

A CASE STUDY UTILIZING PODCASTING FOR EDUCATIONAL PURPOSES IN ONLINE TEACHER EDUCATION

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ABSTRAK

Artikel ini menyajikan hasil studi kasus yang dilakukan di sebuah universitas di Indonesia, yang bertujuan untuk menyelidiki kelayakan penggunaan podcast yang dibuat siswa untuk penilaian formatif interaktif dalam pembelajaran bahasa Inggris. Penelitian ini dilakukan sebagai bagian dari inisiatif tahun pertama yang lebih besar yang bertujuan untuk merekam, menyempurnakan, dan menyebarkan metode penggunaan internet yang efisien dan orisinal untuk pengajaran dan pembelajaran. Wawancara dan diskusi dengan dosen melalui focus group discussion (FGD), dan penilaian kursus secara keseluruhan semuanya memperlihatkan bahwa tugas melalui podcasting sebagai sarana dapat membuat siswa memperoleh pengetahuan dan wawasan baru. Siswa memperoleh pengetahuan, kompetensi, pengalaman untuk berlatih speaking secara independen. Penelitian ini membantu peneliti memahami apa yang perlu diketahui oleh pendidik di masa depan agar berhasil di ruang kelas di mana alat digital seperti internet dan perangkat seluler berperan sentral dalam pengajaran dan pembelajaran.

Kata Kunci: Pedagogi digital, pembelajaran elektronik, TIK, pembelajaran jarak jauh, podcasting.

ABSTRACT

This paper presents the results of a case study conducted at a university in Indonesia, which aimed to investigate the feasibility of using student-created podcasts for online interactive formative assessment in a pre-service teacher education course. The research was conducted as part of a larger, first-year initiative that aimed to record, refine, and spread efficient and original methods of using the internet for teaching and learning. Interviews with course instructors discussions in student focus groups (FGs), and overall course assessments all point to the podcasting assignment as a means by which the instructor, and students might gain new knowledge and insight from one another. Students gained the knowledge, competence, and assurance from the experience to do further independent research into technology for pedagogical reasons. This research helps us understand what future educators need to know to be successful in classrooms where digital tools like the internet and mobile devices play a central role in both teaching and learning.

Keywords: Digital pedagogy, e-learning, ICT, distance learning, podcasting

Introduction

It's fascinating to see how, in the present day, most ICT-based media with educational potential don't fit neatly into either the educational or communicative categories, but instead take on a dual nature.

Blogs, vlogs, wikis, and podcasts, among others, serve as educommunicative objects in this way. Digital media from the 2.0 era include the podcast format in particular. It took shape in 2004 when technology journalist Ben Hammersley (2004) described the consolidation of these practices in an article titled Audible revolution. This trend had its origins in the early 2000s, when technophile users began exchanging

audio files with one another. While many people refer to podcasts as "internet radio," identifies them as content distributed using the RSS protocol, which enables both immediate and delayed access to the content by subscribers.

Similarly to videoblogs, podcasts can just be audio or they can also include video, in which case they are termed video podcasts or vodcasts. There has been a huge increase in the popularity of podcasts in recent years. Podcasts typically feature audio content. It aggregates amateur initiatives while acting as an extension to formal media, and platforms like Spotify or Apple Podcasts serve as showcases, making it comparable to the YouTube explosion in

the world of audio. Most podcasts are listened to in the United States. If the monthly podcast listenership rates reported by Morris 2019 the accurate, then 90 million Americans (or 32%) have listened to podcasts in the past month. Data from EGM shows that in Spain, the numbers are more modest: 350,000 listeners, or 1.2% of Internet users (2017). To be fair, this is a format with an increasing popularity among consumers.

Envision a world where instructors are not the only arbiters of class content, required reading lists, and final grades. Future-oriented learning is distinguished by flexibility, permeable curricular boundaries, real-world inquiry, and messy avenues to open-ended outputs for sharing (Forbes ,2015 ICTs in education provide new possibilities for instructional engagement. Students use Web, YouTube, and social networking sites to learn about topics of interest, keep track of their own ideas, and maintain contact with their classmates.

It is essential to analyze how online teachers equip their students with the attitudes, motivations, and literacy levels necessary to make effective use of information and communication technologies for learning. How can we give students who are unable to physically be in the classroom the tools they need to take charge of their education? Podcasts created by students foster critical thinking, online discussion, and cooperation amongst learners.

This qualitative case study looked at the use of student-created podcasts for formative assessment in a distant learning setting for a course in online beginning teacher education. The case study took place within the context of a distance learning program for new teachers.

The case study was part of a broader study of e-learning across disciplines with the objective of leveraging pedagogical change, reducing involvement gaps for students and lecturers, and establishing and strengthening a merge educational research ethic to inform pedagogical practices.

The project was designed to foster a spirit on research studies in higher learning, which would assist pedagogical change and lessen student-faculty involvement gaps (Johnson, Cowie, & Khoo, 2011). This article addresses lecturer and tutor reflections, student focus groups, and course grades from the podcasting case study.

In the first part of this discussion, we will go over the theoretical underpinnings of the study. After that, we describe the background of our research as well as the procedures for the study, and then we present our findings. The topic in this paper is centered on the pedagogical implications for educators who are working toward the goal of preparing students for future teaching-learning activities. This is in contrast to measures of how well students are learning.

2. Brief Literature Review

2.1 What is an Audio or Video Podcast?

Many different academics have offered their own unique perspectives on how best to interpret this medium. In the first place, a podcast is described as an online form of digital media that is appealing to the senses of hearing and seeing and that requires the use of headphones or speakers in order to listen to and observe its contents. In addition, it was discovered that this media was available online in the form of video or audio resources that were being used for a variety of reasons). In a similar vein, McGarr explained that "Video podcasts relate to files that are delivered in a digital format on the internet by using personal computers or mobile devices." These files are characterized by the fact that they can be shared, downloaded, and easily accessed by users (Ibid). In addition, "the main component of podcasting is audio, which is not new to the educational sector" (Edirisingha et al. 2007). Despite this, if you combined the audio and video aspects of the podcast, the content would be more appealing to both the eyes and the ears, making it a richer kind of entertainment than audio alone.

2.1.2 The Benefits and Drawbacks of Listening to Podcasts

Podcasts have been shown in a number of studies to be beneficial to educational settings for a variety of reasons. To begin, the utilization of this instructional technology is groundbreaking because it introduces new concepts into the educational system, which in turn boosts the level of interactivity within the classroom (Edirisingha et al. 2007). In a similar vein, it was discovered that this form of media provides a "Competitive Advantage" to schools in industrialized countries (Siguaw et al. 2006). In addition, a number of these pieces of research data pointed out that it is helpful for students to revise their work after a significant amount of time has passed. In a similar vein, one example of this type of content is the technology known as Newcastle University Recap. This system captures audio and graphics of live lectures and makes them accessible to students over the internet. Therefore, the students have the ability to perform a speedy review of the material by accessing it on the internet (Ibid). Adu, (2017) found that empirical evidence suggested that "Sixty Percent (60%)" of some tertiary education students tend to use podcast as medium for course materials delivery in a Western domain.

2.2 The Role of Pedagogy in Educational Planning and Research

The application of digital technology in educational planning has experienced tremendous growth in popularity over the past several years. More and different kinds of technology are being included into the curriculum for urban planning courses. Electronic information and resource, photogrammetry and preparing (Evans-Cowley 2017), and immersive virtual tech are examples. There was initially skepticism about these innovations owing to worries about price, availability, and quality (Moore 2022). (the proliferation of technology, region, cultural, and societal inequality can alter affordability and accessibility (Klauss

2000; Students who enter the workplace after completion are expected to be tech-savvy (Evans-Cowley 2017).

The "philosophy of science variability" of the design area provides an important setting for contemplating the utilization of technology for education, podcasts in particular. This is possible because of the nature of the planning discipline itself. The term "epistemological diversity" refers to the variety of ways that can be taken to study, the production of new knowledge, and the collection of new data. It can also pertain to the desire that learners realize the viewpoint of all other communities and cultural organizations. This is linked to a "dialogic tendency" in planning, which advocates participatory and communal planning procedures over rational frameworks that portray urban renewal as a scientific activity.

This "communicative shift" in planning started in the 1970s. In response, planning syllabi have incorporated considerations of democracy, equality, variety, and inequality to examine how these factors affect the planned, structure, and sense of built environments. This exemplifies how crucial democracy, social justice, diversity, and inequality are in today's society. Using multimedia resources is one approach to provide students exposure to different points of view on urban planning and development.

Podcasts and documentaries based on human stories and real-world experiences can improve critical thinking and knowledge of plurality, tolerance, and justice. They can also sidestep power, representation, and positionality difficulties. Podcasting can provide a voice to those marginalized from public discourse and academic education due to power, representation, and narrative system failures.

Broadcasting and distribution, say Rogers and are affected by "the politics of speech," which includes questions of power, representation, and control over narrative.

The increasing incorporation of audio and visual technologies into the educational planning process is reflective of broader

societal shifts. In recent years, the medium of podcasting, which refers to audio content that is syndicated and can be accessed online, has experienced explosive growth.

There is a diverse selection of podcasts, each of which has its own unique format, content, and focus, making them appealing to a variety of audiences. According to Berry (2006), podcasting is "where audiences are producers, where the technology we already have assumes new roles, and where audiences, cut off from traditional media, rediscover their voices." Podcasting lets anybody with least audio equipment generate and distribute content. Despite the fact that some podcasts may be professional way produced and advantage from predominant distribution systems, the possibilities for expert stereotyping and interaction of direct connections to communicative platforms is decreased compared to more governed discussion boards such as radio or Therefore, it may make it possible to produce content that is more spontaneous or grounded, or it may make it possible to represent voices who have been disenfranchised from mediated public debates and coverage, and it may make it possible for students and public audiences to access this content. It is not the purpose of this discussion to imply that podcasts are inherently free from problems and conflicts related to power, distribution, and representation; rather, the purpose of this discussion is to demonstrate that the process of producing and disseminating podcasts has the potential to "politically and ethically intervene in the socio-political world" (Rogers and Herbert 2020, 299).

2.4 A scenario involving student-created podcasts in the context of teacher education.

Podcasts may be downloaded and streamed on a workstation or portable player. These files can be played audibly live (Salmon, Mobbs, Edirisingha, & Dennett, 2008). Edirisingha (2009) differentiates between the technical definition of podcasting,

which focuses transmission and access to electronic media files, and educational adoption of podcasting, which connects to digital sound learning affordances. Edirisingha (2009) distinguishes a scientific definition of podcasting that prioritizes transmission and digital audio content from a narrower definition.

Since podcasts can be easily recorded, edited, and uploaded, as well as accessed and subscribed to, they provide benefits in convenience and flexibility. Podcasting presents improvements in these areas, however the use of audio recordings in teaching is not new. Thanks to free and widely available web-based audio recording tools, students may quickly create and distribute podcasts. As Forbes puts it, podcasting is "one of the most accessible of the Web 2.0 technologies and one of the easiest to test out and adapt" (p. xvii). That's why podcasting is "one of the most accessible of the Web 2.0 technologies and one of the easiest to test out and adapt."

Accessing podcasts in order to listen to pre-recorded lectures or additional materials is becoming increasingly common among students studying at postsecondary institutions (Lonn & Teasley, 2009). Podcasting, on the other hand, does not take advantage of the Web2.0 capabilities of facilitating user invention, collaboration, and transmission of their ideas, as Forbes, 2011 brings to our attention. Podcasting information to students does not utilize Web2.0. According to Forbes, 2011 the learning potential is enhanced when students in separate locations communicate with one another using the medium of podcasting.

Salmon and Nie (2008) claim embracing podcasts as a learning tool enhances learner flexibility, control, motivation, engagement, cognition, and learning. Podcasts are beneficial to students who attend classes online since they supplement traditional reading materials. Reading and writing all the time can have a very isolating impact, which can make participants in online studies yearn for the company of other people and

the sound of their voices. While our students do make use of synchronous conferencing platforms like Google Hangouts and Adobe Connect, in addition to phone calls and Skype, they need the option of asynchronous access for greater flexibility (Forbes, 2011). Students are driven, first and foremost, by the ability to verbalize their thoughts and revise them as required, as well as by receiving feedback from other people who listen to them. According to Campbell (2005), the act of producing and disseminating podcasts might encourage learners to reflect more deeply by prompting them to reconsider and adjust their perspectives in light of the comments they receive. This is especially potent when podcasting is done in episodes, as it allows for reflection to take place at different moments throughout the learning process. Students with varying learning styles, such as aural learners or those who need to move about, can all benefit from podcasting because it can accommodate to their individual learning preferences (Lum, 2006). Throughout this process, students learn abilities in problem-solving as well as technical skills connected with the recording, editing, and publication of podcasts (Forbes, 2011). They improve their ability to communicate and provide presentations (Forbes, 2011), and at the same time, they discover their voice in terms of efficacy, democracy, and empowerment (Beilke, Stuve, & Williams-Hawkins, 2008). These considerations lend credence to the notion that podcasts produced by students have a place in the context of distant learning. Podcasts enable verbal articulation, spanning the gap of space and time, and hence serve as a supplement to asynchronous online debate

Setting of our study

In an online pre-service teacher education course, the purpose of this case study was to investigate the feasibility of using student-created podcasts as a form of interactive formative evaluation.

This case study centered on a speaking course offered by the Faculty of

Education to second-year Bachelor of Teaching degree students. This required 16 weeks course provides an overview of how various learning theories might be used. The students were all adults, spread out across Jambi province,

One lecturer was responsible for coordinating and teaching the course. The lecturer had tried using podcasts to help her students learn in a previous course and found that it helped them think critically and articulate their grasp of course material. In the new application, she had improved upon and expanded upon its use. Specifically, she wanted to (The goals of this course are to: (1) give students a platform to share their thoughts and perspectives through a podcast; (2) provide students with more opportunities for oral expression to supplement their written modes of learning; (3) supplement traditional summative assessment with a more participatory approach; and (4) encourage students to engage in an active apprehension of the course material. The professor elaborated on this idea around the semester's midway when the students were getting ready for the podcasting project.

In the grand scheme of things, I'm not attempting to impress them with my knowledge of ICT or teach them some new nifty classroom trick; rather, I want to demonstrate that, owing to Web 2.0, useful and accessible software is now available for download on every computer. It's possible to get up and running with it after learning the ropes on your own, thanks to the abundance of resources available online in the form of YouTube videos and discussion boards. The next logical step is to try my hand at other forms of media production and distribution outside just podcasting; for example, to start a blog, wiki, website, or experiment with brand new software. Knowing there is a limitless ocean of information and tools available to teachers and that they have the freedom to explore their own creative potential and then pass that on to their pupils is incredibly inspiring.

Students used the open-source program Audacity (found at

audacity.sourceforge.net/) to record and edit their own podcasts, which they then uploaded to Moodle to share with their own online discussion communities. Other students, however, choose to use third-party software like Wimba Voice (http://www.wimba.com/products/wimba_voice) or GarageBand (<http://www.apple.com>) to finish their podcast projects. The two teacher educators (lecturer and two tutors) worked with the students to produce two podcast episodes, the purpose of which was to facilitate "podcast-mediated reflective learning" (Forbes, 2011). (each lasting three minutes).

The purpose of this case study was to investigate the feasibility of using student-created podcasts as a form of interactive formative evaluation.

Students benefited from the opportunity to make two episodes by practicing and refining their craft between attempts. In the first episode, students discussed and reflected on assessment strategies they observed during a 6-week teaching practicum. In the second episode, students synthesized their own teaching philosophies and the types of educators they aspire to become. In order to facilitate students' podcasting experiences, the university's e-learning staff developed comprehensive guidelines and a Moodle-based online help forum with ongoing technical support. Despite not counting toward a final grade, creating a podcast was a required assignment.

METHODS

Research data collection and analysis were guided by an interpretivist methodology (Maykut & Morehouse, 2002). Research in the interpretivist tradition focuses "on the wider picture of lessons learnt and not simply the instantly created results," and is characterized by detailed descriptions and interpretations of significant phenomena in educational contexts

The goal of using an interpretive approach to research is to better understand the significance of events from the perspective of the people

who participated in the study and to use that understanding to make meaningful improvements to the learning process. This way of thinking is consistent with a sociocultural paradigm that places importance on historical, political, economic, and other non-individual factors in the process of knowledge creation

In-person interviews with instructors provided information on how beneficial podcasting assignments were for facilitating formative evaluation throughout the program. The interviews lasted half an hour and were performed by a member of the e-learning research project team using an established interview technique (see Appendix 1). It was also informed by an online student FG discussion 2004; Williams & Robson, 2007) and an end-of-semester online evaluation of the effect of podcasting on students' learning (Appendix 2). The CE's questions were free-response and were delivered using the online learning platform Moodle. The FG functioned as its own forum within the Moodle site for the course and collected data on students' formative learning experiences as they engaged in and finished each podcasting assignment (see Appendix 3). There were 80 students enrolled in the class, and only 43 of them (54%) filled out the CE, while only 17 of them took part in the FG discussions.

Textual data was read and reread in accordance with a constant comparison method of data analysis (Lincoln & Guba, 1985), which is typical of qualitative research. Emergent themes were uncovered using inductive reasoning (Braun & Clarke, 2006), and then reported, discussed, and disputed by the research team at frequent team meetings.

This study's participants are not necessarily representative of those who could enroll in an online teacher education course at any given university; rather, they reflect a convenience sample of the experiences of a single university's lecturer, tutors, and students. The results of a case study may not be extrapolated to the population as a whole, but they can be applied to other situations in the field of

higher education and may shed light on important challenges and practices in the field of pre-service teacher education. All participants volunteered to take part in the study, which was approved by a university's committee on human research ethics.

FINDINGS

Our research revealed two overarching themes: first, the need of fostering a collaborative learning environment between educators, and second, the skills, mindsets, and literacies that would be valued in the workplace of the future. The future applications of each concept to their own classrooms were evident in the minds of the student educators throughout. After that, we have some quotes from various participants to illustrate their points.

As evidence of the value of co-learners and co-learning, both students and teacher educators benefited from developing new skills and strategies for fostering relationships based on mutual respect, understanding, and cooperation in the classroom. Teachers in one course even discussed their role as active participants and co-learners in the podcasting assignment. Teachers in this model showed students that they, too, were willing to try out new technologies and take some chances. The instructor elaborated:

I admitted to my freshman seminar that I, too, was a novice. In addition, I shared how writing out my ideas on paper helped me hear them more clearly when I recorded a voiceover. (Tutor 1) Teachers' openness to new information and experimentation was modeled for students. The same teacher was thinking about this, too.

The goal here is to provide support for students as they make informed decisions about how to use various forms of technology in the classroom. Assisting them by putting theory into practice. If we are going to insist that students record their lectures, we should set a good example. Modernized skills, perspectives,

and knowledge that can be applied to future classrooms.

When asked to reflect on their podcasting projects, students gained valuable insight into the new mindset, skills, and content knowledge required for effective instruction and learning in a digital environment. Learning outcomes included the ability to investigate and select appropriate technologies (illustrated through podcasting) for use in a wide range of pedagogical and evaluative contexts (be it to problem-solve, collaborate or reflect). The podcasts were lauded by both instructors and students for their ability to cater to a variety of learning preferences.

In class, students frequently engage in written assignments and lively class discussions. They have three minutes to brainstorm, summarize, and discuss the process. Some people would find it extremely disturbing, while for others it would be completely standard. It's an exciting new option for students who are eager to expand their horizons. When asked to present their findings in a podcast that was only three minutes long rather than the standard two pages, students shifted their presentation strategies to accommodate the time constraint. This was something that virtually no one in the class had ever experienced before.

Conclusions and Reflections

The purpose of this study was to determine how student-made podcasts may be integrated into a distance-learning pre-service teacher education course to improve formative assessment. In order to show how ICTs may support formal learning goals and enhance sharing of ideas, cooperation, and reflection, student instructors were encouraged to develop podcasts as a method of sharing insights and asking comments from peers. The pupils were allowed a lot of leeway to express their individuality in their work.

They were to discuss the podcasts of their coworkers and offer feedback on the ideas presented. The students' subsequent efforts to refine their podcasts

in light of this feedback would be formative. Students were presented with a technological challenge in the form of the need to acquire, install, and master new software in order to finish the introspective episodes. Students were expected to take an active role in solving the problem and to seek out help from their peers in order to do so. The podcasting example serves primarily as an example and a jumping off point for further research into appropriate ICTs for their application (including technologies that are yet to be imagined).

Based on our findings, we conclude that teacher educators and classroom teachers play a vital role in disseminating forward-thinking pedagogical strategies. For transformation to occur, all educators—from university faculty to K-12 principals and teachers—need to practice what they preach through inquiry and pedagogical modeling (Hedberg, 2011). Our experience with working with college-level students through our online education program suggests that it need not differ greatly from professional training for in-service educators or K-12 teaching. Adults and children can make important decisions about their education, agree on research directions, conduct research and reflection, create podcasts or other digital legacies, and share these for the purpose of learning from and providing feedback to one another. Both young children and grownups need help throughout, learn best from trial and error, and ultimately gain competence and self-assurance with practice. We think this is an important and applicable study for all teachers, just as we encourage our student teachers in far-flung locations to use their podcasting expertise with students. With the help of ICTs, students of all ages can share their work and grow as thinkers and creators.

To sum up, our research on student voice and the affordances of podcasting has highlighted the importance of students' perspectives as a compass for the future of education. Looking ahead, we envision a world where inexperienced educators aren't afraid to try out new tools and methods, where they can encourage students to think critically and solve

problems using information and communication technologies (ICTs), and where they can build resilient networks of support for their own classrooms. To make sure the exciting educational opportunities of the future meet the needs of future students, we hope that experienced teachers and school leaders will back these initiatives and implement them in their own classrooms. In the twenty first century, podcasting has grown rapidly and is now commonly used in classrooms.

My research suggests that podcasts may be used in many teaching circumstances. This article uses the modified Bloom's taxonomy to show how student-created podcasts can achieve higher-level cognitive outputs. It's hard to draw general conclusions from interdisciplinary study. Podcasts may be useful for teaching critical thinking and analysis when introducing unfamiliar or unpleasant themes to learners, especially when they contradict their prior views and beliefs. Podcasts are helpful, but not magic. The dangers of "surface" learning, transmissive pedagogy, and inclusivity and access issues may prevent its implementation.

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