IMPACTS AND CHALLENGES OF USING PODCASTING FOR TEACHING AND LEARNING IN HIGHER EDUCATIONAL INSTITUTIONS IN NIGERIA

[1]Ismaila, Abdullahi Abubakar, [2]Abdulaziz, Nafiu and [3]Wokili, Sa'adatu Helen

[1,2]Department of Curriculum Studies, Faculty of Education, Sokoto State University
[3]Department of Educational Foundations, Faculty of Education, Sokoto State University
[1]e-mail: abdullahi.ismailabubakar@ssu.edu.ng

Abstract

Podcasting are short clips that can be either on audio or video. This paper discussed the impacts and challenges of using podcasting for teaching and learning in higher educational institutions in Nigeria. If we look at the technological progression globally, it becomes imperative to review the impacts of using such technologies as podcast, and others and also the challenges encountered by teachers using such technologies in their instructional practices. The emergence of technological tools makes teaching and learning easy, interesting and enjoyable. This paper highlighted a number of stages a teacher should implement while using podcasting in teaching. Impacts and challenges of using podcasting in teaching and learning were also discussed. The challenges facing the use of podcasting in Nigeria tertiary institutions: inadequate tools, inadequate power supply, lack of adequate awareness on how to use podcasts in education and poor implementation of ICT related policies by the concern authorities Inadequate access to available resources, inadequate power supply, lack of pedagogical training on how to integrate Podcasting into teaching, inadequate technical support, lack of adequate awareness about educational podcasting, poor implementation of ICT policies by government, insufficient competence in handling ICT resources, high cost of internet service providers, inadequate funding of the university by the government, corruption, Technological challenges, High cost of implementation, high cost of e-learning facilities. Despite the challenges facing the use of podcasts in Nigeria, there are enormous impacts of podcasts in education: podcasting helps students to carry out much of their studies online, podcasts supported organizational aspects of learning, podcasting brought an informality and fun to formal learning, podcasting developed students e-learning and independent study skills and podcasting enable learners a deep engagement with learning material. The paper recommends that seminars, conferences, workshops or lectures should be organizing regularly to further enhance integration of ICT related technology especially the use of podcasting towards development of teaching and learning. Electricity should be adequately provided by the government to enable the use of technology related tools for teaching and learning and podcasting should be one of the most active teaching aids.

Keywords: Pedagogy; Technological Tools; Podcasting

Introduction

Teaching and learning is a process of fluctuating behavior. Teaching and learning is about a change: the change that will brought a new skill, understanding a scientific law, changing an attitude. The change is not merely incidental or natural in the way that our appearance changes as we get older. Learning is a relatively permanent change, usually brought about intentionally. When we attend a course, search through a book, or read a discussion paper, we set out to learn (Sequeira, 2012). New technological innovations emerged everywhere in the world with no exception to Nigeria. People can no longer do without using technological tools for one reason or the other. E-learning is an educational approach that combines

different types of multimedia technologies to ensure better education experiences for students and teachers. The e-learning method allows teachers and educators to provide educational materials and the related knowledge to a wide range of learners by using more effective and efficient communication channels (Ismaila, 2020). E-learning has been used very effectively for enhancing the traditional forms of teaching and administration, Students in many universities in developed countries now have web access to the lecture notes and selected digital resources in sup-port of their study, personalized web environments in which they can join discussion with their class or group, and this new kind of access gives them much greater flexibility of study (Ibezim, 2013). These could be possible by the use of popular platforms: YouTube, Play Store, Facebook, WhatsApp, just to mention but few.

Concept and Importance of Podcasting in Higher Education

The term podcasting is a combination of the terms pod (i.e., from the Apple iPod) and broadcast (Masudul & Bee, 2013). Podcasting are series of digital audio and video recordings uploaded on the web with the aid of Rapid Simple Syndication (RSS) feeds, RSS feeds allow listeners to download their favorite podcasts using pod catcher software like iTunes (Masudul & Bee, 2013). Many types of podcasting are found on the Internet such as television podcasts, radio podcasts, classroom podcasts, and individual or group podcasts. Television podcasts, radio podcasts and classroom podcasts are existing programs and lectures turned into podcasts such as those created by VOA (Voice of America), individual or group podcasts are real podcasts designed for multiple purposes such as those created by the website (Masudul & Bee, 2013). Individual podcast is the type of podcast whereby individual will search for audio or video for his/her studies alone, while group podcast is a process whereby group of people would use/play audio or video for their own benefit either for study or otherwise.

Podcasting refers to the distribution of audio/video files in digital format. These resources can be manually downloaded from the Internet or distributed automatically to subscribers and can be accessed directly from the desktop or transferred to a portable media device such as an MP3 player to be listened to 'on the go'. The term podcasting emerged from the use of Apple's portable audio player, the iPod. Despite the proliferation of a range of portable audio, and more recently video, the term podcasting remains the term used to describe the broadcasting of all audio/video files across the internet (McGarr, 2009). Podcasting is a term introduced through the use of Apple Computer, Inc.'s iPod, a term which denotes how a portable audio player can be used to download audio files, mostly MP3s, and be heard at the user's convenience; initially such an operation was intended for entertainment. However, it has proven itself to be an important tool in the field of education as well (Aristizabal, 2017).

Podcasting is a new technology that is increasingly capturing the attention and imagination of practitioners from all areas of education. Wider penetration of broadband internet access, and freely available software on the internet to create digital sound and video files, and increased ownership of MP3 players all work in favour of the popularity of podcasts (Edirisingha & Salmon, 2019). The adoption of Web2.0 applications, tools and services that enable users to capture, generate and share content and form online communities has also contributed to the popularity of podcasts (Edirisingha & Salmon, 2019). Podcasting is a digital media file, or a

series of such files, that is distributed over the internet using syndication feeds for playback on portable media players and personal computers (Yamaguchi, nd). Mobile technologies, which include hand held computers, Personal Digital Assistants, mobile phones, lap tops, and i-Phones, are all part of the emerging information revolution taking place worldwide and with them podcasting will be possible in teaching and learning. Podcasting have had a rapid rise in popularity in recent years, in 2014, there were 7 billion total Apple podcast downloads, 10.5 billion in 2016, 13.7 billion in 2018, and in March of 2018 Apple Podcasts jumped to 50 billion total podcast downloads and streams, it's also reveals that podcasting now cover over 155 countries, with at least 525,000 active podcast shows and more than 18.5 million episodes, people are listening, and the growth is continuing (Goldman, 2018).

Podcasting has been used for the dissemination of lecture materials, assessment feedback, fieldwork, student support and for online and distance learning (Ukwueze & Okpulo, 2014). Podcasting initial appeal was to allow individuals to distribute their own radio shows, but the technology is increasingly used for other reasons including education, numerous colleges and universities have adopted podcasting as a supplemental learning tool, in fact, some instructors have adopted podcasts as their primary means of communicating with students (Gribbins, 2007). Chester, Buntine and Atkinson (2011) noted that irrespective of the form of podcasting, student satisfaction is typically strong and students generally perceive podcasts to have enhanced their learning.

Stages to make into Considerations while using Podcasting for Pedagogical

Ukwueze and Okpulo (2014) noted that effective use of educational podcasting instructional method has taken the educational process beyond the four walls of the traditional classroom and beyond the physical boundaries of the university campus environment. There is an increase of podcasting use in higher education with different purposes such as lectures, orientation material, conferences, language learning, project demonstration, and instructions to research papers (Carvalho & Aguiar, 2009). The podcasting length depends on its purpose and content, audio is a powerful medium for conveying feelings, attitudes and atmosphere. It is less good at conveying detail and facts after listening to 30 minutes, but it is still useful to remember general opinions and arguments (Carvalho & Aguiar, 2009). As a teacher playing an audio podcasting to the students there is need for you to allow them to make observations, comments and ask question for more elucidation.

There are five stages to consider while using podcasting for pedagogy which were mentioned and explained by Laing & Wootton, nd, below:

Step 1– Select appropriate content: the learner will probably be listening to your podcast whilst carrying out another task such as walking, sitting on a bus or exercising. Therefore, avoid condensed complex material and use appropriate which is better covered in a lecture. Don't just record a lecture, unless you have a strong educational reason for doing so. Only provide a limited amount of material within each podcast. You could, for example, produce a series of podcasts, each focusing on a concept that students have particular difficulty with.

Step 2– Determine your instructional goal: as a professional teacher you most have a number of educational goals to attain for which podcasts could be useful, and the particular goal will define the podcast content, design and way to use it in your course.

Step 3– Design your content: at this stage you are expected to present your project step by step base on your stated educational goals. Whatever your educational choice, keep it short.

Step 4– Produce your podcast: don't lecture or use a script; be informal, be yourself, let your passion for your subject come through.

Step 5– Incorporate the podcast into your course: insert your podcasts into the course content and learning activities don't make it optional. Your target should be at least 50% of your students should use the podcasting.

Impact of Podcasting in Higher Education

It was put forward by Edirisingha and Salmon (2019) that the following as impact of podcasting in higher education: podcasting helps students to carry out much of their studies online, podcasting supported organizational aspects of learning, podcasting brought an informality and fun to formal learning, podcasting developed students e-learning and independent study skills, and podcasting enable learners a deep engagement with learning material.

Podcasting helps learners while being mobile, listening to educational material as a podcasting is different from listening for entertainment; therefore, podcasts must be integrated with other learning activities, such as online discussions (Edirisingha & Salmon, 2019). Teacher can integrate podcasting in the classroom through online or blended learning, Ukwueze & Okpulo(2014)said podcasting provides a marginal improvement, and that it's true value should be found on its potential to help those who otherwise could not enroll and attend the class, and would be excluded from the educational process. This shows that podcasting is beyond the use of podcasting in formal setting but also informal setting can benefit from podcasting.

Students who participate in online/ e-learning may performed better than students who studied traditional method. Optimistic results of studies conducted on e-learning encouraged teachers all over the world to integrate Information and Communication Technology (ICT) and its applications in the classroom (Alharti, 2016).

Challenges Facing the Use of Podcasting in Higher Education Institutions in Nigeria

Despite all the benefits associated with the use of podcasting in higher education, there are some challenges facing the use of podcasting in Nigerian tertiary educational institutions as stated by Ukwueze & Okpulo (2014), which are as follows:

1.   **Inadequate access to available resources**: there is no availability of tools that could be used in each and every class for successful deliberations. The tools that can be

used in the class for podcasting are; electronic board, TV, camera, laptop, electronic projector, smartphone, just to mention but a few.

2. **Inadequate power supply**: power supply is something very vital, without electricity one can't do anything in this 21st century. In this country we are facing a lot of shortage of power and without electricity as a teacher you can't be able to use podcasting as teaching aids.

3. **Lack of pedagogical training on how to integrate Podcasting into teaching**: majority of our teachers in Nigeria are not professional on how to use and manipulate technological tools to teach and some have doubt on the uses of podcasting because they don't accept change.

4. **Lack of adequate awareness about educational podcasting**: majority of our teacher in Nigerian tertiary, secondary and even primary level are not fully aware regard to use of podcasting in teaching and learning. As such, there is need of government and stakeholders to mobilize and educate our teachers on the usefulness of podcasting for teaching and learning.

5. **Poor implementation of ICT plans and policies by government**: Nigerians are very good in planning and policies making, but if it come to implementation you will find them wanting. In all our dealings implementation is very hard to put into practices, but we have blameless plans and policies.

6. Insufficient competence in handling ICT resources: there are no enough skills personal (laboratory attendant) that could be able to handle ICT resources in each of the ICT's Centre's in various higher education institution for teaching and learning.

7. **High cost of e-learning facilities**: a lot of ICT Centre's in tertiary institutions in Nigeria has no adequate and standard (updated) ICT resources for teaching and learning, if you went to our ICT Centre's you would see a lot of the resources are obsolete. The management of the schools can't be able to afford them because of their high cost.

8. **High cost of internet service providers**: even if there are e-learning facilities, you can find out that management and the students may find it very difficult to subscribe or buy data for their teaching and learning activities. Government of Nigeria should intervene in that regard so that the access to internet resources should be free of charge.

9. **Inadequate funding of the university by the government**: this is enormous in the Nigerian universities. That is the reason Academic Staff Union of Universities (ASUU) are always fighting for adequate funding. No doubt without enough fund Nigerian universities can't be able to run and produce good products.

10. **Corruption**: people are trying to accumulate what does not belong to them. Corruption manifested everywhere in government with no exception. Government properties are no longer secured. As such University could not be capable to have their yearning.

11. Podcasting in Higher Education as a Tool towards Sustainable Development

The term sustainable development is like other social science which has no single definition; it could be as a result of environment, socio-economic or political sphere. Oludare (2020) stated that there is no single definition of the term sustainable development. Sustainable

development is the "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Emas, 2015).

The essence of the concept of sustainable development derives from the Triple bottom line concept, which implies the balance between three pillars of sustainability; environmental sustainability focused on maintaining the quality of the environment which is necessary for conducting the economic activities and quality of life of people, social sustainability which strives to ensure human rights and equality, preservation of cultural identity, respect for cultural diversity, race and religion, and economic sustainability necessary to maintain the natural, social and human capital required for income and living standards. Complete sustainable development is achieved through a balance between all these pillars; however, the required condition is not easy to achieve, because in the process of achieving its goals each pillar of sustainability must respect the interests of other pillars not to bring them into imbalance. So, while a certain pillar of sustainable development becomes sustainable, others can become unsustainable, especially when it comes to ecological sustainability, on which the overall capacity of development depends (klarin, 2018).

Podcasting enable learners to learn own their own in respects of their distance, environment or schools, as such learning become simple, interesting, enjoyable, fast and also concrete. Many universities now routinely offer web-based lecture recordings or podcasting, although recording material for students is not new to education, growing attention has been given to podcast in the last decade with technological changes that make producing and accessing lecture recordings increasingly easy (Chester, Buntine & Atkinson, 2011). Teaching with podcasting is a particular form of e-learning and much of the research into the use of podcasting shares the general objective of other forms of research into e-learning: It studies how the use of technology in teaching enhances the learning process and thereby also the learning outcome (Dorina & Hans, 2016). Our basic premise is that; the use of podcasting can indeed transform learning in that this approach can be used to educate better and enhance learning, this type of technologically enhanced learning contributes to the integration of 21st century graduate skills, as it enhances digital skills, on the one hand, and on the other hand, puts the emphasis on human interaction (Dorina & Hans, 2016). This noted that the use of podcasting in teaching and learning will enhanced and make teaching and learning easy, reliable and permanent.

Conclusion

This research indicates that podcasting can be used for teaching and learning in various higher institutions in Nigeria. Thus, it is important to inform the students and lecturers about how to use podcasting and suggest more resources of podcast for the importance of learning. Teachers should first familiarize themselves with the technology and available resources in order to introduce learners to the basics of podcasting (Darwis, 2016). The use of podcasting for teaching and learning has great potential not only because podcasting help differentiate learning and provide additional support to needs but also because they foster a sense of inclusivity and belonging to the learning community (Maher, 2016). Podcasting is short clip downloaded for one purpose or the other. It is obvious podcasting can be used for various purposes with no exception of teaching and learning. In the developed countries podcast

became tools for teaching at the higher institutions, it makes teaching and learning very easy, simple, enjoyable, interesting and concrete. Podcasting in higher education will make a nation to realize her sustainable development easily with the use of podcasting in teaching and learning. There are numerous challenges that hinder the use of podcasting by the lectures in higher education in Nigeria as explained in this paper. There is need of government at different level to work hand in hand with educational authorities at different levels in order to address the issues, so that podcasting will become teaching aid.

Recommendations

The recommendations stated below were drawn based on the preceding discourse:

1. The National University Commission (NUC), National Commission for Colleges of Education (NCCE), National Board for Technical Education (NBTE), just to mention but few, should organize seminars, conferences, workshops or lectures regularly to further enhance pre-service teachers', teachers', and lecturers' integration of ICT related technology especially the use of podcasting towards development of teaching and learning.
2. Electricity should be adequately provided by the government to enable the use of technology related tools for teaching and learning. Without adequate electricity podcasting could not be used for teaching and learning.
3. WiFi/Network should be provided free within the campuses and outside if possible, so that teachers and learners can have access to internet service to improve their teaching and learning.
4. Teachers' should be encouraged to integrate technological innovations as instructional tools.

References

Alharthi, K. (2016). Evaluating the awareness and perceptions of English teachers in using e-learning tools for teaching in Saudi higher schools. *British Journal of English Linguistics.* Published by European Training and Development UK. www.eajournal.org

Aristizabal, A.(nd). Podcasting: a preliminary classroom study. https://files.eric.ed.gov

Carvalho, A. A. & Aguiar, C. (2009). *Impact of podcasts in teacher education: from consumers to producers*. www.researchgate.net/publication/277235815

Chester, A., Buntine, A. & Atkinson, L. (2011). Podcasting in education: student attitudes, behaviour and self-efficacy. Educational Technology and society. www.researchgate.net/publication/220374783

Darwis, R. (2016). Students' perceptions towards the use of Podcast in learning English: a case study of the second grade students at one high school in Bandung. *Journal of English and Education,* **4** (2). www.researchgate.net

Dorina, G. & Hans, H. (2016). *Podcasting for teaching and learning in higher education (1. Edition-Open Access ed.)*. Aalborg University for lag. Higher Education Practices Series, 2.www.iiste.org

Edirisingha, P. & Salmon, G. (2007). *Pedagogical models for podcasts in higher education.* Beyong Distance Research Alliance Conference Pre-print Copy. University of Leicester, UK. https://core.ac.uk

Emas, R., (2015). *The concept of sustainable development: definition and defining principles.* Brief for GSDR, Florida International University. https://sustainabledevelopment.un.org

Goldman, T., (2018). The impact of podcasts in education. Advanced writing: pop culture intersections. htts://scholarcommons.scu.edu/engl/176/29

Gribbins, M., (2007). The perceive usefulness of podcasting in higher education: a survey of students' attitudes and intention to use. Proceedings of the Second Midwest United State Association for Information Systems, Springfield, IL. https//files.eric.ed.gov

Ibezim, N. E. (2013). Technologies needed for sustainable e-learning in University education. *Modern Economy, Scientific Research*, **4**: 633-638 http://dx.doi.org/10.4236/me.2013.410068

Ismaila, A. A., (2020). *Usefulness and attitude of the pre-service teachers' adoption of smartphone for learning in colleges of education in North-west, Nigeria*. LAP LAMBERT Academic Publishing a Trademark of International Book Market Service Ltd., Member of the Omniscriptum publishing Group 17 Meldrum Street, Beau Bassin 71504, Mauritius. ISBN: 978-620-2-79424-4.

Klarin, T., (2018). The concept of sustainable development: from its beginning to the contemporary issues. *Zagreb International Review of Economics and Business*, **21** (1): 67-94. www.researchgate.net

Laing, C. & Wootton, A., (n.d.). Using Podcasts in higher education. Health Information on the Internet.www.researchgate.net

Maher, S. P., (2016). The power of podcasting: perspectives on pedagogy. *Journal of Instructional Research, 5*. https//files.eric.ed.gov

Masudul, H. M. & Bee, T. H., (2013). *Podcast applications in language e-learning: a review of recent studies.* English language teaching; published by Canadian center of science and education. http:// dx.doi.org/10.5539/eltv6n2p128

McGarr, O., (2009). A review of podcasting in higher education: its influence on the traditional lecture. *Australasian Journal of educational Technology.* **25** (3): 309-321. https://www.ajedt.net

Oludare, O. D., (2020). *Religious education for sustainable development. Language, Education and Religion for National Development*. In M. M. Jimba, M. A. Adedimeji, M. A. Lawal & M. S. Abdullahi (Eds), Published by the Department of Arts Education, Faculty of Education, University of Ilorin, Ilorin, Nigeria, 85-89. https//files.eric.ed.gov

Sequeira, A. H. (2012). Introduction to concepts of teaching and learning. *SSRN Electronic Journal*. https://www.researchgate.net

Ukwueze, F. N. & Okpulo, L. O. (2014), the use of educational podcasting in Nigerian Universities: a case study of university of Nigeria, Nsukka. *Computer Education Research Journal (CERJ),* **1** (1): 78-84. www.researchgate.net