

Empowering Nigeria Students with Civic Education Utilizing Audio Podcasts

Idowu Lanre (Ph.D.)

Department of Educational Technology & Library Studies, Obafemi Awolowo University, Ile-Ife, Osun State.
Nigeria

Abstract

The podcast is a technology that deals with spreading of information, but developed to become a powerful instructional medium. Despite its usefulness in learning, podcast positive impact are yet to be established. Therefore, this paper presents the effect of audio podcasting instruction on the civic education, among the Nigeria Senior Secondary Schools students. The relevant reviews of past studies on podcast were looked into and the results show that learning was positive with podcast. Majority of students in respect of gender also benefited from the podcasts pedagogical. The government should provide and assist the students with the course materials, it was recommended that civic education teachers should be encouraged to use audio podcasts to improve students' knowledge of civic education.

Keywords: Civics Education, Computers, Gender, Mp3, Audio Podcast.

Introduction

The innovation brought through computer has positive influence on instructional media, technology is now utilized for conceptual and theoretical learning (Chakraborty & Nafukho, 2015). It is now clear that learners can access to any networking site for knowledge acquisition at any time, and at any situation (Al.Zoube, 2009). Significantly the contribution of technology has brought great impact on the development of University curriculum globally, improves activity of the learners in schools and colleges and helps private and public educational sectors for easier and effective administrative works (Selwyn, 2007). The study of Miah and Omar (2012) explicated that learners' academic pursuit are built on digital and technological age thereby allow users access to information from different angles.

According to Bugge and Wikan (2016) technology has tailored the instructor to be more flexible, it makes instructions to be interesting and teaching becomes stress free, creating arena for knowledge acquisition via different approaches of interactions for content delivery. Similarly, the study of Hoic, Bozic, Mornar, and Botticki (2009) stressed that technology has tremendously improved learners cognitive intellects and senses for internet usage. In the same vein, Odewumi (2017) expressed that Internet is an offshoot of computer networks tagged as World Wide Web encompassing high speed connections use for media and Podcasting.

The study of Copley (2007) mentioned that podcast is a concept that first appeared in year 2004. It consisted of wordings coined from the words 'iPod' and 'broadcast' (Sutton-Brady, 2009). It is was built on the technology invention of e-learning, based on principles of web, which compacts files of both audio and audiovisual devices and issues through a special links (Harman, Cebeci, & Tekdal, 2006; Buffington, 2010). The study by Lazzari (2009) confirmed podcasts as online digital instruction invented from web purposely for broadcasting and dividing the instructional content to mobile devices for easy playing and feedback from iPods, mp3, and personal computers. Podcast has the attribute of capturing audio events, adding sounds and speech through editing for Web or "blog" usage (McGarr, 2009; Young, 2007; Lewin, 2009).

Also, podcast develops and captures learners' attention through online and moveable technological device (Edirisingha, Rizzi, Nie & Rothwell, 2007; Willingham, 2009). Podcast is an e-learning devices for sharing and also a supplementary medium for knowledge (Lonn & Teasley, 2009; Kidd, 2012). It's also an instructional appliance for the attainment of stated educational goal (Cebeci & Tekdal, 2006).

In another way, Artsinez (2002) and Norman (2004) stressed that podcast facilitates easy integration of Web based, mobile and e-learning instructional modes among learners, through audio recorders, mp3 players and other digital devices (Artsinez, 2002; Norman, 2004, at different locations and time (Lee, McLoughlin, & Chan 2007; Dale & Povey, 2009).

Empirical evidences on usefulness and study of Podcast for language instructions are being looked into. For example, the study of Tohill (2008) established the usefulness of podcast in handling different languages on the school curriculum. Also, Hill, Nelson, France and Woodland (2012) confirmed podcast as valuable for languages and humanities instructions. Similarly, Qiang and Klein (2016) and Ho, Chou and Fang (2016) authenticated podcast on the teaching and learning of Chinese languages. Marefat and Hassanzadeh (2016) revealed that podcast video has influence on the speech learning. Similarly, Khanghah and Halili (2015) worked on the influence of podcast on Iran language, the study concluded with solving of issues in vocabulary associated with Iran language. Hasan and Hoon (2013) findings established that podcasts support learning especially pronunciation, grammar and vocabulary. Farshi and Mohammadi (2013) revealed that podcast provides learners

with positive attitude and motivates them for learning of language. Kay (2012) confirmed the effectiveness and positive of video podcasts in instruction. Tam (2012) studied revealed the relevance of podcast and motivation in learners. The study of Bannon, Lubke, Beard, Britt (2011) on pre-service teachers on audio podcast it was clearly stated that there is no significant difference in the pre-service teachers academics performances on Podcast and lecture method. Similarly, Beylefeld, Hugo and Geyer (2008) exposed audio Podcast as a powerful instructional medium, for university education. Also the study of Toth (2011) and Gnaur and Huttel, (2016) re affirmed Podcast as a useful and effective instructional materials in the universities setting. In the same vein, Çölkesen and Bedir (2016) further argued the efficacy of podcasts in teaching of local and foreign languages as well as the effectiveness in handling vocabulary in languages.

Nevertheless, empirical studies on values and usefulness of audio Podcast remained controversial among the scholars. For example, Lenhart (2010) identified a number of values of podcasts that includes sharing of audio, images and video on web. Lonn and Teasley (2009) argued that audio podcast presents and encourages technological advancement in learning in different ways. McCombs and Liu (2007) explained that audio podcast is an active technology that is based on the web for reflection, revision and clarification of learning. Also, Cebeci and Tekdal (2006) emphasized podcast as a technological device of m-learning and e-learning for assembles of information and purposeful instructions. Podcast is effective ways of delivery coded instruction to the scholars. It is very imperative for interaction, collaboration and a pedagogical task in delivery instruction to higher institution (Edirisingha, Rizzi, Nie, Rothwell, 2007; Vajoczki, Watt, Marquis & Holshausen, 2010).

The study of Heilesen (2010) confirmed audio podcasts as positive in developing and achieving purposeful educational goals. It also promotes, influence universities curriculum implementation. Edirisingha (2007) established that Podcast have been utilized for spreading useful information to the students and teachers via social network site and a potential learning oriented programme of instruction (Lonn & Teasley, 2009). In essence, it was concluded by Sutton-Brady (2009) that both the student and the teachers gain for embarking on podcasts as a medium of transmitting information and instructions.

The theoretical framework of this study is based on the theory of McLoughlind and Lee (2008) whose studies confirmed the constructivist models of instructions, which has the ability to promote learning individually. Also, Lim (2006) grouped podcast within the cultural and historical range of the activity theory of the Engeström 2001, which stressed the idea that all necessitates, accomplishes and outcomes of planning are regulated by a specified activity.

The relevance of the citizenry activities are monitored by the government. Therefore, Odanye (2012) defined civics education as an academic discipline which aims to inculcates in learners, the right values, positive attitudes and behaviour, that are considering acceptable to community. The author further explained civics as the study of the duties and right of the citizens in their society with the objectives as exposing Nigerian students to the basic concept and provision of the Nigeria Constitution and its relevance towards the social- cultural diversity of the country.

The extent to which the podcasts enhances teaching of Civic Education in Nigeria is still unknown. Although, many podcast studies done were on languages. Therefore, on this the present study researched to empowering civic education learning utilizing podcasts among the senior secondary schools in Nigeria.

Research Questions

The study answer these questions;

1. What is the difference in the performance of students taught civic education with Podcast?
2. What is the difference in the performance of male and female students taught civic education using Podcast?

Research Hypotheses

These null hypotheses were tested accordingly in the study;

- (i) There is no significant difference in the performance of students taught civic education with Podcast and those taught with conventional method.
- (ii) There is no significant difference in the male and female taught civic education with Podcasts.

Methodology

The study utilized quasi-experiment that consisted of the treatment group and control groups with the pretest and posttest. The pre-tests was used to examine the correlation of treatment and control groups. The study used purposive random sampling to assign two secondary schools in Ile- Ife in Osun State. The school were selected based these common attributes: uniformity in term of standard school Hall, constant supply of manpower, government owned and composition of the both male and female. Podcasts were developed by the researchers based on the Joint Scheme of Work for Secondary Schools in Oyo State.

The researcher developed the podcast based on second term work of Senior Secondary School civic

education for senior secondary two. Through the availability of text and internet facilities. The podcast was given to the Heads of Department of Political science, at Federal College of Education Special Oyo, Oyo State. Nigeria. The podcast were validated by the experts in Educational Technology, experienced civic education teacher, a Computer science specialist for content and face validity and later, it was finally field tested on the sample of the same representative, which is similar in another school equivalent to the sample of the study.

The podcasts contained the scheme of work for the term break into topics. Mp3 with 1GB memory card and extra battery and charger were the podcast learning devices which were given to the students at the beginning of the second term of 2015/2016 session. The treatments last for 12 weeks, the first week is for the introduction of the course content, distribution of the course materials and administering the pretest. The students were instructed to come to the assembly hall on every Monday morning to get adequate information on the course materials and content for each week. In essence, 30 students were divided into two groups, each group consisting of 15 students for control group and 15 students for the treatment group from the senior secondary school of Civic education students' senior class two. The treatment class were given weekly topics on individual memory cards (podcasts learning devices), while the control group was engaged in through teaching from two experienced Civic Education teachers. On completion of the teaching, on the last week of the prescribed week of the term a summative post-test were given to both groups to confirm the differences.

The validated Podcast Civic Education Test (PCET) was used for collection of data. Test instrument of Podcast Civic Education Test (PCET) consist of 100 multiple objective test items from West African Senior School Certificate Examination (WASSCE). Podcast Civic Education Test (PCET) is based on the topic in the scheme of work for the term. Each stem of the Podcast Civic Education Test had A-E option of selection as likely answers. Therefore the students were asked to pick the right answers from the option (A - E). Podcast Civic Education Test (PCET) was administered as a pretest to both study groups and later rescheduled and utilized for the post-test which is the Summative.

Despite the validation of instrument, it was also revalidated for the purpose of given modifications and constructive criticisms. Therefore the instrument was given to a lecturer in Test and Measurement, a lecturer in Educational Technology and a lecturer in Computer Science from the federal University of Ilorin. Ilorin Nigeria, for face and content validation. Based on their constructive suggestion final draft was made and the validity as well as the reliability was later administered on sample of students from a close school not in the study sample with Cranach's alpha value of 0.79. The data collected at the end of the treatment were analyzed using t-test and Analysis of Covariance (ANCOVA) with Statistical Package for Social sciences (IBM SPSS Statics) version 21 at 0.05 alpha level.

Results

Testing of hypothesis:

Ho₁: There is no significant difference in the performance of students taught Civic Education with Podcast and those taught with conventional method.

In other to locate the significant difference in the post-test mean scores of the two groups (podcasts and conventional), the data collected were analyzed with the t-test statistics. Table 1 exhibits the result of the analysis.

Table 1:

t-test post test on Podcasts group and Conventional group.

Variables	N	Mean	Std. Deviation	df	t	Sig. (2.tailed)
Podcast	15	74.11	14.540	28	064	.950
Conventional	15	67.54	14.142			

Table 1 exposed the effect of treatment between the group (podcasts and lecture) on Civic Education. The $F = 064, p = 950$). The effect was significant. Therefore the hypothesis one was not rejected. There was a clear significant difference between the podcast group and conventional group.

Ho₂: There is no significant difference in the male and female taught Civic Education with Podcasts.

To determine the significant difference in the post-test mean scores of the male and female students. Data were analyzed using the t-test statistics. Table 2 shows the result.

Table 2:

t-test post test on male and female post test.

Variables	N	Mean	Std. Deviation	df	t	Sig. (2.tailed)
Male	16	74.11	13.662	28	.334	.741
Female	14	67.54	15.641			

Table 2 indicates that the post test of male and female (gender) $F = .334, p = 741$ which was not significant at 0.05 alpha level. This illustrated that there was no significant difference in the male and female post test scores. Therefore, hypothesis two was not rejected.

Discussion of Findings.

The hypothesis one obviously specified that there is a significant difference of students' performance in favour of Podcast group by individual students. The result exhibits further that the significant difference of students taught using Podcast. The discoveries confirmed better performances in favour of students in the audio Podcasts as compared to the conventional method of teaching. The finding is conformed with the findings of Crippen and Earl (2004) and Alpay and Gulati (2010) that established the significant gains in the learners understanding when they are exposed to Podcasts. Furthermore, this finding was in line with the outcome of the studies of Kurtz, Fenwick, and Ellsworth (2007) that confirmed great significant improvement of learners used podcasts for learning, and also Ho, Chou and O'Neill (2010) whose findings reported the clear performances of students which had significantly impact on learning with the podcast.

However, this finding disagrees with the findings of Lakhal, Hager and Pascot (2007) s that established no significant difference between control and podcast group respectively. Moreover, the finding of this study also contradicted the conclusion of Copley (2007) who stated that students learn when using different learning materials and that students taught with Podcast are better. And also the outcome of Lazzari (2009) who explains that learning with podcasts did not find any significant effect of enhancing learning and performances of students.

The hypothesis two confirmed the significant difference in the students taught fine Civic Education with Podcast and lecture before the treatment and after. This finding supports the finding of Hill and Nelson (2011) who submits that the student's attitudes are positive towards using Podcast for studies. The finding is also in agreement with the findings of Vajoczki, Watt, Marquis, and Holshausen (2010) that explained the increase in the students learning performance when exposed to Podcasts. And also, the findings of Evans (2008) who explained that undergraduate students access to learning hints and facts are of great significant importance. Also, the study conformed with the conclusion of Campbell (2005) who suggests the undergraduate students often working with rich media that has a positive effect on student attitudinal performance.

The finding was also in support of the finding of Chi, and Chan, (2011) whose explains the great significant impact on the respondents attitudes to podcasting have a bearing on the users' attitude and intent. The finding is in favour of Kay, and Kletskin (2012) that suggested video podcasts as having a higher supremacy on students learning performance. The finding disagrees with the Ducate, and Lomicka, (2009) study that confirmed no significant improvement in pronunciation attitudinal practice in English language using podcast. In essence the attitude of the undergraduate students toward the technology is higher, therefore civic education lecturers should utilize the situation to bring out needed knowledge in the students through Podcast.

Conclusion

The study of podcast ascertained great achievement in the senior secondary school students' performances, deep involvement in civic education instruction and deep meaning of podcasting technology in learning. Moreover, learning with Podcast becomes positive and using podcasts for instruction supports meaningful and usefulness to learning with a great significant reward. Therefore, podcasts can be associated with the learning resources that aid meaningful learning and stimulate meaningful learning.

Recommendations

Based on the findings, it was recommended that school administrators should made available materials need for audio podcast technologies to alleviate the learning problem for the students. Also, students should be encouraged to use audio podcast technologies in learning of Civic Education. Moreover, workshops, seminars and periodical in service trainings should be put in place by government for the Civic Education teachers and as well as the students on the usefulness of audio podcast for learning. Government can provide memory cards of civic education content for student to easy and aids their reading culture.

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