

Application of Mobile Learning as a Delivery Technique in Business Education

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Abstract

Mobile learning is an aspect of information and communication technology that is based on wireless technologies and computing. This paper deals on application of mobile learning as a delivery technique in Business Education in Nigeria. It is an attempt to provide business educators with an overview of mobile learning with a view to underscoring the need for its application as a delivery technique in Business Education programmes. The phenomenon of mobile learning is examined to reveal its importance to Business educators and learners. To provide a better focus, the paper reviewed the benefits of m-learning to include learning on the go; provision of alternative learning environment such as blended learning; improvement of personalize learning among others. The paper also discussed the challenges of m-learning to include limited storage capacity of mobile devices, unethical use of mobile devices and devices not suitable for teaching all business education subjects such as shorthand, typewriting and account. Certain strategies for integrating m-learning in instructional delivery of business education reviewed included professional development aimed at updating business educators' knowledge, adaptation of change in lesson delivery and development of flexible policies in schools.

Keywords: Mobile Learning, Delivery Technique, Mobile Devices, Business Education

Introduction

Students at all educational levels across the globe are increasingly engaging with advanced wireless devices to collaborate with peers, access rich digital content, and personalize their learning experiences. Mobile devices such as cell phones and personal digital assistants (PDAs) are widely used by activity sectors (financial, education, healthcare, etc.) to deliver services. For example, in the financial sector, customers now have access to banking services using mobile technology, while libraries are being digitized and information formatted for easy access using mobile technology (Ally & Needham, 2010). With communication technology, learners can use mobile technology anywhere and anytime to access

educational resources (Ally & Tsinakos 2014). The first generation of truly portable information has been integrated with many functions in small, portable electronic devices (Peters, 2007). The capabilities of mobile devices, such as mobile phones, have improved in recent years; they are now capable of exchanging voices, text, pictures and video. Crompton (2013) described mobile learning to be learning across multiple contexts, through social and content interactions and using personal electronic devices. MoBIlearn (2003) stated that mobile learning is any sort of learning that happens when the learner is not at a fixed, predetermined location, or learning that happens when the learner takes advantage of the learning opportunities offered by mobile

technologies and devices. In other words, with the use of mobile devices, learners can learn anywhere and at any time (Crescente & Lee, 2011).

Mobile learning is considered to be the ability to use mobile devices to support teaching and learning. Mobile technology offers a plethora of features and benefits that enable it make the educational system open, engaging students in new ways and making educational experiences more meaningful. Ko, Chiu, Lo & Ho (2015) asserted that mobile devices in the classroom can be used to enhance student-centered learning, group collaboration among students through communication applications, interactive displays, and video features. Mobile devices facilitate online interaction between instructor and student, and student to student. Existing mobile technology can replace cumbersome resources such as textbooks, visual aids, and presentation technology (Maniar, Bennett, Hamo & Allan, 2008). Desktop computers, laptops computers and notebooks were the most prevalent technologies utilized in schools until 2010 when Apple released the iPad which created a new category for mobile devices; the tablet computer. Featuring touch screen technology, increased portability, WiFi, and an intuitive user interface, the iPad presented a major game changer for digital learning (McQuiggan, Kosturbo, McQuiggan & Sabourin, 2013). Many education leaders are intrigued with the opportunity to use these mobile devices as learning tools within schools and want to understand the power of these devices to transform teaching and learning.

While this new learning vision is appealing to students, parents, teachers and administrators, the realization of this educational model remains elusive for many schools. In some cases, teachers and school leaders have tried using different kinds of mobile devices in the classroom but efforts

are usually focused on available instructional devices. According to Masters (2007), the major challenge facing use of mobile devices in teaching and learning is access to and use of the technology in developing countries. At the same time, scholars and policymakers are increasingly interested in how mobile learning can be the long sought after catalyst for reforming education and be effectively utilized in business education, so that students are well prepared to compete and thrive in the global economy and society.

Overview of Mobile Learning (m-Learning)

The concept of mobile learning was developed on the bases of electronic learning and distance learning. Mobile learning is that kind of learning based on wireless technologies and computing. O'Malley, Vavoula, Glew, Taylor, Sharples & Lefrere (2003) defined mobile learning as the learning that takes place via such wireless devices as mobile phones, Personal Digital Assistants (PDAs), or laptop computers. Crompton (2013) described mobile learning to be learning across multiple contexts, through social and content interactions and using personal electronic devices. The evolution of mobile technology originated in the last decade, and consequently the emergence of mobile learning has given rise to new forms of learning in different contexts (Pachler, Pimmer & Seipold, 2011). Wireless networks has caused m-learning to present itself as a new milestone in e-learning. It allows access to any type of information, at anytime and anywhere. Crescente & Lee (2011) stated that mobile learning is a form of distance education and that m-learners use mobile device educational technology at their time and convenience.

The physical boundaries of the classroom and time for learning no longer prevail because the content is ubiquitous (can be accessed anywhere). Students can communicate with teachers, other students

and anyone else to satisfy their need for knowledge using the new generation of mobile devices – digital media players (including iPods and iPod Touches), smart phones (including iPhones, Android phones, BlackBerry and Windows phones), Personal Digital Assistants (PDAs), and tablet computers (including iPads). Vavoula & Sharples (2009) stated that m-Learning is a social rather than technical phenomenon of people on the move, constructing spontaneous learning contexts and advancing through everyday life by negotiating knowledge and meanings through interactions with settings, people and technology. According to Pegrum, Oakley & Faulkner (2013), m-Learning is perhaps the fastest growing area in the whole field of ICTs in education. It covers any form of learning that is mediated through a mobile or, more precisely, mobile handheld device. M-learning is one of the dominating trends of educational applications for new technologies. Another view to define mobile learning focuses on the mobility of the learners (Kukulka-Hulme & Shield, 2007). This was further elaborated and defined as the type of learning that could be formal (within the classroom), or informal (outside the classroom), and the learner has the choice to choose when and what to learn. In view of the foregoing, mobile learning implies that learners' mobility, learning virtually anywhere and anytime, via mobile devices, are the main characteristics of mobile learning, hence, mobile learning is that kind of learning that occurs when the learner takes advantage of wireless technologies in any place, at any time with instructor guidance.

Typical examples of the wireless devices used for mobile learning include cell phones, smart phone, palmtops, and handheld computers; tablet PCs, laptops, and personal media players can also fall within this scope. Recent innovations in programme applications and social software use Web 2.0

technologies like blogs, wikis, Twitter, and YouTube, or even social networking sites such as Secondlife, Facebook and MySpace have made mobile devices more dynamic to adopt in education in a learning context that can provide suitable learning environment. In the same direction, Umoru and Okeke (2012) listed m-learning devices among others to include mobile phones, iPods, mp3, personal digital assistants (PDA), USB drive, e-book reader, ultra-mobile pc (UMPC), smart phones, and tab-lets. These technologies seem to be playing important roles in university student's academic lives. Devices such as smart phones, tablets and e-book reader connect users to the world instantly, thereby heightening access to information and enabling interactivity with others. Applications that run on these devices let users not only consume but also discover and produce content (Dehlstrom, 2012). Sergio (2015) reported that m-learning solutions are poised to tap into the vast amount of existing educational materials that could be made accessible via mobile channels. This is especially true with YouTube, Vimeo, and other video-sharing services already providing a critical mass of tips, tutorials, and full-fledged lessons that can be re-aggregated by theme and packaged as educational material. Similarly, m-learning devices have good purposes in the areas of access to course materials, use of camera especially by students with limited vision; provision of Wispercast services; note taking; creation of interactive books, storage; downloading and gaming.

In comparison to traditional classroom pedagogical approaches, mobile learning allows widened opportunities for timing, location, accessibility and context of learning. Mobile learning can happen while the learner is in a move. If mobile learning occurs in the classroom, then it is just a form of e-learning, even via Learning Management System (LMS) (Nguyen, 2015).

On the other hand, if mobile learning occurs outside of classroom with or without mobile device in asynchronous form (that is not based on lectures or direct teaching), then Mobile learning is learning at distance form. This derivation takes place on the basis that Mobile Learning is an innovation of e-learning and learning at distance. Across the world, teaching and learning have acquired a new meaning and have pushed traditional learning behind the scene. Thus, the purpose of learning will be activity-based where students discover and produce content rather than consume what the teacher has produced. Academic programmes commonly associated with e-learning careers include business education and social sciences. M-learning being part of e-learning has the capacity to inspire new approaches and purposes of learning (Ozoemena, 2014). Ally & Tsinakos (2014) reported that mobile subscription reached 6 billion globally with at least 75% of these being in developing countries and nearly 2.5 billion of the world population now access the Internet through mobile device alone. Mustafa (2012) categorized mobile learning into four pedagogical types with the instructor lead and guidance.

1. **Object Type:** This type is based on the content and the materials through which the learner will achieve the objectives. The instructor will communicate with the learner through any portable device by sending content and materials in a form of electronic learning objects. The instructor may use multimedia messages; the device used is phone or any portable device that can accept the kind of communications. The learner's role in this case is dictated to the types of learning object mentioned (West, 2013). Here, the instructor can assist the learner through MMU or SMS. In Business

Education, this can be achieved through sending texts, whatsapp messages and videos on different topics of interest. The teachers can send recorded video of how to balance a sales account and send to students. The teachers can also create a Facebook or Whatsapp page for learners and ask the learners to contribute to conversations as they arise.

2. **Research Type:** This type is based on the objectives that the learner should achieve, so the learners (individuals or groups) have a task to accomplish by using other concrete materials, such as: library, projects or laptops. [The instructor will assess learners via messages and post face session.
3. **Open Sources:** This focuses on using internet by using any device available (palmtops, phones, computers) and they can communicate with the instructor by SMS, MMU, E-mail or Relay chat.
4. **Learning Management System:** This type provides the most interactive communication and assessing tool for both instructor and learners. In this type, using electronic portfolios is a very powerful tool that may be used to evaluate the learners. The four mobile learning types are largely dependent on Learning Management Systems contribution.

Role of Mobile Learning in Business Education Programme

Business Education is a skill-oriented programme that equips the recipient with the skills and competencies for the world of work. In the view of Mamman and Nwabufo (2014), Business Education is a programme of instruction, which offers specialized instruction for the office occupation and general business orientation that is capable of

transforming the nation. Accordingly, Ezenwafor, Okoli and Obi (2014) stated that business education is a programme of study, which provides knowledge, attitudes and skills for effective participation in such activities as producers and consumers of goods and services. The main objective of business education is to produce competent graduates that can teach at all levels of education, work in the office or be self-reliant. This is in line with Afolabi and Oru (2013) who opined that the primary objectives of business education is to prepare students to enter a business career or to help those who have entered to be more efficient and advance to higher levels of employment. Amor in Onwuachu (2013) summarized the objective of business education as primarily to produce competent, skillful and dynamic youths who can function effectively in the world of work. For the primary objectives of business education programme to be achieved, there is need for business educators to integrate mobile learning approach in the instructional delivery process.

The growing use of wireless technology and mobile devices suggest that training and education cannot ignore the use of these devices in learning and training process. Business educators need to design learning materials for the mobile devices and look for safe and productive ways to integrate mobile devices into the curriculum. Although many students in tertiary institutions in Nigeria own mobile devices, the purpose for which these devices are used is not guaranteed. Hence mobile devices such as smart phones, iPod, and mp3 among others seem to be used by students for mere leisure than study. Chen and Denoyelles (2013) found that there is a gap between students owning mobile devices and actually using them for academic purposes. The purposes m-learning can be put to in the study of business education are varied as according to Kopter, Squire and Jenkins (2002), they

possess five properties of portability, social interactivity, context sensitivity, connectivity and individuality. Harnessing these properties therefore implies that devices can be moved about to any site; face-to-face exchange and collaboration with other learners is possible; devices can gather and respond to real or simulated data; connecting mobile devices to other devices or network would create a shared network; and scaffolding for difficult activities can be customized to suit individual learners. These new purposes can only be achieved with the increased use of technology based training methods such as online simulation, mobile learning, social network and podcasts to complement traditional methods of teaching (Patel, 2010).

The challenge however is the absence of business education curriculum interlaced with these new technologies. Though informal and lifelong activities are believed by many educators to be superior and for this reason encourage activities which promote learning outside dedicated learning environment and formal curriculum. However, these observed properties which m-learning possess can be matched with theories of learning (Umoru, 2015). Firstly, is the behaviourist theory that sees learning as a change in observable action. In this case, in business education, drill and feedback activities together with other classroom response systems can be employed. Secondly, the constructivists see learning as taking place only when learners can construct new ideas. This happens when learners are encouraged to participate in creating contents from past and present experiences. Thirdly the collaborative, as the name suggests, collaborates in social interaction activities using their mobile computer supported collaborative learning. Finally, the situated learning theorists try to create activities that promote learning within the authentic context and culture, and Perry (2003) referred to this

as the problem and case-based learning and context awareness. Business teachers believe that technology rich activities can sustain high level of student engagement and peer collaboration (West, 2013). Umoru (2012) reported that most m-learning devices enhances collaboration among students, improves practical classes, encourage everyday life skill, enhances learning everywhere and anytime, increases personalization of learning and sharing of content. Shawn (2013) stated that m-learning devices assists students and teachers that embrace the usage in teaching and learning to improve business education outcome and also instil lifelong survival skills needed for everyday business activities and also management of personal businesses. Mobile learning facilitates designs for personalized learning in that they are responsive to difference and diversity in the way learning occurs (Umoru, 2013). They facilitate designs for situated learning by providing learning during the course of the activity; in the office for a business executive, in the classroom for a teacher trainee, or in the workshop for an engineer.

Benefits of M-Learning in Business Education

The benefits of m-learning in business education teaching and learning are immense. Mobile learning offers many opportunities to reach students in different ways. The major benefit is the ability to learn on the go. Traditionally, sitting in a classroom between the hours of 8 a.m. and 4 p.m is where one expects students to learn. Increasingly however, learning is not limited to a predetermined location or time. Learning can occur anytime and anywhere with mobile devices. The increasing rate of smartphone usage with its varying usages for information retrieval and storage is an indication of the changing norms of teaching and learning (McQuiggan, et. al. 2013). Shawn (2013) opined that m-learning enhances

asynchronous learning which allows educational environment to move anywhere and occur at anytime. One can access lessons, video clips and audio libraries from anywhere, including public places and moving vehicles. Each student can learn at his or her own pace bearing in mind that some student may be slower learners. The students who pick up things fast need not waste time going repeatedly through basic lessons. Mobile devices offer substantial power in taking learning opportunities outside of the four walls of a classroom. Virtual classrooms, online classes and simulated experiences all come standard with a mobile device and the internet (Umoru, 2015).

Mobile learning provides a medium that improves higher-order thinking skills. Partnership for 21st Century Skills (2008) reported that there are four key skills for students to master in school: critical thinking and problem solving skills, communication, collaboration and creativity and innovation skills. The features of mobile technology inherently foster these complex skillset to students. Umoru (2015) reported that everyday use of mobile devices in teaching and learning business education enable students to creatively utilize a wide variety of educational resources and critically evaluate the veracity and value of the information sources. Some schools are offering alternative learning environment such as flipped classrooms and blended learning environment which allows teachers to use class time more efficiently and even cover more learning materials. McQuiggan, et. al. (2013) opined that there are many ways that mobile learning can enhance the traditional classroom setting and improve pedagogy. Mobile devices enable personalised learning to thrive. Personalised learning environment in

business education would enable business teachers to easily target students that are struggling with typing, balancing accounts and shorthand drill and practice. This would enable the teacher plan on how to meet the students' needs. Shawn (2013) mentioned that mobile technology enhances personalised instruction thereby enabling effective implementation and tracking of students' growth. Mobile learning provides a new way to motivate students by providing high levels of engagement and novelty, personalization and autonomy (McQuiggan, et. al., 2013). The ability to constantly use new apps and find new ways to use the device keeps it fresh and interesting to students. The use of cell phones and mobile devices is high among business education students. Hence, there will be value in integrating mobile devices in teaching and learning rather than limiting students to older learning methods. Allowing and encouraging mobile devices for academic purposes gives new meaning and excitement to lessons. Mobile devices encourage interaction among teachers and students. It is an accepted fact that learning is made easier when information is shared and questions answered through a sort of combined study. This helps several students to work together on assignments even while remaining at far-flung locations.

Using mobile devices to teach students will benefit higher education by increasing enrolment and having a broader student population, since students in different age groups will be able to access course materials anywhere and anytime. M-learning is one of the dominating trends of educational applications for new technologies (Ozoemena, 2014). M-learning can

transform pedagogy to cater for new generations of learners because it offers the opportunity to use active learning strategies and for learners to learn on their own context, which will result in higher-level learning (Stevens & Kitchenham, 2011). Crescente and Lee (2011) highlighted the benefits of m-learning to include: relatively inexpensive opportunities, as the cost of mobile devices are significantly less than PCs and laptops; availability of multimedia content delivery and creation options, continuous and situated learning support; decrease in training costs of teachers and potentially a more rewarding learning experience.

Challenges of M-Learning in Business Education

Mobile learning comes with its share of difficulties in teaching and learning of business education. There is the definite inconvenience of size, as the student has to learn while hunched over the small screen of a mobile phone. There is no denying that the storage capacities of cellphones are limited. Anyone who has a mobile gadget knows that the short battery life and frequent changes of batteries is a great nuisance. Teachers and students of business education would be restricted by the challenge of short battery life. Absence of a common hardware platform makes it extremely difficult to develop mobile content for use by all business educators. Another challenge that m-learning initiative in business education can face is the differentiated audiences. Koole (2009) posited that availability and cost of broadband in schools and homes can be a big hurdle for smaller and low-income communities thereby presenting a huge disparity among students from different economic background. Rideout (2014) mentioned that implicit in the challenge of differentiated access to mobile devices is the cost factor. It is a common knowledge that a

smartphone or tablet is more expensive than a textbook and some schools (students especially) might not afford it.

When mobile devices are used by business education students in classrooms or at homes, their usage must be monitored in some way. McQuiggan, et. al. (2013) opined that while mobile devices can be utilized for academic enrichment, the opportunity also exists for them to be used for distraction or unethical behavior. There are also health concerns stemming from increased screen time and privacy concerns about students or the device itself and over sharing personal information. Umoru (2015) asserted that while using mobile devices in schools will undoubtedly enhance teaching and learning in business education, ethical issues should be addressed and schools will need to develop an Acceptable Use Policy (AUP) framework aimed at limiting sites to source for information. There are many prevailing attitudes and prejudices against using technology for instruction, and the system remains structured in a way that reinforces traditional educational methods. Effectively incorporating mobile technologies in teaching and learning of business education would mean abandoning some of the traditional structures such as manual typewriter and desktop computers, and many stakeholders would be resistant to this huge cultural shift. Fritschi and Wolf (2012) stated that in some schools, use of mobile phones is prohibited in classrooms. Katz (2013) reported that in New York, the city Mayor, Michael Bloomberg, enacted a citywide ban on cell phones in the city's public schools, saying that they were a distraction in school and could be used to cheat in examinations.

Mobile learning devices such as cell phones and tablets offer many benefits over computers and laptops however, there are some limiting physical attributes that make them more difficult to use. For instance, most tablets do not come with a keyboard making

typing very difficult. The implication of this is that mobile devices might not be suitable for teaching some subject areas in business education such as typing, shorthand and accounts. Typing on a smaller interface such as smartphones, iPod touch or tablets is even more challenging. Devices may become outdated quickly and students have to keep combating obsolescence.

Strategies for Integrating m-Learning in Instructional delivery of Business Education

Mobile learning is one of the emerging technologies in education. With a variety of mobile tools and resources available, mobile learning provides increased options for the personalization of learning. The main criterion for a successful mobile learning programme is to encourage the entire school system to accept the technology. Systemic changes need to occur to facilitate the new devices and learning structures. Business education teachers and students need to be educated on new possibilities and paradigms in learning. The strategies for integrating m-learning in business education include:

1. Professional development: Business education teachers need to obtain the requisite skills in order to incorporate mobile devices and technology into their teaching. Ko, Chiu, Lo and Ho (2015) reported that teachers need to be proficient in the use of mobile devices before they can effectively use it to teach. According to McQuiggan, et. al. (2013) learning to use mobile devices for education involves several adjustments for teachers and it will be for students as well. Finding good apps, enhancing lessons rather than retrofitting old lessons with an app and ways to be prepared if the mobile device fails are all important skills needed by the teacher for m-learning (Masters, Ellaway, Topps & Archibald, 2016). It cannot be assumed that adapting to m-learning will be easy or understood by all business education teachers, however,

professional development can provide business educators with the means to effectively use the technology. Professional learning communities within the school or online are great resources for teachers to update their knowledge.

2. Change in Instructional delivery: While mobile learning devices does not require a business education teacher to completely abandon the way he or she runs a classroom, it may require creative changes in how apps and mobile devices are incorporated to strengthen certain lessons or activities, and creative use of apps (such as stalking). It is important to note that adding an app as an afterthought is not the best way to take advantage of the technology. Teachers need to plan on how to use mobile devices in lesson delivery. McQuiggan, et. al. (2013) reiterated that pedagogy still matters in teaching and learning and that technology cannot replace good teachers. Adding new and engaging technology to the classroom is a learning experience for business educators and students. Saylor (2012) opined that good teachers should be able to see the potentials in mobile learning and adapt their classroom structure accordingly.

3. Use of Data to Personalize Learning: Mobile devices offer tremendous opportunities to obtain data on students' usage and knowledge, which can drive smarter decisions and personalized learning plans, among other things. A smart mobile learning strategy will take advantage of this information and use it to enhance the educational process. The flexibility offered with a device enables students to explore content at their own pace, dive deeper into what is most interesting, and reward their curiosity with instant answers. Ko, et. al. (2015) mentioned that based on what engages students most, mobile apps can suggest similar resources. Adopting a mobile classroom in business education would enable business educators get instant data

from students. For instance, business education students can be given topics to write on and asked to submit via their cell phones; data for such assessment would be gotten instantly.

4. Flexible Policies in Schools: There is need for schools to create more lenient policies to support a mobile learning plan. Such school policies should more closely resemble real-world usage. McQuiggan, et. al. (2013) mentioned that digital citizenship is a key skill needed in the present society, hence, teaching students how to participate in social media responsibly, how to evaluate information found online, how to search for information using appropriate criteria and act in a responsible way are all skills that need to be cultivated. It is important for schools to update and provide well-thought out policies regarding students' privacy. Maniar, et. al. (2008) stated that privacy is a significant and largely uncharted, area that is central to mobile learning. There must be a balance between protecting students' data and enabling students' data use nu entitled individuals to enhance the learning process.

5. Availability of a Good Mobile App: A strong mobile learning plan cannot function without good apps to scaffold the lessons. Business education teachers must figure out how to locate good content and tools and how to incorporate the tools into curriculum and lessons. The best educational apps present necessary information in a fresh way and are in tune with schools' needs. According to McQuiggan, et. al. (2013), developing a quality educational app is not just making a textbook into an ebook, and also not using all available functions on the mobile device. Effective educational apps, like all parts of mobile learning, require a sense of balance to make them appropriately interactive and impactful.

6. Purposeful Planning for Mobile Device Usage: According to

Crompton (2013) purposeful planning involves careful consideration of the following issues: the learning goals to be achieved the learners and what prior knowledge and skills they bring to the experience; the instructional and curricular materials available – or need to be developed; and how these materials will be delivered via mobile devices; what will be measured to determine and enhance educational effectiveness, and how the contextual “conditions for success” that must be met for the initiative, and the leaders in each setting that will ensure these conditions are developed and sustained. This shows that thoughtful planning with a focus on determining the foundational objectives of the mobile learning initiative combined with the active involvement of the education stakeholders, including the students, are primary requisites for a successful mobile learning initiative.

7. Understanding the Power of Internet Access: Internet access any place, anytime is a powerful tool for learning that is uniquely provided by mobile devices. Access to the internet is one gateway to a plethora of rich educational content and tools that could be accessed by students for learning purposes. The internet access discussion however includes a wide spectrum of types of equity. \equity starts with whether Internet connectivity is even available in the area and then what types of devices can be provided to those students to facilitate that access, at school or at home.

8. Building Personal Learner Efficacy and Capacity for Self-Directed Learning: Two important features of 21st century education are (1) personalized learning for each student in classroom settings and (2) life-wide learning outside the school place and school day, involving families, informal educators, and communities in every child’s education. Wolf (2010) described e-learning as ensuring

that a student’s educational path, curriculum, instruction, and schedule be personalized to meet her unique needs, inside and outside of school through a wide range of resources and strategies appropriate for her learning style, abilities, and interests, as well as social, emotional, and physical situation. The knowledge and skills students acquire from a mobile learning initiative should have intrapersonal and interpersonal dimensions, not just cognitive attributes. For example, mobile learning can foster academic engagement: sustained voluntary participation in pursuits related to learning academic knowledge (content, skills, culture), both in and out of school (Lepper & Henderlong, 2000). Engagement is a mixture of states (e.g., using social media on a mobile device to collaborate with friends) and traits (e.g., approaching all new situations with intense curiosity about their causes). Mobile learning initiatives should be designed with an understanding of these motivational dimensions and issues.

Conclusions

The society today relies on technology to help in everyday life. M-learning is growing powerfully, not just for education, but also for business and personal use. As technology grows and gets better, more ways of using it are discovered. M-learning focuses on the mobility of the learner, interacting with portable technologies. The benefits of m-learning include learning on the go; provision of alternative learning environment such as blended learning; improvement of personalize learning among others. The challenges of m-learning includes limited storage capacity of mobile devices, unethical use of mobile devices and devices not suitable for teaching all business education subjects such as shorthand, typewriting and account. The strategies for integrating m-learning in instructional delivery of business education include professional development

aimed at updating business educators' knowledge, adaptation of change in lesson delivery and development of flexible policies in schools.

Recommendations

Based on issues raised in this paper regarding challenges of m-Learning in Business Education, the paper, therefore, make the following recommendations.

1. The introduction of mobile devices in Business Education should aim at students' perspective, rather than on the device. It has to revolve and involve students in learning, leading them to participate more actively as well as ensure that the learning is most effective.
2. Business Educators should be properly trained on the use and advantages of mobile devices for them to be motivated in making adequate and proper use of them. There should be periodic training and development sessions in academic

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curriculum when the educators and students should be trained on the modern use of electronic gadgets and current features herein.

3. Business educators should acquire relevant competences on how to explore high technology devices and apply them for instructions in line with mobile learning.
4. The nuisance caused by short battery life and frequent changes of batteries is alarming. It disrupts teaching and can delay one's work. Hence, attempt should be made by mobile devices producers to increase the life of gadgets batteries.
5. Curriculum planners should integrate digital literacy in the curriculum as a course to include mobile learning to help students adopt knowledge and learning practices associated with digital media and technological devices.

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