academic purpose. For instances, in Erongo 75.4% were positive while 24.6% of the learners where negative. This is same with Hardap where 76.4% of the learners use mobile devices for academic purposes and 23.6% do not. There is a sharp increase on the number of learners that use mobile devices for academic purposes in Khomas region. 97.7% of the respondents indicated that they use it while 2.3% said they do not use it. The case of Khomas region may be unique in the sense that it is an urban area where there is likely to be more usage of these mobile devices because of the availability of more network infrastructure. Furthermore, in Otjozonjupa region, 69.7% of the learners use mobile devices for academic purposes while 28.9% do not. In Oshana 68% use it and 32% do not. And lastly, 87% of the learners in Oshikoto region indicated that they used mobile devices for academic purposes while 13% of the learners do not. On the whole, an average 79.03% of learners in the six (6) regions indicated that they use mobile devices for academic purposes while 20.03% do not. It could be aptly said that with the large percentage of learners that use mobile devices for academic purposes, there is hope for collaborative learning in Namibian high schools. This is in agreement with Schuler, Carly, Winters & West (2012) who noted that mobile learning facilitates learners’ ability to understand key concepts and personalize their learning experience.

Computer Labs in Schools

One positive discovery in this research is that all the schools visited have computer laboratories. Butzin (2001) noted that if computers are available in schools learners can easily access and use them and it will in turn make a greater impact on their learning. This was affirmed by the learners in their responses. Although 7.4% of the learners said they do not have computer labs in their schools. The learners that indicated that there are no labs may be unaware due to the fact that they may not have had access to the labs.

Learner access to the internet from a mobile device

The interest in harnessing their power for education and training through the internet increases as the use of mobile devices increases (Ally & Tsinakos, 2014). This means that mobile devices have a role to play in the area of internet access. 9.7% of the learners in Erongo region said that they do not know how to access the internet from a mobile device. This also goes for the Hardap, Otjozondjupa and Oshana regions, where 4%, 4.1% and 12% respectively of the learners said that they do not know how to access the internet. Summarily, the percentage of learners in the 6 (six) regions that cannot access internet from their mobile devices is 2.7%. Also, majority of the learners in all the 6 (six) regions have access to the internet from their mobile devices. This can be seen from their responses. For instance, in Erongo 90.3% of the learners have access to internet from their mobile devices. There is a similarity in the responses of learners in the Khomas and Oshikoto regions where they all affirmed that they can access internet from their mobile devices. This is also the case in Otjozonjupa. 95.9% of the learners agreed that they can
access the internet through their mobile device. This means that the majority of the learners are mobile ICT literate. Therefore since increasing internet access through mobile Learning devices can contribute to the advancement of the mobile learning (Ally & Tsinakos, 2014), it becomes advantageous for the users.

**Downloading educational materials onto a mobile device**

One of the benefits of mobile learning devices is that learners an easily download on their mobile devices, while teachers can upload excerpts from texts as pdf files and sharing them with learners (Geist, 2011). From the responses below, 21.4% of the learners in the Erongo region cannot/have not downloaded educational materials onto a mobile device. This is the same with learners in Hardap, Khomas and Otjozonjupa Regions where 17.6%, 13.5% and 14.7% respectively cannot download educational material. The percentage is smaller in Oshana and Oshikho which has 8% and 4.3% and the percentage of learners that do not know how to download educational materials onto a mobile device. This group of learners are not in a position to download educational materials from mobile devices should the need arise. In short, this means they are not doing any mobile learning. It is also possible that they use the phones to download other things besides educational material probably. The percentage of learners that can download educational materials onto a mobile device is higher. In Erongo the responses are 78.6%, Hardap is 82.4%, Khomas 86.5, Otjozonjupa 85.3%, Oshana 92% and Oshikoto 95.7%. The total average percentage of Learners that cannot download educational material onto their mobile devices in all the six (6) regions is 13% while those that can download is 87%.A high number of leaners have the potential to learn and research with their devices based on the results above. Does it mean that these leaners are using this downloaded material for academic work already? Studies have found that mobile devices have applications that serve as study aides and productivity tools for learners. Not only were learners able to use “apps” to help create flashcards for studying, but they were also able to access and edit documents on Google docs for assignments (Miller, 2012).

**Downloading applications onto a mobile device**

The software that is used for mobile learning includes mobile applications designed specifically for learning purposes Ogbu (2015). Even though some of them could be in form of educational games they still go a long way to improving the learning capabilities of individual. From the survey carried out in Khomas and Oshikoto regions, the total number of learners that can download educational materials and also download educational applications are equal. Khomas has a percentage of 13.5% learners that cannot download educational materials and applications while 86.5% can. In Oshikoto 95.7% can do both while 4.3 cannot. This is also the case with Oshana and Otjozonjupa regions where each region has 80% of their learners being able to download educational applications and 20% cannot. In Erongo 75% can and 25% cannot and Hardap 75.7% can and 24.3% cannot download educational applications on a mobile device. In summary, 82.1% of learners in the 6(six) regions know how to download educational applications onto a mobile device while 17.9% cannot.

**Searching for definitions of words**

Learners report that mobile devices facilitate their ability to understand key concepts and personalize their learning experience (Schuler et. al, 2012). This affirms that these devices have
the capacity to broaden the learners’ knowledge. This is seen in their responses. 94.3% in Erongo, 98.6% for Hardap, Khomas responses are 95.6% with Otjozonjupa 96% while Oshana has 80% responding affirmatively and Oshikoto 95%.

Using a mobile device as a calculator
Mobile phone use in education, has moved from just sharing information to being used for mathematical problem solving (Aker, Ksoll, & Lybbert, 2012; Cowan & Butler, 2013; Lepp, Barkley, & Karpinski, 2015). The symbolic and graphic calculators are the most commonly used calculators known also as CAS (Computer Algebra Systems). Along the trends of current education and the improved capabilities of hardware, calculator makers invest in making the personal tool to function also as a communication device in class. The responses from the learners show the importance of calculators in their lives. The percentage of learners in the 6(six) regions who can conduct a word search and those that can use a calculator (93.5% and 84.5% respectively) is minimal because the learners have access to mobile devices. The question to ask is why the minority who are not using the calculator and word search are not encouraged like the majority. The calculator on a smartphone has more features. Hence, learners find it difficult to use mobile calculators which have more features. This explains the high percentage usage of calculators not minding the fact that 70.4% of the learners use smartphones.

Access to social networking sites
It has be said that “the collaborative web is rich in applications that can facilitate knowledge sharing, interaction, collaboration and communication, and the collaborative web therefore supports social networked learning in which learners use personal tools for self-directed and problem based learning” (Munguatosha, Muyinda and Lubega, 2011). Social networking media is very popular among youths the only thing that can keep them from such sites is if they do not have access to an internet enabled smartphones. This can be seen in the number of learners that do not have access to social networking sites. For instance in Erongo only 12.7% of the learners do not access social media but a total of 87.3% of the learners can. Also in Hardap, 13.5% of the learners cannot access social networking sites whereas 86.5% of them can access it. This is also the case with the Khomas region where only 5.3% of the learners indicated that they do not know how to access the social networking sites and 94.6% can. 90.4% of the learners in Otjozondjupa region can access social networking site while 9.6% of the learners cannot. Though there is a little reduction in the percentage of learners who indicated that they can access social networking site from a mobile device (68%) in Oshana region, the percentage is still more than the learners that cannot access it.

There is also a significant number of leaners that can access social networking site from a mobile device in Oshikoto region (82.6%) where the percentage of those that cannot is 17.4% on the whole the average percentage of learners that can access social networking sites from a mobile devise in the 6 (six) regions is 84.9% while those that cannot is 14.8%. Judging from the responses from the learners, it will not be out of place to say that mobile learning could be made interesting and appealing to young people if educators take advantage of social media in education dissemination. This is in agreement with Greenhow (2011) who stated that “there is a variety of choices to be made by young people over what, how, and with whom they learn in a
wide range of settings: classrooms, after school programs, home-school, formal online learning programs, and web-enabled spaces that dominate popular culture”. Therefore “since the social networked learning connects learners in the virtual space it will enable them to interact and collaborate as they execute learning activities, and through their participation they actively engage in the teaching and learning process and experience flexible environments for communication, global information sharing, personalized learning and independent learning in respect to time and place” (Munguatosha et al, 2011).

**Using mobile device to look up something not understood during class**

There is an emerging global trend in the use of mobile phone in education; learners have particularly been using this tool in searching for information (Aker, et al., 2012; Cowan & Butler, 2013; Lepp, et al., 2015). This is where learners use these devices to understand certain things that are not clear. The responses from learners in the 6 (six) regions indicates that a large number of learners use mobile devices to look for something they do not understand during class. From their responses, 85.9%, 80.8%, 82.4%, 81.1%, 84%, and 91.3% of respondents from Erongo, Hardap, Khomas, Otjozonju, Oshana and Oshikoti respectively, indicated that they use mobile devices to look for something they do not understand during class while 12.7%, 192%, 17.6%, 18.9%, 16% and 8.7% of the respondents from Erongo, Hardap, Khomas, Otjozonju, Oshaha and Oshikoto respectively, indicated that they do not look up something they did not understand during class. In summary, an average of 84.5% percent of the learners in the 6 (six) regions look up something they do not understand in class form their mobile devices while an average of 15.5% of the learners do not.

**Sending email**

One interesting aspect of mobile learning according to Gikas and Grant (2013) is that learners can used mobile devices to interact with each other and share their knowledge and skills and also send email and get feedback through email from their teachers. There is a sharp drop in the percentage of learners that use their mobile devices to send emails compared previous responses. This is understandable because learners are more at home to using their devices for chatting and sending SMSs than sending email. For instance, in Erongo region, 43.2% of the learners said they do not know how to send emails on a mobile device while 57.7% of the learners do. Also in Hardap 63.5% of the learners indicated that they know how to send email on a mobile device while 36.5% of them do not. The Khomas and Oshikoto regions had a better response with 81.1% and 87% of the learners agreeing that they know how to send emails on a mobile device with 18.9% and 13% of them negative respectively. 58.1% of the learners in Otjozonjupa can send emails on a mobile device while 41.9 cannot. This region that has the highest number of learners that do not know how to send emails using a mobile device (52%) is Oshana while 48% can. On the average, 34.1% of the learners in the 6 (six) regions cannot send email while 65.5% can.

**Posting comments on a blog**

The blog is a new social media concept and youths are usually explorers. That is why there is a noticeable high rate of acceptance because the features enhance communication and information gathering and sharing. For instance the average percentage of leaners that access social
networking sites on a mobile device in the 6 (six) regions is 84.5% while the average percentage of learners that use mobile devices to post comments on blogs and respond to posts on a mobile device is the 6 (six) regions 83.7% respectively. This gives credence to the fact that the social media is a very good tool for information dissemination and knowledge sharing among the learners. Though special training is needed so as to enable them have knowledge on how to use the social media for pedagogy.

Usage of educational applications
Several studies reveal that learners frequently report using different types of electronic media such as cell phones while in class, studying, and doing homework (Jacobsen & Forste, 2011; Junco & Cotton, 2012; Sanchez-Martinez & Otero, 2009; Tindel & Bohlander, 2012). Learners using mobile devices for non-educational purposes could be viewed at in the area of playing games. Though it is worthy of note that most of these games are also educational games. But in essence, the usage of mobile devices, whether for educational or non-educational purposes signifies that these learners have one thing or the other to do with the devices which give them self-satisfaction. Therefore it does not come as a surprise that majority of these learner agreed that they use mobile devices for educational and non-educational purposes. In Erongo, 87.3% of the learners indicated that they used mobile devices for educational and non-educational purposes while 9.9% of the learner where negative. This trend cuts across all the learners in the other regions which has their responses as follows: Harp, 89% positive and 11% negative; Khomas, 91.9% positive and 8.1% negative; Otjozonjupa, 94.7 positive and 4.0 negative; Oshana, 92% positive and 8% negative; and Oshikoto, 91.3% positive and 8.7% negative. Putting together the average percentage in all the 6(six) regions, the learners that do not know how to use mobile technology for educational and non-educational purpose is 8.3% while the learners that knows how to use it is 91.3%.

Educational applications such as games can enhance learner skills in different subjects. This is because games are absorbing and also exciting to most young people. 55.9% of the learners say that they do not use any educational applications to enhance their skills, while 44.1% say they do. The truth is that all games have a lesson to be learnt from them; hence the answer should be positive for all that have access to the games. The explanation can also be that mobile learning and technology have not been adopted in their schools. The few learners that take interest in educational games are self-motivated.

Conclusion
There is every certainty that the time of collaborative learning is now. Evidences have shown that active engagement of learners will be achieved through this process. Fundamentally, mobile technology-collaborative learning will give learners access to information, it will also enhance information sharing, skills acquisition and sharing of knowledge, ideas and ultimately facilitate group interaction. This can be seen in their responses where learners agree that they have access to the internet and can also download materials from the internet. Collaborative learning environment brings about a shift of learning approach from traditional approach to the technology mediated approach.
The findings and results of this study are also in line with other studies carried out in online collaborative environments (Buraphadeja & Kumnuanta, 2011; Nam & Zellner, 2011). The results are also in alignment with the conclusion of other researchers that social interactions were essential factor to predict quality of learning in technology-mediated instruction (Gowan & Graham, 2009) and motivation (Csikszentmihalyi & Schneider, 2000). Furthermore, the qualitative data revealed that learners liked the information sharing (post on blogs and commenting on networking sites).

Collaborative learning using mobile technology in Namibian high school is long overdue. Since learners are already making use of their mobile devices for various purposes. It means the country is already ICT compliant and a little push will make it work. The researcher is of the opinion that collaborative learning using mobile devices should be given its pride of place in Namibia high schools in order to make the learners more active, increase their learning experience and achieve better academic performance.

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Cite Article as: