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Blending Mobile Technology into Lecture Delivery: From Theory to Practice

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Abstract
This paper advocated for the blending of Mobile Technology into the lecture delivery by Faculty of Education members using Usmanu Danfodiyo Uinversity, Sokoto as pivot. The paper argued on the backdrop of the need for the Faculty members to embibe the best practice in teaching and learning to set good examples for lecturers in other departments. The paper thus suggested the integration of mobile phones, G-Cloud and social network platforms like WhatsApp and Telegram to create online classroom for the purpose of lecture delivery. The paper suggested practical steps in creating online class and identify the large number of students offering education courses as one of the challenges lecturers may face in doing that. The paper thus recommended that the Administrator (the lecturer) can temporally forfeit his / her absolute control of the platform by allowing added members to add others.
Keywords: Mobile Technology, Telegram, WhatsApp, Lecture Deliver, Online Class

1. Introduction

Faculty of Education in most Nigerian universities has always been argued to be the mother of other Faculties. This might be as a result of the fact that teachers are trained in the Faculty; therefore, the lecturers should demonstrate this claim in practice by embracing the best practices in lecture delivery. In this regard, the faculty should be seen to be playing a leading role in embracing strategies that have been found to promote efficiency and effectiveness of teaching and learning for others to emulate. It is in line with this belief that this paper is strongly convinced that since Information and Communication Technology (ICT) is now the in-thing in lecture delivery world over, it is time for the Faculty members to embrace the trend so that their efficiency and effectiveness are enhanced.

The revolutions in the area of ICT in general and Mobile Technology (MT) in particular have come along with change of life style in all spheres of human existence including education system. The life of today can hardly be imagined without one form of ICT or the other. So also, the business of education is keying into this rush for technologies for it to remain relevant to the emerging students' populace that have been described in literature as 'digital students'. Therefore, both teachers and learners have to double effort to remain a par with the fast growing ICT so that they can meaningfully engage in the business of teaching and learning. Failure to do so will isolate Nigerian students from the global students' populace with its attendant consequence of poor content knowledge as well as dislocated academic and social interactions among teachers and learners. This paper is raised on the backdrop of this importance of ICT in education by examining how lecturers can exploit the use of ICT to promote teaching and learning.

The paper is divided into two major parts: the theoretical postulates about blending Mobile Technology into lecture delivery and the second part which focused on how that can be done. In the first part, the paper examines the concepts related to the theme of the paper. Some theoretical postulates as well as the various mobile technologies available to teachers and learners were explored. The advantage of mobile technology as instructional tool as evident in some research findings in literature are explored. The second part focuses on how mobile technology can be blended into lecture delivery in the Faculty drawing from the experience of the writer in the attempt made along that line so that students' learning problems that might be associated with poor delivery are cubed.

2. Conceptualisation

The paper examines the concepts of ICT, MT and blending to provide the basis for the understanding of the discourse. The concept of ICT contains three basic words. Information refers to facts and opinions provided and received during the course of daily life: one obtains information directly from all sorts of observable phenomena in the surrounding environments which later translated into various bodies of knowledge which education makes its business to communicate from generation to generation. Therefore, it can be argued that education system as a human activity relies on information to be communicated. Technology can be defined as the application of scientific knowledge to the practical activities of human life (educating and communicating inclusive) to make such activities easy to accomplish. ICT therefore refers to diverse set of technological tools and resources which humans used to create, communicate, disseminate, store, and manage information. It is not out of place, therefore, to argue that, for appreciable success in education to be achieved, the process should be ICT driven

Among several ICT at the disposal of lecturers, Mobile Technology, represented by various hand held devices carried about by users, seems to offer greater opportunities for lecture delivery. Mobile technology, according to Mikre (2011), include a range of devices such as Personal Digital Assistants (PDAs), smart phones, tablets, laptops, mobile phones and Global Positioning System (GPS) devices, and wireless debit and credit card payment terminals and so on which people use to perform tasks on a go. In the views of Ali (2014), the friendly and ubiquitous nature of these devices make them find favour with many learning institutions to integrate them as part of educational resources. The high points of Mobile Technologies include the ability of a single device to perform multiple task such as smart phone that combine the functions of phone, camera, media player and multimedia wireless computer (Sharples, Taylor &Vavoula, 2007).

The thought of deploying MT in education led to the necessity of explaining the concept of blending. To understand the concept, another concept, e-learning, has to be explained. Yousif, Abdelrahman and Abusfian (2016) explain e-learning as general term used to refer to computer enhanced or technology enhanced learning According to Tinio (undated) e-learning sometimes refers to as *online learning* is a process of education which uses information network – the Internet, an intranet that is Local Area Network (LAN) or extranet (WAN) – whether wholly or in part, for course delivery, interaction and/or facilitation. Blended learning on the other hand refers to learning models that combine traditional classroom practice with e-learning solutions. For instance, students in a traditional class can be assigned both print-based and online materials, have online mentoring sessions with their teacher through chat, and are subscribed to a class email list. The adoption of this model led to the emergence of the concept of Mobile Learning (M-Learning) which is defined by Yousif, *et.al.* (2016) as the use of wireless devices, cellular and mobile phones and their equipment in an educational interactive environment which is not constrained by time or place.

3. Mobile Technology in Education

The emergence of MT has introduced a new chapter in educational discourse that has attracted comments and researches of recent time. That is M-learning which has been explained earlier as learning on the move with the help of mobile technology. MT has brought on its wake different group of students that are not constrained by space and time. These are students everywhere and teacher nowhere who can engage on learning at will, independently and uninhibited by restriction of time and space. Consequently, '24/7' teaching learning is made possible with mobile technologies. The complain of lack of time to complete one's course content because of other university engagements will be reduced if lecturers embrace these technologies in planning and delivering of course allocated

Available pieces of literature on current dispensation in teaching and learning have all lauded the contributions of MT in promoting both teachers' and learners' efficiency and effectiveness. For instance, Kim, Mims and Holmes (2006) described mobile technologies as the new frontier for teaching and learning in institutions of higher education. Yordanova (2007) stressed MT ability to perform the basic task of advanced forms of education which is flexible and assure mobility to the learners where information is accessible all over the world whenever and wherever it is needed. Martin and Ertzberger (2013) believed that mobile learning gives students the opportunity to be in the context of their learning and have access to information that is related to what they are seeing and experiencing at the moment. Yousif, et. al (2016) shared the same position of others in their opinion that mobile and wireless technologies engender learning environment based on a participatory and interactive learning. The bottom line of these views is that students are getting smarter with mobile technology therefore lecturers have to grow smarter too to be abreast with their students.

As expressed earlier, there are several advantages of using mobile technologies in lecture delivery. Some of the benefits as curled from literature are summarised here:

a) Connectivity to internet to access information
b) Catalyst for students' development in the area of critical thinking
c) Encourage collaborative learning and give students competitive edge
d) Enhances mobility of learners and learning materials
e) Enhances multimodal presentation of learning materials (which finds favour with educational psychology)
f) Promotes relaxation for the learners
g) Promotes students' autonomy, as well as
h) Flexibility and convenience in lecture delivery for the lecturers

The above benefits are by no means exhaustive. The list gets longer as one gets better understanding from several researches on MT effectiveness both ongoing and completed which is not direct focus of this paper. Equally, there challenges in introducing mobile technology but the practical ones will be discussed under section contain the proposal of this paper.

4.1 Practical Steps in Blending MT in Lecture Delivery

This writer joins Davis (2014) in lamenting the fact that despite these numerous benefits of mobile devices, their

pedagogical use is not widespread in higher education. In this section of the paper, the writer wishes to share some ideas as well as experience on blending mobile technologies in lecture delivery. The section will be preceded by some questions. Answers to those questions may serve as motivational factor to our intention of embracing the technologies in our lecture delivery.

The first obvious question is can we really blend mobile technology into our lesson delivery? The answer to the question is in affirmative. It has been done elsewhere; therefore, the lecturers in Faculty of Education in Nigeria can do it if the procedure is explained in concise terms. The next question is whether lecturers have required ICT options for lecture delivery? The answer is yes. In fact, we have a lot of them. The mobile phones possessed by lecturers can be used for several things in the lecture hall. What is the level of ICT literacy of our lecturers to pursue the project? They have appreciative level of ICT knowledge. What is the percentage of our students that have access to ICT gadgets? Significant number of our students have mobile / smart phones and these are enough for their learning purposes. Is our campus, and Faculty of Education specifically, ICT friendly? The answer is equally positive because there is internet connection both on campus as well as in the Faculty of Education of most universities. The last question is could we be successful? The writer has no doubt the will be success. These encouraging answers are evidence that Faculty of Education, especially that of Usmanu Danfodiyo University, Sokoto is ready for mobile technology integration into lecture delivery

4.2 Creating an Online Classroom

The discussion in this segment is influenced by this writer's little experience with blending MT into lecture delivery of the postgraduate course 'ICT in Education' during the 2015/2016 academic session (currently with 2016/2017 sets also) and undergraduate course of EDU 402 and PED 209 for 2016/2017 session. Suffice to say that the experience was quite encouraging and rewarding to warrant the argument put forward. So guided by that experience, the first step is to constitute the 'online classroom' where lecturers and students will interact. To be able to do this, one needs mobile hardware, software and social platform.

For hardware, mobile phone, tablets or laptops with wireless connectivity are required. The software requirement includes Kingsoft Office and G Cloud Applications or their equivalents that perform similar functions. There are several social network platforms but the ones that the writer has tried are WhatsApp and Telegram. The hardware houses the 'online class, the social network platform serves as the classroom while the software serves as the vehicle of conveying messages to the students as well as protecting the class. For example, G Cloud app helps backup of data to prevent loss.

The first procedure is to admit students into the 'online class' via the selected social platform. Experience has shown that both WhatsApp and Telegram can work but each has comparative advantage over the other. For example, WhatsApp is more popular with students therefore they do not have to be encouraged to download it. However, it has disadvantage of the number of persons that can be included in a group which is a maximum of 250 which represents a class in our case. Therefore, it may be ideal for small classes. When the writer used it for PED 209 students WhatsApp was found to be adequate because the number was 222 only. When it was tried with students of EDU 402: Curriculum Theory, a general education course, it could not accommodate them.

Similarly, the WhatsApp has disadvantage in the volume of file that can be attached at a time (about 50 mb). Telegram on the other hand has a comparative advantage over WhatsApp in these two respects. Telegram can accommodate as many as 5000 in mega group if need be and the volume of file that can be attached above 1gb. Telegram also has the advantage of being projected in multiple devices including laptop and tablet, therefore, make it more flexible than WhatsApp. Whichever platform selected, students' numbers have to be saved in the lecturer's mobile phone to enable him/her add them to group. When this is done, the class is as good as the physical one.

As soon as the online class is constituted, the lecturer has scaled the first huddle. The second one is to manage the class. Because the platforms are primarily for social networking the students may try to turn the 'online classes' into social group. Therefore, the rule of engagement has to be established right from the beginning. Here, it will be suggested that the rules that apply in the physical class should be strictly enforced. Live discussions should be strictly guided to focus on the content of the course. Social interaction should be mutually respectful and ideas shared respected. The lecturer has to be constantly in the 'online class' to monitor and caution on noise making as well as social decorum. Sanctioning of an erred students by making them offer apology on the platform or on the extreme removing such students from the platform for a period of time can be enforced to ensure class control. For this to happen effectively, the lecturer has to take a complete control of who gets in and out of the platform. There is a feature in both applications that allows the 'Administrator' to take control.

The next step is the development of lecture materials. Both Telegram and WhatsApp support sharing of text, audio and video files, therefore, lecturers of a course have to adapt quickly. This is a challenge to our ingenuity of producing varieties of lecture materials so that students can take advantage of the learning opportunities Mobile Technology offers. The difficulties of lecturers in this direction can be minimised if they

make the best use of collaborative work which the faculty has to established firmly. Therefore, cross-departmental collaboration will be helpful in the attempt to convert lecture notes from text to audio or video formats. G Cloud app should not be too far away from the lecturers in order to guard against loss of phone numbers. Therefore, phone data should be backed up as regularly as possible. In addition, both Telegram and WhatsApp have options of saving chats in the cloud space. This will help safeguard the discussion on a course until the course is completed

5.1 Some Challenges to Implementation

There are some challenges which lecturers need to overcome in the bid to blend Mobile Technology as suggested in this paper. They include the following:

a) The large number of students offering education courses may be a challenge when creating groups in the social platforms. For a lecturer to add close to thousand students to the platform may be very cumbersome.
b) Also, saving the numbers of students in lecturers' phone could also be a source of challenge.
c) Getting students to participate in online discussion may not be easy at the beginning. Lecturer has to device a means of involving everyone.
d) Some students may not have phone that can access internet thus they may not be able to participate in discussion.

5.2 Some Suggestions to Cope with Challenges

The following suggestions can help lecturers to cope with the challenges identified:

a) In dealing with adding large number of students to the platform, the Administrator (the lecturer) can temporally forfeit his / her absolute control of the platform by allowing added members to add others. This can be done in the settings of both Telegram and WhatsApp platforms.
b) Since the platforms save data in the sky storage, lecturer can add students directly in the group.
c) To get students to participate in discussion, incentive such as award of some marks may do the magic
d) For students that do not have required phone, we simple provide the learning material to them the old way.

6. Conclusion

From the presentation so far, it becomes obvious that the idea of blending mobile technology into lecture delivery by Faculty members is very feasible. We have the 'e-capacity' to do that. This is evident looking at the participation of members on Faculty on various Social platforms. The paper is simply calling on lecturers to form and sustain the culture of sharing which we have been demonstrated on these various platforms a little further by converting it to a teaching strategy. The writer is very confident that lecturers will all rise to the challenges of blending MT into lecture delivery. That is the nature of a teacher and we are teachers.

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