Accessibility Challenges of Using Podcasts and Vodcasts in a South African Distance Learning University

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ABSTRACT

Academic writing presents a range of challenges for students, particularly those enrolled in distance university institutions. These challenges encompass various facets such as understanding citation and referencing, developing a distinctive writer's voice, mastering academic discourse, paraphrasing, summarising, and adhering to academic conventions. Notably, deficiencies in academic writing skills often trace back to inadequate preparation during high school education, potentially leading to qualification deferment and high dropout rates. To tackle these challenges, podcasts and vodcasts emerged as essential tools to bridge academic gaps, catering to diverse learning styles and offering flexibility beyond traditional teaching methods. However, the efficacy of supplemental multimedia tools warrants exploration, considering uncertainties regarding student acceptance. Thus, this study aimed to identify accessibility challenges, to reduce existing barriers and enhance accessibility in open distant institutions. Utilising qualitative research methodologies, including focus group discussions and literature analysis, data collection was conducted. The study drew upon Moore's theory of transactional distance and Garrison et al.'s community of inquiry framework to create collaborative online interactions and meaningful lecturer-student engagement, culminating in the construction of new knowledge. Findings revealed that students did not encounter accessibility challenges and expressed preference for shorter podcasts and vodcasts. These multimedia formats alleviated boredom, clarified complex concepts, prevented monotony, enhanced attention and comprehension, stimulated interest, facilitated active learning, and accommodated various learning styles. Podcasts and vodcasts reduced transactional distance and created a sense of community. Contrary to prevailing literature, students did not encounter accessibility challenges, shifting the focus towards shorter, high-quality multimedia content rather than accessibility concerns.

KEYWORDS

Academic writing challenges; accessibility challenges; OdeL; podcasts; student support; vodcasts.

INTRODUCTION

The ENG101 (pseudonym) module, focusing on English for Academic Writing purposes, reveals a significant struggle among its students with mastering academic writing skills. This struggle may likely be traced back to students' prior education experiences in high school, where they may not have had the opportunity to fully develop these essential skills. Successfully navigating the ENG101 module requires students to not only understand but also adhere to the established academic writing conventions outlined in the study guide:

> …Develop [students' abilities of critical reading and critical writing, which are essential academic skills], and to improve their academic English competence. The module will help them develop their ability to read and write academic genres, such as argumentative essay writing, research-based essays, research articles, and lectures, and to use appropriate academic conventions, such as citation (Ndlangamandla et al., 2024, p. 6).

The primary objective of the study guide is to equip students with the skills necessary to produce well-structured, cohesive, and academically appropriate written texts, in line with the established conventions of academic writing (Ndlangamandla et al., 2024). Despite this aim, extensive research has brought to light the myriad challenges students encounter in mastering writing skills. AlMarwani (2020) emphasises the expectation for students to analyse academic texts and effectively translate their ideas into coherent written form. These challenges encompass expressing ideas clearly, accurately paraphrasing and summarising, navigating grammatical complexities, expanding vocabulary, mastering proper referencing, and crafting well-formed sentences. Drawing from the experience of assessing and moderating the ENG101 module, it became evident that the academic writing challenges faced by ENG101 students mirror those identified by a multitude of researchers (AlMarwani, 2020; Akhtar et al., 2020; Hassan et al., 2021; Hinkel, 2020; Khadawardi, 2022; Lentz & Foncha, 2021; Mahmood, 2020; Maphoto, 2021; Mohale, 2023; Rafikova, 2022; Sevnarayan, 2022; Sevnarayan & Mohale, 2022). According to Frye (2022), Khalo (2022), Mitchell (2021), Teng (2022), and Poe (2022), academic writing represents a distinctive mode of written expression prevalent in academic settings, notably universities, for presenting research, theories, and arguments. It is characterised by its formal language, coherent structure, and emphasis on substantiating claims through evidence and analysis. Proficiency in academic writing is indispensable for students to fulfil their academic aspirations.

Moreover, academic writing challenges in the context of open and distance e-learning (ODeL) may be compounded by factors inherent to distance learning, such as disconnection, feelings of isolation, and the use of English as a medium of instruction (MoI), particularly for English second and third language speakers (Ali, 2022; Bolton et al., 2023; Cilliers, 2022; Hawari, 2022; Mendoza, 2022; Mhlanga & Molio, 2020; Mthimunye & Daniels, 2019; Sahiruddin, Junining & Prawoto, 2020; Sevnarayan & Mohale, 2022; Wang & Xie, 2022; Wentzel & De Hart, 2020; Xie & Peng, 2021). In view of these academic writing and transactional distance

challenges, podcasts and vodcasts have been implemented as supplemental tools to alleviate feelings of isolation and facilitate knowledge dissemination as part of student support initiatives.

Podcasts and vodcasts have become integral components of contemporary education, presenting a dynamic platform for disseminating knowledge and engaging students in diverse learning environments. Defined as digitally compressed multimedia files, podcasts have emerged as a versatile tool, allowing individuals to download and access audio content at their convenience (Beniamini, 2020; Crofts et al., 2005; Rime, Pike, & Collins, 2022; Rajar, 2020; Sherrill, 2020). Conversely, vodcasts [or video podcasts] provide a visual dimension to this digital medium, incorporating additional elements such as graphics and animations to enhance the learning experience (Gerber, 2022; Suroviec, 2023; Tadena & Salic-Hairulla, 2021; Tecson et al., 2021). According to Heshmat (2018), MacKenzie (2019), Segarra (2020), and Thoma (2020), the popularity of podcasts and vodcasts in higher education institutions (HEIs) is evident, with scholars highlighting their numerous benefits. From facilitating the dissemination of academic knowledge to breaking down social barriers, these multimedia formats offer lecturers and students alike a flexible and accessible means of engaging with course material. Studies by Quintana and Heathers' (2021), Gonulal (2020), and Lee (2020) have shown that podcasts not only normalise academic experiences but also contribute to the development of essential skills such as listening comprehension, particularly in second language acquisition contexts. However, despite their advantages, podcasts and vodcasts present unique challenges, including issues related to accessibility, technical glitches, and compatibility. While audio podcasts may lack visual aids, making comprehension difficult for some students, video podcasts require substantial data and internet connectivity, posing obstacles for individuals from disadvantaged backgrounds (Fadilah et al., 2017; Gikas & Grant, 2013; Nadhianty & Purnomo, 2020). Nevertheless, research emphasises the effectiveness of podcasts and vodcasts as supplemental learning tools, empowering students to take control of their education by offering flexibility and interactivity. With the ability to pause, rewind, and engage with content at their own pace, students can deepen their understanding and critical thinking skills (McNamara et al., 2020; McNamara & Haegele, 2021; Nielsen et al., 2018). Moreover, the personalised nature of podcasts adopts meaningful connections between lecturers and students, enriching the learning experience. Incorporating vodcasts into HEIs can further enhance the educational spheres, providing lecturers with a powerful medium to deliver interactive and engaging content. Harnessing multimedia elements such as graphics and demonstrations, vodcasts cater to diverse learning styles and preferences, promoting active learning and student engagement (Aagaard & Lund, 2020; Brevik et al., 2019; Johnston et al., 2021; Lucas, 2016). From videos to audio recordings, online multimedia resources provide lecturers with a plethora of tools to enrich their teaching and accommodate the diverse needs of students. By embracing these digital formats, HEIs can create inclusive and dynamic learning environments that encourage creativity, collaboration, and student success. To understand the accessibility challenges of using podcasts

and vodcasts to enhance students' academic writing skills, the following research questions were formulated:

RQ 1 What accessibility challenges do students encounter with podcasts and vodcasts?

RQ 2 According to prior and recent literature, what can be done to reduce accessibility challenges?

THEORETICAL FRAMEWORKS

The study is underpinned by a comprehensive student support framework that synthesises two prominent theoretical perspectives: Moore's (1972) Theory of Transactional Distance (TTD) and the Community of Inquiry (CoI) framework developed by Garrison, Anderson, and Archer (2000). TTD, particularly relevant in ODeL institutions, highlights the importance of bridging psychological and communication gaps between students and lecturers (Devkota, 2021; Iqbal et al., 2021; Kgabo, 2021; Krishnan et al., 2021; Mokina & Khoronko, 2020), thereby enriching the quality of online learning experiences. Complementing TTD, the CoI framework emphasises collaborative learning and meaningful interaction in online environments (Garrison, Anderson, & Archer, 2000; Lee et al., 2021; Timonen & Ruokamo, 2021; Ochieng & Gyasi, 2021), nurturing a sense of community among students and lecturers. This framework promotes engagement and deep learning through active participation and social presence. The CoI framework comprises four interconnected elements: cognitive presence, social presence, teaching presence, and organisational presence. Cognitive presence encourages intellectual engagement and critical thinking through activities like challenging discussions, problem-solving tasks, and reflective inquiry (Garrison et al., 2000). Social presence focuses on building supportive and collaborative learning communities where participants feel a sense of belonging, trust, and mutual respect. Teaching presence involves the lecturer's role in facilitating and guiding the learning process, encompassing instructional design, facilitation, and direct instruction to meet learning objectives effectively. By integrating the CoI framework, the current study seeks to address the collaborative learning needs of first-year students at UniX (pseudonym) and investigate the potential of podcasts and vodcasts in enhancing their academic writing skills. The adoption of both TTD and CoI provides a robust theoretical framework that acknowledges the significance of reducing distance barriers and nurturing collaborative learning within DE institutions. This framework guides the study in assessing the effectiveness of multimedia tools in promoting meaningful online engagement and facilitating positive learning outcomes.

MATERIAL AND METHODS

This study adopts a qualitative approach (Stewart, 2018; Tümen-Akyıldız & Ahmed, 2021), allowing students to articulate their experiences regarding accessibility challenges and the foundational aspects of literature about multimedia accessibility challenges. To collect data for this study, the researcher conducted a focus group discussion using the Microsoft Teams platform. This discussion aimed to address the first research question. To answer the second

research question, which focused on reducing accessibility challenges, the researcher performed a literature review analysis and discussion, examining both prior and recent literature.

Following data collection, transcription was carried out according to Braun and Clarke's (2021) guidelines for thematic analysis. This method involves systematically identifying, organising, and interpreting patterns of meaning (themes) across the dataset. The analytical approach was grounded in the TTD (Moore, 1972) and the Community of Inquiry (CoI) framework (Garrison et al., 2000), providing a comprehensive pedagogical lens through which to interpret the findings. Additionally, the researcher analysed both historical and contemporary data from other scholars to identify strategies used to reduce accessibility challenges associated with podcasts and vodcasts. Verbatim responses from the students were utilised to validate the findings.

The context of the study is UniX, an ODeL university in South Africa where online delivery is the standard mode of instruction. UniX stands as one of the largest distance-learning institutions in Africa, boasting a student body of over 400,000 individuals hailing from more than 136 countries. Within this academic environment, the focus of this article centres on an undergraduate English academic writing module. This module, denoted here as ENG101 for anonymity, typically enrols approximately 16,000 students per semester. While the ENG101 module is designed for first-year students who are native English speakers, the reality is that for many enrolled students, English serves as a second and a third language. With a pass rate that has not exceeded 75% over the past five years, ENG101 is recognised as a high-risk module.

In addressing the challenges posed by distance learning and the potential for feelings of isolation, it becomes imperative to explore the accessibility challenges surrounding podcasts and vodcasts. This exploration aims to enhance the academic writing skills of first-year students within an ODeL institution like UniX. Data was gathered in July 2022, marking the conclusion of the first semester. Initially, ten students were invited to take part in the study, yet only seven chose to participate. The group consists of seven students: three males and four females. Their ages range from 18 to 30 years old, and they come from diverse linguistic and ethnic backgrounds. These students were first-year South African individuals who use English as an additional language. To maintain anonymity, pseudonyms were uniformly assigned to each participant. In exploring accessibility challenges, podcasts and vodcasts were uploaded onto the LMS Moodle platform, specifically under the ENG101 site. Microsoft Teams was employed as the medium for conducting focus group discussions with the students. Although ten students were invited, only seven ultimately responded and took part in the study. This participation rate aligns with the qualitative nature of the research, which aims to probe deeply into the experiences of a select number of individuals. To ensure the validity and reliability of the study, the researcher triangulated data from focus group discussions and an extensive literature review. The research questions were aligned with established themes from the literature review to comprehensively address accessibility challenges. Cross-referencing these themes with those

from the focus group discussions enhanced the construct validity, providing a robust understanding of the accessibility challenges in the distance learning context.

DISCUSSIONS OF FINDINGS

This section discusses the main findings of the study after being divided into themes that respond to each of the research questions. To understand students' accessibility challenges and what can be done to reduce accessibility challenges according to prior and recent literature, the following two themes emerged:

- accessibility challenges encountered by students and,
- useful advice emphasised by researchers to reduce podcasts and vodcasts accessibility challenges.

Accessibility challenges encountered by students

Student support initiatives are pivotal for ensuring the well-being and success of students. Therefore, it is imperative to ascertain students' perspectives on the accessibility challenges they face to make informed decisions. Podcasts and vodcasts are invaluable tools that cater to diverse learning styles, accommodating both auditory and visual preferences. Moreover, a thorough understanding of students' accessibility challenges has the potential to reduce transactional distance and enhance teacher presence. In the context of the ENG101 module, lecturers took the initiative to create simplified podcasts and vodcasts ranging from five to fifteen minutes in duration. To answer RQ 1 (What accessibility challenges do students encounter with podcasts and vodcasts?), focus group discussions with students were conducted electronically via Microsoft Teams. Although initially ten students were invited to participate, the response rate was limited, with only seven students actively engaging in the study. To maintain the anonymity of participants, pseudonyms were assigned to each student. The analysis was based on the responses of these seven students, presented verbatim below:

I could not download the podcasts and vodcasts as soon as they were posted simply because I didn't visit or check my emails for announcements. However, as soon as I realised or saw the automated email announcements in my email address, I then downloaded podcasts and vodcasts into my laptop with ease (Lesetja, 2022 focus group discussions).

I honestly did not experience any challenges when downloading the podcasts and vodcasts. But I remember being frantic when I missed a virtual class. I was on a bus when the class was on. Fortunately, I saw email announcements that spoke about podcasts and vodcasts and links were posted (Sizwe, 2022 focus group discussions).

I never had problems with downloading or compatibility issues maybe because I downloaded the podcasts and vodcasts directly onto my computer (Lethabo, 2022 focus group discussions).

When I attended the virtual classes, I would not see the presented PowerPoint slides or hear sound due to poor network coverage caused by load shedding (power cuts). But when I

downloaded the podcasts and vodcasts onto my PC, I could hear and see everything, as well as learn from the recorded podcasts and vodcasts (Tshabalala, 2022 focus group discussions).
I did not encounter any challenges. I was able to download the podcasts and vodcasts (Mbali, 2022 focus group discussions).

I didn't have any issues when downloading podcasts and vodcasts. I used both my laptop and smartphone to access the podcasts and vodcasts. I truly did not struggle and don't have anything to fault. I am happy with the accessibility that I had, and I did not struggle with the network at all. I was able to find the information (Thuso, 2022 focus group discussions).
I did not experience any accessibility challenges and recommend not changing anything because everything that I needed was there in the podcasts and vodcasts. I struggled to attend the virtual classes because most of us are working during virtual classes, but I could access my podcasts and vodcasts (George, 2022 focus group discussions).

The findings of the focus group discussions reveal that seven students encountered no challenges in accessing or downloading podcasts and vodcasts onto their personal devices, laptops, or PCs. Notably, one student even mentioned the absence of compatibility issues when accessing these multimedia resources (Lethabo, 2022 focus group discussions). However, some students expressed anxiety stemming from challenges such as missing virtual classes due to work commitments, commuting, and disruptions caused by poor network coverage exacerbated by load shedding (Sizwe, Tshabalala, George, 2022 focus group discussions). These findings corroborate and align with recent studies by Aagaard and Lund (2020), Brevik et al. (2019), and Johnston et al. (2021), which highlight the usefulness of podcasts as supplementary learning tools due to their accessibility, concise format, and simplified content. Moreover, podcasts have been shown to enhance student motivation and facilitate deeper comprehension and application of content, nurturing critical thinking skills. Additionally, the availability of these supplemental resources promotes interaction and community-building between students and lecturers, encouraging cognitive presence, social presence, learner presence, and teaching presence (Garrison et al., 2000). Podcasts and vodcasts play a crucial role in disseminating academic content, transcending social barriers, and providing flexible and accessible avenues for engagement (Heshmat, 2018; MacKenzie, 2019; Segarra, 2020; Thoma, 2020). Contrary to claims by Fadilah et al. (2017), Gikas and Grant (2013), and Nadhianty and Purnomo (2020), who highlight challenges such as accessibility issues, technical glitches, internet connectivity, and compatibility, the findings of this study indicate that students did not encounter significant accessibility challenges. With podcasts and vodcasts, students have the freedom to pause, rewind, and engage with content at their own pace, enhancing deeper understanding and honing critical thinking skills (McNamara et al., 2020; McNamara & Haegele, 2021; Nielsen et al., 2018). Podcasts and vodcasts as supplemental tools are beneficial to students, and no accessibility challenges were experienced by students, reducing transactional distance (Moore, 1972).

Useful advice emphasised by researchers to reduce podcasts and vodcasts accessibility challenges

In understanding phenomena, particularly accessibility challenges, it's crucial to adopt a multifaceted approach. In this section, the researcher focused on literature to explore strategies recommended by various scholars for addressing accessibility challenges, specifically focusing on RQ 2 (According to prior and recent literature, what can be done to reduce accessibility challenges?). This initiative aimed to shed light on both established and emerging techniques for reducing accessibility challenges, thereby enhancing transactional distance, facilitating information flow, and alleviating feelings of isolation often encountered by distance education students. Furthermore, these strategies may offer valuable guidance to present and future lecturers in crafting high-quality podcasts and vodcasts.

According to Van Zanten et al. (2010), students are generally drawn to and interested in multimedia integration, such as podcasts and vodcasts, given their proficiency as digital natives in consuming digital content effortlessly (Evans & Robertson, 2020). However, lengthy recordings may pose challenges for downloading and can become monotonous. Therefore, podcasts ranging from 5 to 10 minutes are deemed more effective. Additionally, Cebeci and Tekdal (2006) suggest that podcasts should not exceed 15 minutes in length, as longer recordings often result in decreased attention and comprehension. Berk et al. (2007) argue that employing podcasts and vodcasts as educational tools for promoting academic literacy sparks interest and encourages active student engagement in the learning process. Exciting podcasting series can be created at minimal expense using simple production methods, serving as a valuable complementary tool. This can be achieved by creating engaging series at a minimal cost using straightforward production methods. Creating funky, stylish, and trendy (five-minute) audio podcasts, infused with background music, and presented in a radio show format, can result in a captivating product. The incorporation of music aims to generate interest and facilitate easy absorption by the listener, particularly first-year students (Berk et al., 2007). Previous research maintains the importance of writing interventions, including supplemental tools such as short videos and podcasts, to provide first-year students with the necessary guidance for encouraging independent writing skills (Bonner & Reinders, 2018; Karasu, 2018; Meyer et al., 2019). Moreover, mobile learning proves to be an effective approach for promoting individualised learning and catering to students' diverse needs. Shorter podcasts and vodcasts offer a flexible platform for teaching and learning (Javier, 2021; Kiberg & Spilker, 2023). According to Fhloinn and Fitzmaurice (2021), as well as Shiang et al. (2021), short podcasts and vodcasts are advantageous, as they are not overwhelming, easy to navigate, and allow students the option to 'pause and replay' the material. Scholtenhuis, Vahdatikhaki, and Rouwenhorst (2021) argue that vodcasts reduce the discomfort associated with traditional lecture settings, empower students by placing them at the centre of their learning experience, and enhance knowledge retention. Additionally, shorter vodcasts yield positive outcomes and are less

overwhelming. As noted by a participant in Scholtenhuis, Vahdatikhaki, and Rouwenhorst's study (2021),

Yes, it is also about the length of the video. It is for ten minutes and not two hours. I found it pleasant that the videos were just around five minutes and not fifteen or so. Because if it is just five or ten minutes, it is very easy to watch. It is done quickly, and you will watch it back more easily (Participant 1) (Scholtenhuis, Vahdatikhaki, & Rouwenhorst, 2021: p. 464).

Shorter multimedia content holds appeal for both lecturers and students, alleviating the boredom factor and weight associated with lengthy vodcasts laden with information. Additionally, shorter podcasts and vodcasts offer manageability in terms of information processing and reflection. Streamlining content in uploaded podcasts and vodcasts contributes to enhancing students' academic writing skills (Mohale, 2023). Traditional teaching methods are increasingly deemed inadequate for the 21st century, as today's generation favours the use of modern technology to facilitate learning less overwhelmingly (Szymkowiak et al., 2021). Modern education entails leveraging appropriate pedagogical e-learning tools, such as podcasts and vodcasts, accessible via mobile devices, and presented in easily digestible segments. Hence, recording shorter podcasts and vodcasts holds the potential to enhance students' academic writing skills, given the inherent complexity of academic writing. Consequently, ODeL lecturers must produce supplemental tools that are less overwhelming to prevent confusion, particularly when addressing intricate academic writing topics (Mohale, 2023).

Both earlier and recent research consistently highlights the myriad advantages associated with creating shorter podcasts and vodcasts. These advantages encompass a spectrum of recurring themes, including the alleviation of boredom, elucidation of complex concepts, prevention of monotony, augmentation of attention and comprehension, stimulation of interest, facilitation of active learning, adaptability to diverse learning styles, promotion of individualised learning in a less overwhelming manner, and the provision of the 'pause and replay' option for students. It is imperative to heed the insights gleaned from researchers when aiming to reduce accessibility challenges inherent in podcasts and vodcasts. Multimedia files ranging from five to ten minutes prove highly beneficial compared to longer recordings. However, despite the efficacy of shorter podcasts and vodcasts, some researchers assert that multimedia files still pose accessibility challenges (Fadilah et al., 2017; Gikas & Grant, 2013; Nadhianty & Purnomo, 2020). Nevertheless, most researchers consulted in this study accentuated a 95% advantage to 5% disadvantage ratio. Podcasts and vodcasts, as supplemental tools, empower and inspire students to assume control of their educational journey, nurturing interactivity, flexibility, and the ability to engage at their own pace. Most significantly, they deepen understanding of academic writing and critical thinking skills (Aagaard & Lund, 2020; Brevik et al., 2019; Johnston et al., 2021; Lucas, 2016; McNamara et al., 2020; McNamara & Haegele, 2021; Nielsen et al., 2018). Furthermore, addressing the accessibility challenges of podcasts and vodcasts aligns with the concept of creating a community of practice, as advocated by Garrison, Anderson, and Archer (2000), thereby enhancing cognitive presence, social

presence, and teaching presence. The advantages of shorter podcasts and vodcasts encourage greater connectedness and interactivity between students and lecturers, ultimately reducing transactional distance as discussed by Moore (1973).

CONCLUSION

This study explored accessibility challenges encountered by students in a distance higher education environment. The findings, extracted from unaltered verbatim students' responses in focus group discussions, highlighted positive experiences with accessing podcasts and vodcasts. The absence of significant challenges indicated that podcasts and vodcasts bridge the transactional gap, strengthen online platforms, enhance educational experiences, and create a calm climate, reducing anxiety associated with downloading podcasts and vodcasts. Additionally, the researcher zoomed in on the literature to highlight perspectives shared by other scholars regarding reducing the accessibility challenges of podcasts and vodcasts. Most prominent researchers emphasised the benefits of shorter formats. Longer podcasts and vodcasts are prone to increasing accessibility and compatibility challenges. Moreover, most personal devices cannot accommodate high volumes of content data due to storage capacity limitations. While most researchers emphasise the benefits of shorter formats, a minority cautions against overlooking potential challenges such as technical glitches and connectivity issues. Nevertheless, the recurring theme remains clear: podcasts and vodcasts serve as valuable supplements to traditional teaching methods, providing students with greater control over their learning journey while promoting interaction and engagement. By addressing accessibility challenges and leveraging the advantages of shorter formats, lecturers can enhance the quality of distance education, reduce transactional distance, and create a more connected and interactive learning community. Furthermore, the alignment of these findings with existing literature corroborates the benefits attributed to shorter multimedia formats, such as enhanced engagement, comprehension, and flexibility. Recommendations by scholars, including the adoption of shorter durations and the incorporation of engaging elements like music, further reinforce the notion that accessible and engaging educational content is pivotal in developing effective learning experiences.

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