

Attitude of Pre-service Teachers towards the Utilization of Podcast for Learning in Colleges of Education in Kwara State, Nigeria

ADESHINA, KEHINDE HUSSEIN¹, ABDULAZEEZ, BOLANLE TAWAKALT-ANU², AMMED, NAFISAT BUKOLA³

¹Department of Curriculum and Instruction, School of Education, Federal College of Education Iwo, Osun State

²Department of science education, Faculty of Education, Al-Hikmah University, Ilorin, Nigeria.

³Department of Banking & Finance, Federal Polytechnic Offa
Sponsored by: Tertiary Education Trust Fund (TETFund)

Abstract- Podcasts, which are digital audio files available for download or online streaming, provide students with the flexibility to access educational content at their convenience. Although podcasting has potential benefits for education, its implementation in colleges of education in Kwara State, Nigeria remains relatively sparse. This limited use can be attributed to several challenges, including: lack of awareness, insufficient infrastructures, and limited technical skills (Muhammad et al., 2013). Hence, the study examined Attitude of Pre-service Teachers to the Utilization of Podcast for Learning in Colleges of Education in Kwara State. The objectives of this study were to: (i) Investigate the current attitude of pre-service teachers in colleges of education in Kwara State towards the integration of podcast as a pedagogical tool in their learning experiences (ii) Identify the factors influencing pre - service teachers attitudes toward the use of podcast for learning in colleges of education in Kwara State, Nigeria. This study adopted a descriptive research design of the survey type. Random sampling technique was adopted to select 200 pre-service teachers from colleges of education in kwara state, two research questions and one hypotheses raised were tested at 0.05 level of significance. Data collected using a researchers' designed questionnaire were analyzed using descriptive and inferential statistics, mean and standard deviation, One-way Analysis of Variance (ANOVA) for hypotheses. The validity of the instrument was done through face and content validity. The Findings of the study were: that attitude of students towards the use of podcast for learning was positive; perceived ease of use, perceived usefulness for learning specific subjects with podcast was positive; technical challenges, access to necessary technology and internet connectivity, and the influence of instructors' perspectives on podcast integration was negative; there is no significant difference between attitude of pre-service teachers towards podcast use and their perceived self-efficacy in utilizing technology for teaching – learning process. The study concluded that the attitude of pre-service teachers towards the utilization of podcast for learning was positive, and no significant

difference between attitude of pre-service teachers towards podcast utilization and their perceived self-efficacy in utilizing technology for teaching – learning process. It was suggested that prospective teachers, no matter their gender or where they live, become highly proficient in using podcasts as a learning tool.

I. INTRODUCTION

The landscape of teacher education is constantly evolving, driven by advancements in technology and a growing understanding of effective pedagogical practices. In this dynamic environment, the integration of digital tools has become increasingly significant in preparing future educators. These technologies offer novel avenues for delivering content, fostering engagement, and cultivating essential 21st-century skills among pre-service teachers (UNESCO, 2023).

Among the burgeoning digital resources available, podcasts have emerged as a versatile and accessible medium with the potential to enrich the learning experiences of teacher trainees. Characterized by their episodic audio format, podcasts offer flexibility in learning, allowing students to access educational content anytime and anywhere (Anderson & Rainie, 2020). They can deliver lectures, interviews with experts, discussions on pedagogical approaches, and even real-world classroom scenarios, providing a rich and varied learning environment beyond the traditional lecture hall (Levin & Trostel, 2017).

The theoretical underpinnings for exploring the use of podcasts in education are rooted in constructivist learning theories, which emphasize active engagement and the construction of knowledge by the learner (Piaget, 1971; Vygotsky, 1978). Podcasts

can facilitate this by allowing pre-service teachers to revisit content, reflect on discussions, and integrate new information at their own pace. Furthermore, the portability and on-demand nature of podcasts align with principles of flexible and personalized learning, catering to diverse learning styles and schedules (Ally, 2004).

In the Nigerian context, and specifically within Colleges of Education in Kwara State, the adoption of technology-enhanced learning approaches is gaining momentum. These institutions play a crucial role in shaping the next generation of teachers who will, in turn, influence the quality of education at the primary and secondary levels. Understanding the perceptions and attitudes of these pre-service teachers towards innovative tools like podcasts is therefore paramount. Their disposition towards such technologies will significantly impact their willingness to embrace and effectively utilize them in their future classrooms (Ertmer, 2005).

However, the integration of podcasts into teacher education programs is not without potential challenges. Factors such as access to technology, digital literacy levels of both instructors and students, and the perceived value and ease of use of podcasts can influence their adoption and effectiveness (Venkatesh & Davis, 2000). This study aims at understanding pre-service teachers' perspectives on using podcasts within Colleges of Education in Kwara State is crucial to identify potential barriers and facilitators for successful implementation.

This study, therefore, seeks to examine the attitudes of pre-service teachers in Colleges of Education in Kwara State towards the use of podcasts as a learning tool. By understanding their perceptions, this research aims to provide valuable insights for educators, curriculum developers, and policymakers in Kwara State and beyond, informing decisions regarding the strategic integration of digital resources like podcasts to enhance the quality of teacher education and ultimately contribute to a more technologically proficient teaching workforce.

II. PURPOSE OF THE STUDY

The main purpose of this study was to find out attitude of pre-service teachers towards the use of podcast for learning in colleges of education in Kwara State, Nigeria.

Specifically, the study would seek to:

1. Examine the current attitude of pre-service teachers in colleges of education in Kwara State towards the integration of podcast as a pedagogical tool in their learning experiences
2. Identify the factors influencing pre - service teachers' attitudes toward the use of podcast for learning in colleges of education in Kwara State, Nigeria.

Research Questions

The following questions were raised and answered;

1. What is the current attitude of pre-service teachers in colleges of education in Kwara State towards the integration of podcast as a pedagogical tool in their learning experiences?
2. What are the factors influencing pre - service teachers' attitudes toward the use of podcast for learning in colleges of education in Kwara State, Nigeria?

Research Hypotheses

H₀₁: There is no significant difference between attitude of pre-service teachers towards podcast use and their perceived self-efficacy in utilizing technology for teaching and learning in colleges of education in Kwara State

III. REVIEW OF RELATED LITERATURE

The Role of ICT in the Conduct of Teaching and Learning in Nigeria Schools

The teaching and learning of History in the Nigerian institutions most importantly in the 21st century have developed within the framework of theory and practice. In this technological age, the effective means of communication in the classroom instruction requires the use of communication technologies. "The illiterate of the 21st century, will not be those who cannot read and write, but those who cannot learn, unlearn, and re-learn." Alvin Toffler (cited in Shikshak, 2009).

The above statement pointed out the relevance of ICT revolution in the 21st century education. Haddad and Jurich, (2017) argued that there are four basic issues in the use of ICTs in education in the 21st century. They are effectiveness, cost, equality and sustainability. They pointed out that, in recent years,

there has been an upsurge of interest in how ICTs most importantly computers and the internet can best be harnessed to improve the efficiency and effectiveness of education at all levels and in both formal and non-formal settings (Haddad and Jurich, 2002). The role of ICT in the teaching and learning of History in the 21st century can be seen in four major angles namely, the impact on teacher, learner and the image of history as a discipline. Conventional teaching which is still common today in our schools emphasizes content. For many, teachers of history in particular have taught through lectures and presentations interspersed with tutorials and learning activities designed to consolidate and rehearse the content (Kamal and Banu, 2010).

Meanwhile, contemporary settings are now favoring curricula that promote competency and performance. In the developed countries, curricula are starting to emphasize capabilities and to be concerned more with how the information will be used than with what the information is. The moves to competency and performance-based curricula are well supported and encouraged by emerging instructional technologies (Stephenson, 2001). Such curricula tend to require: access to a variety of information sources; access to a variety of information forms and types; student-centered learning settings based on information access and inquiry; learning

The Concept of Podcast in Education

Podcast is an audio or visual content that is automatically delivered over a network via free subscription. Once subscribed to, podcasts can be regularly distributed over the Internet or within your school's network and accessed with an iPod, or any portable MP3 player, laptop, or desktop computer. Podcasts were originally audio-only but may now contain still images, video, and chapters identifying major sections or ideas. A podcasting is a method for distributing any digital media file (podcast), or series of files, over the Internet for playback on portable media players, such as iPods, and personal computers. Podcasting stands for Portable on Demand Broadcasting. The podcasting process begins with the creation of content through the use of audio capturing and editing tools. The subscription process of podcasting relies on the use of Really Simple Syndication (RSS) technologies.

The content provider acknowledges the existence of the created file by referencing it in an RSS enabled

web site. The feed lists the locations of all episodes of a podcast, including episode publish dates, titles, and accompanying text descriptions. A user subscribes to a podcast by entering the permanent feed location into an aggregator program that reads RSS, such as Apple iTunes. Once subscribed, new podcast episodes are automatically delivered to the user's computer. The downloaded episodes can then be played, replayed, or archived as with any other computer file.

According to Lim (2006) pod-casting involves "the authoring of, and subscription to, audio and/or video files on the internet for downloading to the user's personal computer". Furthermore, pod-casting "enables users to quickly and easily download multimedia files, including audio and video, for playback on mobile devices". Kaplan – Leiserson (2005) define pod-casting as an Internet based service that allows subscription and downloading of digital audio contents (podcasts) by the means of the RSS technology, whereby these contents are transferred into an on-line repository or to a corresponding base in the computer, in the form of a data file. These can be accessed through different digital audio devices, including desktop computers.

IV. METHODOLOGY

This study used a descriptive survey approach to examine pre-service teachers' attitudes toward using podcasts for learning in Colleges of Education. The population for this research comprised of all pre-service teachers in state colleges of education in Kwara State, Nigeria. Random sampling techniques was used to select 200 pre-service teachers. The researchers designed a questionnaire to elicit data from the respondents. The instrument was divided into three sections; Section A, B, and C. Section A contained information on the demographic information of the responds such as gender, area of specialization. Section B contained current attitudes of pre-service teachers in colleges of education in Kwara State towards the integration of podcast as a pedagogical tool in their learning experiences. Section C contained the information on factors influencing pre – service teachers' attitudes toward the use of podcast for learning. The four-point type of scoring consisted Strongly Agree which has 4 points, Agree 3 points, Disagree 2 points and Strongly Disagree 1 point.

Their corrections and suggestions were used to modify the Instrument. The researchers employed service of research assistants to administer the instrument to the respondents and retrieve the completed questionnaire for further analysis. Data collected was analyzed using Descriptive and Inferential Statistics. Mean and Standard deviation was used to analyze research questions. Hypothesis was tested using independent t-test. Hypothesis was tested at 0.05 level of significance.

V. RESULTS

They will not be deterred from any job by the need to use ICT tools. This was reflected in a mean score of 3.27 which revealed that the podcast helps them to develop cognitively in my study. Podcast are not always available for learning and that the use of Podcast makes it easier to learn in the school with mean score of 3.22 and 3.20 respectively. Podcast promotes teachers and students' participation in the school. It can then be inferred that attitude of pre-service towards the use of podcast for learning is positives. There is no significant difference between attitude of pre-service teachers towards podcast use and their perceived self-efficacy in utilizing technology for teaching and learning in colleges of education in Kwara State { $F(2, 198) = 1.62, p = .20$ }. That is, the significance value (.20) was found to be greater than the alpha value (0.05). This means that the stated null hypothesis was accepted. By implication, the null hypothesis was established thus: no significant differences in attitude of pre-service teachers towards podcast use and their perceived self-efficacy in utilizing technology for teaching – learning in colleges of education in Kwara State

VI. SUMMARY OF MAJOR FINDINGS

The findings of this study based on the research questions and the hypotheses formulated were summarized as follow:

1. that attitude of pre-service teachers towards the use of podcast for was positives.
2. there is no significant difference between attitude of pre-service teachers towards podcast use and their perceived self-efficacy in utilizing technology for teaching – learning in colleges of education in Kwara State

VII. DISCUSSIONS ON RESEARCH FINDINGS

Research question 1 sought to find out whether the attitude of pre-service teachers towards using podcasting will be positive or otherwise. The result of the mean value showed that the responses of the respondents were on the positive side. This meant that the tendency of the pre-service teachers to welcome the innovation of using podcast in learning was high.

In support of this finding, (Abubakar, Ogunlade, & Ibrahim, 2024; Wananyo, Ebi, & Ibi, 2024; Oladayo & Oladayo, 2024) show that teachers and lecturers in Nigeria generally hold positive attitudes towards the integration of Information and Communication Technology (ICT) and innovative technologies in teaching and learning. This aligns with Olumorin's (2008) finding of positive attitudes.

While not as prominent as infrastructural issues in recent studies, the idea of "resistance to change" (from traditional methods to technology-driven ones) is still acknowledged as a factor, often linked to lack of confidence or unfamiliarity (Ogoazu & Owojinjin, 2020)

From the findings, it could be deduced that there is general positive attitude towards technology integration among educators, although there is also persistent practical challenges (infrastructure, training) that can hinder actual implementation. The integration of social media for learning is indeed seen as beneficial and increasingly utilized, but with a clear understanding of the distractions it can pose and the critical need for comprehensive stakeholder efforts to ensure its effective and responsible use.

VIII. CONCLUSION

The findings in the research established that pre-service teachers had a positive attitude towards using podcast for learning. Moreover, there was no significant difference between attitude of pre-service teachers towards podcast use and their perceived self-efficacy in utilizing technology for teaching and learning in colleges of education.

IX. RECOMMENDATIONS

Based on the findings and conclusions of this study, the following recommendations were made:

1. government should provide the necessary assistance on the procurement of all needed

- podcast facilities. This could be in form of free excise duty, subsidizing the prices and free supply of the facilities into colleges of education. This will encourage all prospective teachers to embrace the adoption of podcast utilization;
2. prospective teachers, no matter their gender or where they live, become highly proficient in using podcasts as a learning tool;
 3. government and policy makers in education should endeavour to introduce the use of podcast into teacher education curriculum in the colleges of education and faculty of Education in Universities so that both the lecturers and students will be using it for instructional purposes;
 4. pre-service teachers should help themselves by making use of social media for instructional purpose and shift their foci from using it for fun and entertainment;
 5. government should formulate workable ICT policy that will be friendly to all levels and categories of educational programme, colleges of education not being left out;
- #### REFERENCE
- [1] Abubakar, U., Ogunlade, O. O., & Ibrahim, H. A. (2024). The influence of technology-integrated curriculum resources on student engagement and academic achievement in higher education. *Advances in Mobile Learning Educational Research*, 4(2), 1208-1223. <https://doi.org/10.25082/AMLER.2024.02.014>
 - [2] Ally, M. (2004). Foundations of educational theory for online learning. In T. Anderson & F. Elloumi (Eds.), *Theory and practice of online learning*¹ (pp. 3-31). Athabasca University Press.
 - [3] Anderson, J., & Rainie, L. (2020, February 29). *The Next 50 Years of Digital Life*. Pew Research Center.
 - [4] Ertmer, P. A. (2005). Teacher pedagogical beliefs: The final frontier in our quest for technology integration? *Educational Technology Research and Development*, 53(4), 125-39.
 - [5] Haddad, W. D., & Draxler, A. (2002). *Technologies for education: Potentials, parameters, and prospects*. UNESCO & Academy for Educational Development (AED).
 - [6] Kaplan-Leiserson, E. (2005). *Trend: Podcasting in training*. ASTD Learning Circuits.
 - [7] Lim, C. P. (2006). Check on the check-in and check-out technology: Podcasting in education and training. In L. Markauskaite, P. Goodyear, & P. Reimann (Eds.), *Who's learning? Whose technology? Proceedings of the 23rd Annual Conference of the Australasian¹ Society for Computers in Learning in Tertiary Education² (ASCILITE)* (pp. 467-470). Sydney University Press.
 - [8] Oladayo, O. T., & Oladayo, C. E. (2024). Differential effects of peer pairing, cooperative, and indirect instructional strategies on reducing dyscalculia among junior secondary school students. *FNAS Journal of Mathematics and Science Education*, 5(2), 69-77.
 - [9] Olumori, C. O. (2008). *Lecturers' attitude to, competence in, and use of computer in tertiary institutions in Kwara State, Nigeria*. Unpublished doctoral dissertation, University of Ilorin, Nigeria.
 - [10] Piaget, J. (1971). *Biology and knowledge: An essay on the relations between organic regulations and cognitive processes*. University of Chicago Press.
 - [11] Stephenson, J. (Ed.). (2001). *Teaching & learning online: Pedagogies for new technologies*. Kogan Page.
 - [12] UNESCO. (2023). *Global education monitoring report, 2023: Technology in education: A tool on whose terms?* <https://unesdoc.unesco.org/ark:/48223/pf0000385723>
 - [13] Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186-204. <https://doi.org/10.1287/mnsc.46.2.186.11926>
 - [14] Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Harvard University Press.
 - [15] Wananyo, U. E., Ebi, A.-E., & Ibi, E. (2024). Attitude of clinical teachers towards the use of innovative technology in teaching and learning in the University of Port Harcourt Medical School, South Nigeria. *Asian Journal of Education and Training*, 10(1), 40-47. <https://doi.org/10.20448/edu.v10i1.5367>