

A.6 Decentralised Teaching with OER Podcasts in Higher Education: The Classic Management Murder Podcast Series

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Research

1 Introduction

Open educational podcasts have become a popular medium of communication in decentralised teaching and learning environments, commanding a growing interest in education and digital media studies. Previous research on the effectiveness of educational podcasts for teaching and learning – mainly through user self-reports and experimental designs – has shown that podcasting can, for example, enhance skills development in language learning (e.g., Anzai, 2007), increase understanding of the material covered in lectures (e.g., Bongey, Cizadlo & Kalnbach, 2006), and be beneficial as a supplemental tool which helps to reinforce core course content (e.g., Gachago, Livingston, & Ivala, 2016). Very little research has been performed on podcasts that use narratives and storytelling approaches to help connect students more easily with classical theories in their field (e.g., Drew, 2017). Yet, several questions remain open: How could podcasts be best integrated into higher education, teaching, and learning? What motivates learners to use these podcasts? What challenges and bottlenecks do they face in using them?

The paper starts with an explanatory analysis which considers the relatively limited amount of podcast assessment in higher education and its integration in decentralised learning environments. Thereafter, a newly created educational podcast is introduced: the Classical Management Mystery Podcast Series. This open educational resource provides a unique learning opportunity to acquire basic knowledge and skills connected with the history of management (e.g., the Bureaucratic, Administrative, and Scientific Management School of Thought). The paper concludes with recommendations for its practical application and future research to explore learners' motivation and listening behaviour.

2 Podcasts in Decentralised Learning Environments

2.1 Decentralised Learning Environments

As our everyday experiences, also our digital learning spaces are closely linked to different platforms, providers, and learning resources. There is no ultimate learning platform or app that efficiently supports the collection and preparation of all our learning resources in one place at one time. Such a place has never existed even before the “digital turn” in higher education (cf. Kergel et al., 2018) because knowledge is distributed widely and in different spaces, networks, communities, and environments to which teaching and learning can provide valuable access.

It depends on both the community that makes sense of these resources and the individual that follows certain learning paths in developing personal learning spaces. Decentralized networks and thinking can be beneficial for learning and teaching (fig. 1). They are “built from a hierarchy of nodes, and nodes at the bottom of the hierarchy have only a single connection to the network. Failure of a few nodes in a decentralised network still leaves several connected components of nodes that will be able to communicate with each other (but not with nodes in a different component)” (Bodó, Brekke, & Hoepman, 2021).

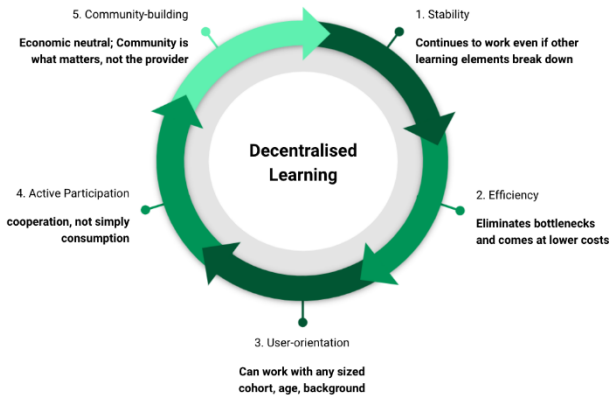


Fig. 1: Decentralised Learning and Teaching
(Masinde & Graffi, 2020; Resnick, 1999; author’s own illustration)

2.2 Podcasting in Higher Education

Podcasting is a means of sharing files in digital audio formats through the internet. In an instant, a podcast can be retrieved from the web- or app-based streaming platforms, and the user can listen to it via a mobile phone, a podcast service, a personal digital assistant, or any other portable media player.

To be effective, a podcast must present its idea in a single format that can be easily explained verbally. Also, it must be in a series with all events relating to one another. Additionally, they are usually created in an electronic form that can be easily played, and finally, they must be provided on a source easily accessible and updated frequently (Gachago, Livingston, & Ivala, 2016).

The podcast technology has intrigued educationists by the possibilities it holds (see also Arnold, 2021b). There are many advantages of asynchronous interactive, informative podcasting between learners and tutors. When educators use podcasts for online lessons, it helps to distinguish learning and offers additional assistance to students who may have individual learning requirements.

According to Chaikovska (2018), podcasts enable every student to be included and feel part and parcel of the learning community. A lecturer uses educational podcasting in the online classroom in two main ways. They can either deliver their lectures through short podcasts that are theme-based or individually customize the feedback and offer it to students. Experienced instructors organize their lectures into themed or related topics because of their effectiveness and long-lasting memory.

Students have acknowledged in a recent study that when they can access the podcast on the go or from the comfort of their homes, it becomes straightforward for them to write notes by engaging with the content. Also, they are happy that they can rewind the podcast, retrieve information, point out knowledge gaps, and clarify concerns (Atlason, 2017). Therefore, these prospects enable learners to take charge of their own learning by encouraging student independence. Additionally, lecturers can promote students' independence in a class by delivering customized feedback in short audio files. When good quality feedback is delivered to students, it better helps them pursue lifelong learning. It also supports students to internalize standards and respond actively to areas for personal improvement and therefore improve the standards of the evaluated work before submitting it. Effective feedback is crucial in education research. Therefore, the lecturer must realize that not all students will go through their written feedback, and those who do it will not understand and decode it. Recent research on students' perception of effective feedback reported themes such as gentle guidance, student individualization, timeliness, and ongoing coaching (Yúgsán-Gómez et al., 2019). Consequently, instructor-to-student audio feedback can deal with all these areas effectively.

Educators have been experiencing challenges in preparing audio feedback for students because they consume more time than written feedback. Introducing new built-in services within learning management systems has improved the time taken by a lecturer to make audio feedback to an average of 3.83 minutes in every assignment compared to written feedback, which takes an average of 13.81 minutes per student. Finally, according to research, college students have a higher tendency to ignore written feedback as compared to audio files (Kaplan, Verma, & Sargsyan, 2020). Therefore, a combination of both can be a winning arrangement.

2.3 Effectiveness of podcasting in teaching and learning

Podcasting proved one of the most significant technological advancements in higher education teaching and learning. Gachago et al. (2016) highlighted several benefits and challenges of podcasting as an alternative lecture context. In their quantitative survey, they discovered that podcasting helps students deeply understand and conceptualize ideas more effectively than in lectures (ibid.). A brief review of the current literature on the effectiveness of podcasting in higher education showed these findings:

- **Effectiveness in inclusive education practice.** A study conducted by Hamburg (2017) indicated that podcasting promotes inclusion for students with disabilities and helps to enhance all students' participation in the learning process. In this context, the Special Educational Needs and Disability Act of 2001 (UK) required that all students can participate in the learning process fully, access course content, and actively demonstrate their strengths and knowledge at assessments. The study found that podcasting was very operational as an inclusive technology and helped to improve grades compared to regular lectures.
- **Flexibility and availability.** Podcasts are readily available and highly flexible to suit any teaching or learning activity. In a study on online teacher education, Forbes and Khoo (2015) echoed that podcasting is very effective as it offers convenience and portability to learning in higher education. From the authors' perspective, podcasting offers students easy access to learning resources anytime, anywhere. Thus, it gives lecturers and their students the chance to teach and learn without physical interactions.
- **Back-up of content.** Podcasting is very effective in backing up the missed course content. Morgan (2015) observed that podcasts help students and lecturers fill in lecture gaps created by missed classes. During the coronavirus outbreak, for instance, many institutions in higher education closed their gates and turned students to digital learning. Several students could not access their lectures quickly due to internet issues and other related challenges. In this perspective, podcasting is very effective in helping students make up for their missed online lectures and discussions.
- **Source of referencing.** According to Berry (2016), podcasting is one of the best learning materials a lecturer could ever offer their students as it creates a forum for future reference. While most of the material is available on the internet and other online platforms, Berry argues that podcasts will be used as citation sources in the future (Berry, 2016).
- **Ease of distraction.** Oloo and Elijah (2015) oppose the common notion that podcasting is all the way effective in teaching and learning. The authors argue that podcasting is prone to many disruptions. A student is likely to get distracted and carried away by other online content. The authors suggest that it is very tricky for podcasting to encourage students to patiently follow podcasts or recorded lectures for over thirty minutes (ibid.).

Evidence gathered from the review indicates that podcasting can effectively facilitate online teaching and learning. As shown, podcasting is beneficial in inclusive education, referencing, and backing up content. However, several researchers question its effectiveness regarding its ease of distraction during use.

3 The OER “Classic Management Murder Podcast Series”

This podcast series consists of six short episodes of a captivating crime story and mysterious murder of Frederick W. Taylor, and the investigation by researcher-turned-detective Lillian Moller Gilbreth. It begs the mean question of inquiry, regarding the ‘unfinished business’ that Taylor mentioned before his death. All episodes are linked to short e-learning activities and support students’ narrative learning (see table 1). Listeners enjoy a lightweight lesson about the classical schools in the history of management (e. g., the Bureaucratic, Administrative, and Scientific Management School of Thought), featuring various renowned engineers, researchers, and theorists: Frederick W. Taylor, Henri Fayol, Frank B. and Lillian M. Gilbreth, and Max Weber. While examining these figures and the fictional murder they were involved in, listeners can also expect this series to give a wonderful listening experience that can be enjoyed again and again.

Tab. 1: Summary of Episodes and School of Thought (Arnold, 2021a)

Act	Summary	School of Thought
I	What Unfinished Business? Frederick W. Taylor is introduced as the father of the Scientific Management School and its relationship with the Gilbreths.	Scientific Management School
II	Is There One Best Way? Taylorism is compared with Time and Motion studies. There is no “one best way”.	Scientific Management School
III	Are We Machines? American Federation of Labor (AFL) reacts to consequences of Taylorism: “Turning men into machines.”	Scientific Management School
IV	Can Managers Be Created Through Principles? Henri Fayol’s five primary functions of management are introduced. Training of managers should be focused on 14 principles.	Administrative Management School
V	When Is Bureaucracy a Good Thing? Organizations are based on rational authority. Managers must depend on formal rules in employee relations.	Bureaucratic Management School
VI	Finishing the Business The murder story of the “unfinished business” is ended and highlights the diversity of the different schools of management thought.	All

The podcast aims to support the development of students’ practical knowledge and transferable skills. This innovative podcast series was published under CC BY 4.0 as a Google Form™ open educational resource in April 2021 (Arnold, 2021a) and is freely available to the public. Its production took place between October 2020 and April 2021 which included outlining a script for the screenplay, the fictitious murder story, the recording with voice actors, mixing the footage, creation of sound effects to enhance the listening experience, and its publication on the web and mobile platform speaker.com™.

Pre-testing took place since April 2021, while the podcast was distributed to (non-) academic listeners via personal networks, mailing lists of professional societies and higher education experts in various social media channels. It is planned to integrate this podcast into the undergraduate course 'Introduction to Social Work Management', based on a flipped classroom concept in winter semester 2021/2022.

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The podcast is also accompanied by a Scholarship of Teaching and Learning (SoTL) project to explore learners' motivation and listening behaviour. A separate evaluation form which respondents must complete after the podcast will provide insights into individual user experiences (data collection still in progress). It is hypothesized that despite the challenges of distracted, contextually constrained listening and difficulties to apply the learning into their field, respondents support the ideas of an openly accessible podcast and learning opportunity for a decentralised teaching and self-directed learning experience.

4 Conclusion

This paper explored educational podcasts as an effective medium of communication in decentralised teaching and learning environments. After the presentation of some findings from a review of research on the effectiveness of podcasting, the Classic Management Murder Podcast Series was introduced as an example for decentralized and self-directed learning. There are many advantages in using podcasts in the learning design such as a recap after lectures, great leveler for inclusive education, to provide additional learning opportunities, integral learning material in hybrid learning environments, and instructor-to-student feedback method. Of course, that is not to suggest podcast learning is without its drawbacks; podcasting is prone to many disruptions. In the future, more effort should be put into building decentralized (learning) networks, which require both participation and not only consumption and providing alternative learning paths to users to succeed.

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