Dynamics of Mobile Internet Device in Enhancing the Realization of Universal Basic Education Objectives in Nigeria

By Dr. Oyeyemi, S.O., Akeusola, Bolanle Nofisat & Mustapha Sulaimon

Adeniran Ogunsanya College of Education

Abstract- The introduction Universal Basic Education (UBE) Programme is apt, timely and relevant, considering Nigeria’s dire need for all round development. However, there are pedagogical challenges, facing the realization of the UBE programme. Content delivery in classrooms still tilt towards the traditional method of teaching and not fully inclined to digital content delivery through information and communication technological devices. This study therefore, seeks to establish the efficiencies in mobile internet device features like mobile internet and text message (SMS). Questionnaire was the instrument for the study, tagged Mobile Device Assisted Learning Questionnaire (MDALQ). Validity was obtained through face and construct validity while the test retest method was used to obtain a reliability co-efficient of 0.87. A sample of 100 senior secondary school students were randomly selected from four senior secondary schools in Ojo Local Government Area of Lagos State. Findings revealed that mobile internet search engines, for instance Google, Teoma, Zworks and Mamma do efficiently facilitate learning both within and outside classroom, thereby, promoting student-centred and activity-based learning, such as collaborative, discovery, interactive and innovative learning strategies.

Keywords: dynamics, mobile internet device, realization, universal basic education.

GJHSS-A Classification: FOR Code: 139999

Strictly as per the compliance and regulations of:

© 2019, Dr. Oyeyemi, S.O., Akeusola, Bolanle Nofisat & Mustapha Sulaimon. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License (http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.
Dynamics of Mobile Internet Device in Enhancing the Realization of Universal Basic Education Objectives in Nigeria

Dr. Oyeyemi, S.O.*, Akeusola, Bolanle Nofisat* & Mustapha Sulaimon*

Abstract: The introduction Universal Basic Education (UBE) Programme is apt, timely and relevant, considering Nigeria’s dire need for all round development. However, there are pedagogical challenges, facing the realization of the UBE programme. Content delivery in classrooms still tilt towards the traditional method of teaching and not fully inclined to digital content delivery through information and communication technological devices. This study therefore, seeks to establish the efficiencies in mobile internet device features like mobile internet and text message (SMS). The instrument was the Mobile Device Assisted Learning Questionnaire (MDALQ). Validity was obtained through face and construct validity while the test retest method was used to obtain a reliability co-efficient of 0.87. A sample of 100 senior secondary school students were randomly selected from four senior secondary schools in Ojo Local Government Area of Lagos State. Findings revealed that mobile internet search engines, for instance Google, Teoma, Zworks and Mamma do efficiently facilitate learning both within and outside classroom, thereby, promoting student-centred and activity-based learning, such as collaborative, discovery, interactive and innovative learning strategies. Text messages (SMS) and mobile dictionaries enhance students’ spellings, vocabularies, communication skills and use of English. The study recommended that Mobile devices such as cell phones (consequent to its availability) have the potential to effectively support quality learning necessary for the realization of the UBE objectives in Nigeria. This will enable the nation to cope educationally with the increasing ICT challenges in the Global drive towards attaining the Millennium Development Goals (MDGs).

Keywords: dynamics, mobile internet device, realization, universal basic education.

I. Introduction

The media technology dynamics, especially the transition from analogue to digital format, no doubt, requires a shift in media skills acquisition. The World Summit on the Information Society (WSIS) recommended that everybody should have the opportunity to acquire ICT skills in order to understand, participate actively in, and benefit fully from the emerging knowledge societies. Capacity building in the use of ICT for education, particularly with regards to improving literacy and teacher training, needs to be addressed for lifelong learning for media and information specialists (teachers inclusive), especially in a developing country like Nigeria. The Universal Basic Education (UBE) Programme could not have been introduced at a better time than now that the nation is in dire need of all round national development. The Universal Basic Education (UBE) programme of the Federal Republic of Nigeria was however launched by President Olusegun Obasanjo 30th September, 1999. The UBE programme as spelt out in the implementation guidelines, aims at achieving the following specific objectives.

1. Developing in the entire citizenry, a strong consciousness for education and a strong commitment to its vigorous promotion.

2. Provision of free universal basic education for every Nigerian child of school going age. • Reducing drastically the incident of drop out from the formal school system.

3. Catering for young persons, their schooling as well as other out of school children or adolescents through appropriate forms of complementary approaches to the provision and promotion of basic education.

4. Ensuring the acquisition of the appropriate level of literacy, numeracy, and manipulative, communicative and life skills as well as the ethical, moral and civic values needed for laying a solid foundation for the life skills.

The federal government has committed reasonable financial input to the UBE programme particularly in the construction of classrooms, offices, stores and toilets in several primary schools across the Nigerian nation. Assistance and help have been received from the World Bank, the United State Agency for International Development (USAID), and the Petroleum Trust Fund (PTF) among others for the development of infrastructure, resources and materials for the UBE programme. Training and retraining programme for teachers have been carried out by the National Teachers Institute (NTI) and Universal Basic Education Objectives in Nigeria.
Education Commission (UBEC) in order to ensure the success of the programme in Nigeria. The auspices of the British Council have also enhanced teacher retraining programmes, Innovative techniques of teaching have been emphasized in the various training and retraining of staff in the core subjects. School based assessment and improvisation of instructional materials have also been focused (NTI, 2006). Though the Federal Government has also committed funds to the provisions of vehicles, and boats for the monitoring of the UBE programme, the formidable landmark input was the presidential assent to the UBE Bill on 28th May, 2004.

These laudable steps aimed at achieving the millennium goals on educational attainment in Nigeria have however suffered some set back of some pedagogical challenges, facing the realization of the UBE programme because content delivery in classroom still tilt to the traditional method of teaching. Despite the above arrangements, the efficacy of UBE programme in Nigeria to prepare teachers for the 21st century has been questioned by a number of studies (Obanya, 2004 & Ololube, 2006). Teacher- Training Institutions have also been criticized for their inability to produce teachers who are properly grounded in pedagogy and content as well as having the ability to collaborate professionally in a working environment. Educationists observed that the transition from academic theories in universities to classroom practice has often been very sharp suggesting that student -teachers are not often properly groomed to put into practice current pedagogy and interactive skills that have been theoretically learnt. Learning Materials are not consistently available (students depend on their own notes copied from the blackboard) and thus written materials do not play a sharp suggesting that student -teachers are not often properly groomed to put into practice current pedagogy and interactive skills that have been theoretically learnt. Learning Materials are not consistently available (students depend on their own notes copied from the blackboard) and thus written materials do not play a coherent and pervasive role in the provision of a strong cognitive and structure-giving basis for the development of the required professional knowledge, skills and attitudes of an effective teacher.

II. Literature Review

In a knowledge driven economy pulled by globalization and continuous technological advancement, the term 21st century skills have brought global awareness each country needs to constantly update its workforce in preparation for the future. Information and media technology skills with a focus on accessing information efficiently and effectively, evaluating it critically and competently, and using the information accessed accurately and creatively to solve problems. It also involves understanding how and why media messages are constructed, creating one’s own media products; and using technology as a tool for research, organization, evaluation and communication, and finally, managing, integrating, evaluating and creating information to successfully function in a knowledge economy (P21 Framework Definitions, 2009).

Nigeria, like other developing countries, in the bid to achieving this globalization feat in March 2001, approved the National Information Technology Development Agency (NITDA), that was charged with the mission to make Nigeria an ICT-capable country in African, as well as a catalyst for qualitative UBE programme and global competitiveness (ICT4D Nigerian Annual Report, 2007). In addition, the long-term strategic development plan of Nigeria “Vision 2020” contains elaborate goals for ICT sector. Stating the imperative for Nigeria to apply and promote ICT strategy to facilitate rapid growth and development.

This will involve the development of a vibrant ICT sector to drive and expand the national production frontier in agriculture, manufacturing and other service sectors. It would also require the application of the new knowledge to drive other soft sectors governance, entertainments, education, public sector, media sector, tourism and so on (FMCT, 2012). This mission statement recognized the integration of ICT into the mainstream education and training with a strategy to restrictive educational system at all levels (Yusuf, 2005).

Some initiatives through the collaboration with the government by development partners, non-governmental organization (NGOs, local and international) and private sector way enumerated by Owuotu (2006) include:

- Schoolnet Nigeria: Launched in September, 2001 and funded by Education Trust Fund. Schoolnet is engaged in the effectiveness and sustainable development and use of Information and Communication Technology (ICT) to enhance teaching and learning in the primary and secondary schools.
- Education Trust Fund (ETF): Education tax is 20% of company’s profit which is distributed by the Education Trust Fund for education purpose, beside working with school net Nigeria ETF also works on the Education Resource centre project, which area to create science laboratories, ICT laboratories, libraries and Multi-purpose hall in schools and institution of higher learning.
- Computer-in-Schools Projects: Established in 2002, the initiative aimed at developing computer technology literacy through the introduction of computer training in secondary schools, talking a clue from countries like Turkey and Morocco.
- One – Laptop – Per – Child (OLPC): The initiative was launched in September 2006 in conjunction with the Nigerian government which has resulted in the provision of 100 dollars laptop for the e-secondary school project in Nigeria.

With OLPC however and the above initiatives, Okafor and Edet (2008) identified some barriers to proper implementation of ICT in Nigeria schools. This
includes limited ICT infrastructures, poor internet connectivity; inadequate learning sources (educational tools, course curriculum), lack of maintenance and technical support, inadequate funding of education on the part of corrupt Nigerian leaders and most importantly poor power supply, a problem peculiar to Nigeria. Ololube (2006) also attributes these barriers to the cause of low standard of education due to economic disadvantages and government policies. Okebukola (2005) cited by Aduwaogu Ogiegbaen and Iyamu (2005), concludes that computer is not part of classroom technology in more than 90 percent of Nigerian public schools. This implies that the chalkboard and textbook continue to dominate classroom activities in Nigeria secondary school. These pedagogical challenges call for an urgent approach most especially adoption of mobile internet device as a considerable alternative instructional tool.

The use of mobile internet device is the latest form of information and communication technology (ICT) that libraries need to adopt to enhance qualitative content delivery services. The use of this technology is gaining so much ground in Nigeria as opposed to the traditional chalk and talk analogue method of teaching. These new trends in ICT have impacted on the use of materials and academic information (Ola & Ojo 2006). Buczynski (2008) observed that the positive engagement mobile internet device such as web browsers search engines will impact on the service delivery in libraries. Buczynski further asserted that proper attention has to be given to efficient usage of mobile internet device as a supportive instructional tool in classroom settings.

Wang (2008) asserts that, like other communicating and computing devices, mobile internet device can be used to learn. With the great development of mobile internet device functions and features, learners and teachers can utilise the academic and instructional potential of mobile internet device for effective learning within or outside the classroom. Some of these strategies to use cell phone in the classroom for effective teaching and learning are enumerated below:

1. Downloading e-books, software and dictionaries from mobile internet for studies that can help in solving the problem of a literacy.
2. Use of dictionary checking words meaning, spelling errors and improve vocabulary.
3. Capturing class notes picture of esthetic beauty of nature by the means of mobile camera and video camera
4. Use of Opera-mini device via mobile internet to support, discover and acquire knowledge on curricula subject matter and content areas after school hours.
5. Rehearsing word pronunciation by recording audio-materials
6. Receiving text message from teachers on homework, assignments, projects and so on.
7. Using mobile games to develop problem solving and critical thinking skills.
8. Using word match games as a means of practicing spellings.

Nigeria as a developing country will benefit from the strategies enumerated above. The cost of purchasing a mobile internet device is significantly lower than the cost of procuring even a used computer. Currently, many Nigerian students own mobile internet device and these devices functions to provide SMS, voice mail, recorders, still cameras, video games, audio and radio play back, colour screen that are capable of accessing the internet and e-mail (Olayinka, 2008). This research focuses on the dynamics and feasibility of mobile internet device in supporting classroom learning and pedagogy in senior secondary schools in the UBE. Notably the introduction of the UBE into Nigerian schools is confronted with pedagogical issue of adherence to traditional teaching techniques. Coupled with digital misconceptions on the use of mobile internet device both within and outside school system.

Nigerian students are addicted to the use of mobile internet devices which led to their abuse and misuse of these devices. Mobile internet device cause distraction in classrooms as ring tones may divert students’ attention during lesson. Students misuse cell phones to cheat if they are allowed to use cell phones in the classroom during examination. Students waste valuable and precious time on chatting on Facebook and playing video games on their cell phones instead of reading their books. Students are bored reading printed materials but find it more convenient, to spend several hours reading from the screens of their mobile internet device. The need to tap the academic potentials of mobile internet device to support classroom learning as a means of realising UBE objectives provoked this study. Thus, this study seeks to re-direct the drive of the students from unproductive and derogatory usage of cell phones, to the educative and informative usage, which avails students of the academic potential as regards learning.

a) Research Questions

The following questions would be focused upon as the research questions for this study.

1. To what extent do the students use mobile internet device for learning?
2. Do students take cognizance of the enormous educational potentials in use of cell phones?
3. Does web browser on mobile internet device (such as Opera-mini) facilitate effective learning and pedagogy?
4. Will the use of SMS on mobile internet device enhance communication skills and improve effective teaching and learning?

b) Research hypotheses

H1: There will be no significant relationship between the use of mobile internet device and effective learning and improved pedagogy.

H2: There will be no significant relationship between student usage of text messages (SMS) and improved communication skills.

c) Methodology

The research design is a descriptive survey. The Mobile Assisted Questionnaire for learning effectiveness (MAQLE) is the only instrument used for this study. The 15 item questionnaire was drawn in line with the hypotheses and research questions. Respondents were requested to indicate their level of agreement with the questionnaire items by ticking either agree, disagree or undecided. A test re-test method was used to determine the co-efficient of reliability of the instrument. The correlation co-efficient was computed and it gave reliability co-efficient of 0.87 which was considered high enough to be used. The questionnaire was personally administered by the researchers.

The respondents were drawn from four (4) senior secondary schools within the neighbourhood of the researchers in Ojo local government area of Lagos State. Purposively 100 students were selected as sample for this study, based on versatility of mobile internet device usage:

1. AOEOED International School, Ijanikin, Lagos State;
2. Government Secondary School, Ijanikin, Lagos State;
3. Lagos State Model College, Ojo, Lagos State;

The analyses of findings in the study were made with use of frequency counts, percentages and chi-square.

III. Results

Table 1: Analysis of senior secondary school (SSS) students’ responses to the questionnaire items on the dynamics of mobile devices on learning

<table>
<thead>
<tr>
<th>S/N</th>
<th>ITEMS</th>
<th>A%</th>
<th>D%</th>
<th>U%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I find reading printed books more boring compared to reading from the screen of cell phone</td>
<td>55</td>
<td>27</td>
<td>18</td>
</tr>
<tr>
<td>2.</td>
<td>I learn better when I read from my cell phone than books.</td>
<td>60</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>3.</td>
<td>I enjoy checking my e-mail and chatting on face book via mobile internet</td>
<td>72</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>4.</td>
<td>I rarely use my mobile internet study before and after classroom teaching</td>
<td>62</td>
<td>24</td>
<td>14</td>
</tr>
<tr>
<td>5.</td>
<td>I enjoy learning from the internet through my cell phone, than the traditional chalk and talk method</td>
<td>52</td>
<td>35</td>
<td>13</td>
</tr>
<tr>
<td>6.</td>
<td>I always use my phone web-browser to check for additional fact after classroom teaching</td>
<td>24</td>
<td>39</td>
<td>37</td>
</tr>
<tr>
<td>7.</td>
<td>Learning from web browser e.g opera-mini leads to discovery learning</td>
<td>64</td>
<td>25</td>
<td>11</td>
</tr>
</tbody>
</table>

Hypothesis. H2: There will be no significant relationship between the use of mobile internet and effective teaching and learning.

Table 2: Analysis of SSS students’ responses to the item on the academic potentials in mobile web browser

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>DF</th>
<th>Calculated value $X^2$</th>
<th>Critical Value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile web browser academic potential</td>
<td>Agreed</td>
<td>Disagreed</td>
<td>8.715</td>
<td>7.013</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

a) Interpretation

Using the Chi-square statistical model to analyze the data collected which were categorized on the basis of mobile internet academic usage and relevance of SMS towards improving communication skills. Statistically, the table above table revealed that, the calculated value $X^2$ is 8.715, while the critical value is 7.135. In this analysis, the calculated value is greater than the critical value. The hypothesis is hereby rejected, therefore this study revealed that there is a significant relationship between the educational potential of mobile internet usage and effective learning and pedagogy.
Table 3: Analysis of senior secondary school (SSS) students’ responses to the questionnaire items on the use of SMS.

<table>
<thead>
<tr>
<th>S/N</th>
<th>ITEMS</th>
<th>A%</th>
<th>D%</th>
<th>U%</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Collaborative learning is also facilitated by mobile devices</td>
<td>72%</td>
<td>20%</td>
<td>8%</td>
</tr>
<tr>
<td>9</td>
<td>Learning can be meaningful through the use of cell phones to support teaching and learning</td>
<td>71%</td>
<td>24%</td>
<td>5%</td>
</tr>
<tr>
<td>10</td>
<td>I find it easier to answer SMS questions than face to face answer in the class</td>
<td>52%</td>
<td>30%</td>
<td>18%</td>
</tr>
<tr>
<td>11</td>
<td>I use SMS to send vital academic information on class assignment, group projects and home-works to my friends.</td>
<td>45%</td>
<td>32%</td>
<td>23%</td>
</tr>
<tr>
<td>12</td>
<td>SMS helps in improving my communication skills</td>
<td>68%</td>
<td>29%</td>
<td>3%</td>
</tr>
<tr>
<td>13</td>
<td>I easily detect spelling mistakes through SMS than writing on notebooks.</td>
<td>56%</td>
<td>20%</td>
<td>24%</td>
</tr>
<tr>
<td>14</td>
<td>SMS has helped in improving my vocabulary and grammatical efficiency.</td>
<td>68%</td>
<td>29%</td>
<td>3%</td>
</tr>
<tr>
<td>15</td>
<td>The use of SMS through cell phone is a supportive tool to effective learning and pedagogy.</td>
<td>52%</td>
<td>32%</td>
<td>16%</td>
</tr>
</tbody>
</table>

Hypothesis $H_0$: There will be no significant relationship between student usage of text messages (SMS) and improved communication skills.

Table 4: Analysis of SSS students’ responses to the item on the use of SMS and improved communication skill

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>DF</th>
<th>Calculated value $X^2$</th>
<th>Critical Value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMS academic potential</td>
<td>Agreed</td>
<td>3</td>
<td>8.715</td>
<td>0.1376</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

b) Interpretation

The data above revealed that the calculated value is 8.715, while the critical value is 0.1376. Therefore the stated hypothesis is rejected, which implies that there is a relationship between SMS usage and improved communication skills.

c) Discussion of Findings

The traditional chalk and talk method over-time have been teacher-centered, occasionally leading to boredom thereby hindering effective actualization of the instructional objectives. The use of modern mobile technology enhances teaching and learning processes making it easier, efficacious, real, applicable to practical situations, relevant to life, retentive, and simplified. The application of ICT to sustainable development effort is very crucial especially in the realms of renewable energy, water, environment, conservation and education. The findings of these study was corroborated by Partnerships for 21st Century Skills (2009) which asserts that Information and media technology skills with a focus on accessing information efficiently and effectively, evaluating it critically and competently, and using the information accessed accurately and creatively to solve problems. It also involves understanding how and why media messages are constructed, creating one’s own media products; and using technology as a tool for research, organization, evaluation and communication, and finally, managing, integrating, evaluating and creating information to successfully function in a knowledge economy. Thus, the use of mobile internet can be adopted as an alternative instruction tool for teaching and learning in the UBE programme in Nigeria. However, mobile internet technologies and the growing usage of different mobile learning devices are gradually becoming a way of life and part of social activities among youths in Nigeria. Adolescents spend a minimum of between 90 – 125 minutes every day on their phones, using mobile device to read books, chat with friends, surf the net, play games or listen to music (Ball – Rokeah, 2012). This was further supported by Churches (2008) that opined the adaptation of the curriculum and the requirements to teach the curriculum in imaginative ways this requires software and hardware designed for a business model into tools to be used by a variety of age groups and abilities reflecting in the dynamism of teaching experience in classrooms. Robinson and Zaitun (2006) in their research showed that teachers are aware of the benefits inherent in integrating ICT into teaching and learning activities, but they are unable to use the ICT tools; as a respondent explained his view: ICT tools can motivate pupils and help in better understanding of concepts, but an ICT integrated lesson is hinged because many of the computers in the computer laboratory are not in proper working condition. Salehi and Salehi (2012) affirmed that teachers believed that insufficient technical supports at schools and little access to internet and ICT prevent them to use ICT in the classroom. Insufficient ICT tools in schools, lack of exposure to ICT tools and inaccessibility make most of the teachers uncomfortable and not confident in operating these tools in the classrooms. However mobile phones and devices are
readily available with students but not utilized to educational purposes. If the traditional teaching should not be sacrificed at the altar of ICT, teachers need to be immersed into the benefits inherent mobile internet in the bid to realize the objectives of UBE system of education in Nigeria.

IV. Conclusion

The effective implementation of the UBE objectives cannot be excluded from effective and efficient pedagogy disassociated from the stereotyped and old-rugged traditional method of teaching. A mobile internet device undoubtedly serves as teaching and learning space for teachers in the UBE programme. There is the need to tap academic potentials of mobile internet devices and its potency in the realization of the objectives of UBE. This study investigated the dynamics of mobile internet devices as flexible instructional tool using features like mobile internet and SMS as indicators. In spite of the current challenges faced by the UBE objectives in achieving the Millennium Development Goals and the National Economic Empowerment and Development Strategies (NEEDS). Mobile internet devices are widely used in Nigeria and Nigerian youth are very conversant with the applications and functions of these mobile devices. This study believed there is a need for Nigerian school children to cope with the current global drive for ICT, educational technology and technology in education, and there is the need to tap the potential of wireless learning, facilitated by mobile assisted learning, enhanced by the use of Mobile internet devices accompanied technologies do efficiently facilitate learning both within and outside classroom, thereby, promoting student-centred and activity-based learning, which are embedded in collaborative, discovery, interactive and innovative learning strategies. Text messages (SMS) and mobile dictionaries enhance students’ spellings, vocabularies, communication skills and use of English. The researchers are of the opinion that Mobile devices such as cell phones (consequent upon its availability) have the potential to effectively support quality learning and making Nigerian children meet up with the increasing ICT challenges in the Global derive towards attaining the Millenium Development Goals (MDGs).

V. Recommendations

From the foregoing, it clearly showed that the use of mobile devices and internet in secondary schools can play an important role in the realization of the UBE objectives in Nigeria. Consequently, it will minimise some of the challenges attributed to the implementation of the UBE objectives. On this premise, the following recommendations are advanced to achieve better results in teaching and learning activities:

1. To provide opportunities for students to promote learning both within and outside the classroom environment;
2. Promote a conducive, relaxed and convenient learning environment that is more academically productive.
3. Create enjoyable classroom learning as opposed to the didactic classroom situations that generates boredom.
4. Mobile internet device should be used to facilitate differentiation, collaborative and discovery learning, of which all learner are fully involved in learning.
5. Teaching and learning through internet and SMS-based tools should be directed to promote students-centred interactive classroom, that foster innovative teaching, that is, passive teacher activity and active students activity in the teaching and learning process.
6. Students will benefit immensely in verbal learning being provided from uniform access medium that prevent distorted facts.
7. A virtual classroom should also be facilitated without panic for electricity supply, since cell phone is wireless.
8. To cater for the shy and academically struggling students so as to help them remedy their academic deficiencies.
9. Finally, the numerical and grammatical competence of students will be improved with mobile device assisted learning.

References Références Referencias

22. Kukulska-Hulme, A. & Shield, L. (2008). An overview of mobile assisted language learning: Content delivery to supported collaboration and interaction. 30(3) 271-289.
DYNAMICS OF MOBILE INTERNET DEVICE IN ENHANCING THE REALIZATION OF UNIVERSAL BASIC EDUCATION OBJECTIVES IN NIGERIA

open and distance learning (pp. 1-27). London: Routledge Falmer.


