

Using Podcasts to Cultivate Learner-Teacher Rapport in Higher Education Settings

Dominic Conroy (London Metropolitan University) – corresponding author

d.conroy@londonmet.ac.uk

ORCID ID: 0000-0002-7356-2800

School of Social Sciences and Professions

London Metropolitan University

Tower Building

166-220 Holloway Road

London, U.K.

N7 8DB

Warren Kidd

w.kidd@uel.ac.uk

School of Education and Communities

University of East London

Water Lane

London, U.K.

E15 4LZ

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Abstract

Developing rapport with learners has presented challenges for Higher Education teaching practitioners since the onset of the COVID-19 pandemic, and increasingly practice within synchronous/asynchronous online learning environments. Podcasts are of renewed interest as a digital learning resource in this context. We explored, inductively, views of podcasts designed for teaching and learning purposes from students (n = 11) and practitioners (n = 5) in two disciplinary settings. Textual feedback on two sample podcasts per student were subjected to content analysis. Findings underscored podcasts value as digital learning resources to help nurture teacher-student relations. Podcasts may help establish teacher credibility, may help teachers feel more familiar/approachable to learners and may provide an outlet to communicate in a kind, informal tone to attenuate learning-related anxiety. We draw on findings from our small-scale exploratory study to present practical guidance for developing podcasts designed (in part) to cultivate teacher-student rapport.

Keywords: Podcasts; adult learners; digital learning; distance learning; rapport; content analysis

Introduction

Over at least the last two decades, podcasts have offered an accessible, 'low tech' resource for learning and teaching purposes in Higher Education (H.E. hereafter). Evidence supports podcasts as a tool for cultivating enriched learning experiences in H.E. (Carle et al., 2009; Salmon & Edirisingha, 2008; Kidd, 2012) and points to varied benefits of incorporating podcasts into teaching strategies. For example, focus group research with medical students has indicated that podcasts may help consolidate understanding of curriculum and help manage learning-related anxiety (de Villiers & Walsh, 2015). In addition, podcasts may align with a social justice agenda in H.E. settings (Ferrer et al., 2020; Gachago et al., 2016) – for example, survey evidence illustrates advantages of podcasts as asynchronous learning resources among non-traditional and international students (Gachago et al., 2016).

A systematic review of fifteen studies of podcasting for learning in H.E. settings published between 2016-2021 highlights the value of podcasts for promoting engaged learning, but also flagged the lack of interactions/dialogue as an important limitation of podcasts as a learning resource (Andersen & Dau, 2021). Moreover, digital resources, like podcasts, that do not permit synchronous interaction/dialogue risk being viewed as outdated in the context of the huge growth of chat-based, streaming collaboration platforms for teaching and learning (e.g., Google Meet, Microsoft Teams) in a post COVID-19 pandemic context. Podcasts, as an 'old tech' digital resource for teaching and learning, are *not* dialogical – learners cannot interact with the podcast speaker synchronously as they can on collaborative platforms. Similarly, podcasts are solely *auditory* learning resources - again, distinguishing them from collaborative platforms where use of webcams/ screenshares and file sharing are standard. Furthermore, as digital methods for learning and teaching continue to diversify, the need for discrete approaches to designing synchronous and asynchronous online learning environments becomes more apparent (e.g., Vai and Sosulski, 2016, p.14). Here, podcasts arguably offer a valuable resource for the delivery of fully online asynchronous teaching perhaps by breaking from the monotony of traditional teaching materials (e.g., text-based resources). Relatedly, podcasts as a solely auditory form of learning may play a role in reducing 'cognitive load' in the learning process (Sweller & Chandler, 1991).

Against the backdrop of emergent digital technologies which permit synchronous, multi-faceted forms of learner engagement and interaction, podcasts arguably require some reframing as a distinctive teaching and learning digital resource. One increasingly recognized challenge of online H.E. learning and teaching environments is developing ways to utilize digital resources in a way that cultivates *rapport* between learners and teachers (Coman et al., 2020; Rapanta et al., 2020). For example, Rapanta et al (2020) report in interviews with H.E. teaching practitioners with relative expertise in online teaching that creative deployment of welcome forums and initial online learning activities can help establish learner-teacher rapport.

Rapport remains under-researched in the H.E. pedagogic literature, perhaps partly reflecting its shared conceptual overlap with similar concepts and terms. For example, concerns with building rapport align with broader concerns around the importance of good personal student-teacher relationships as part of effective learning (Lowman, 1984), and having ‘an alliance based on trust’ characterising the learner-teacher relationship (Gaston, 1990). Well-established rapport might also reflect *connectedness* between learners, teachers, and the learning subject matter (Palmer, 1998). In the current article, we adopt Buskist and Saville’s (2001) definition of rapport as “an especially harmonious or sympathetic connection” between learners and teachers. For current purposes, we appeal to the conceptual value of rapport to help understand how connected, trusting, harmonious learner-teacher relationships can be cultivated in online learning environments. Evidence attests to the importance of building learner-teacher rapport for enhanced student progression and academic achievement (e.g., Hagenauera & Volet, 2014; Kaufmann & Vallade, 2020; Perkins et al., 1995). As practitioners who use podcasts for learning and teaching purposes, we sought to explore whether and how podcasts, as an older digital resource, may help establish and maintain teacher-student connections in H.E. environments.

The current study

We designed a survey-based study to acquire textual feedback from students (‘learners’ hereafter) and teaching practitioner colleagues, on samples of our own teaching and learning podcasts (‘podcasts’ hereafter). We drew on multiple ‘critical lenses’ (i.e., learners, colleagues) following Brookfield’s (1995) emphasis on the value of developing understanding from differing stake-holder vantage points. We sought to explicitly focus on any textual data feedback that concerned the character/dynamics of the learning experience linked to *the learner-teacher relationship*, as our operational definition for identifying data relating to ‘rapport’. Further study details are provided in the Procedures subsection below. Accordingly, our guiding research question was: ‘Where and how is the learner-teacher relationship apparent in learners’ and teachers’ experiences of listening to podcasts?’

Method

Procedure

Institutional ethical approval was secured from <DETAILS MASKED>. Study data consisted of student/colleague feedback provided from Qualtrics-hosted online free text survey responses. Students/colleagues gave separate feedback on each of two sample podcasts drawn from our respective planned podcast series for the 2019/20 academic year (see Table 1). Our sample podcasts were hosted on institutional webpages and were deliberately chosen to be illustrative of the scope/focus of the podcast series overall. Survey feedback items were informed by pedagogical theories concerning the engagement/motivation of learners (e.g., Biggs & Moore, 1993) and on our own practitioner experiences of developing and using podcasts. Most feedback items were identical

for learners and colleagues. Feedback items started with a stem request ('What did you think of the...') leading to free text items concerning the podcast format (e.g., length, focus), podcast sonics (e.g., pace/ tone), and how the podcast speaker was experienced (e.g., sense of presence of the speaker; authenticity of the speaker).

>TABLE 1<

Participants

Our final sample comprised 16 individuals: 11 learner participants comprising 8 psychology students and 3 education students (*Mean student age* = 34.6, range = 24-57); and five teaching colleagues including 2 psychology lecturers and 3 education lecturers (*Mean teacher age* = 35.2, range = 23-48). Informed consent was acquired from all study participants. Learner feedback on podcasts was acquired from students either studying a Psychology MSc (Author 1's learners) or a Postgraduate Certificate in Education (PGCE) (Author 2's learners). We had relatively high levels of exposure (i.e., term-long, weekly teaching sessions) with study learner participants. Learner participants were recruited via four email recruitment drives at the start of term. We also requested podcast feedback from teaching colleague participants. One of five teaching colleagues had previously developed podcasts for use in learning environments. However, we sought feedback from colleagues as individuals trained and experienced with constructing effective learning and teaching environments and resources in H.E. settings rather than conditional on any prior personal experience with producing podcasts as learning and teaching materials in their own practitioner activities. Colleagues were from each researcher's respective department and were recruited via informal work-based conversations and via email requests.

Analytic approach

Author 1 used an inductive approach to content analysis as defined by Hsieh and Shannon (2005). First, the raw data was downloaded from the free-text responses provided to the Qualtrics survey. Textual data from each participant was then collated to maximise clarity and consistency (e.g., editing out irrelevant textual material) and organized into single Word documents. All textual data was then coded to identify key categories/trends in the data (example code: 'Speaker enthusiasm cultivates sense of support'). Textual data was then organized, iteratively, into themes that reflected common trends/characteristics and dynamics in the dataset. Author 2 audited linkages between themes, codes and textual data illustrations as a quality check to ensure fidelity between raw datasets and clustering and final emergent themes. Disagreement about these linkages were identified and discussed leading a reviewing of the organization of analytic codes and/or to adjustments in the emphasis and phrasing of theme titles.

Results

Below we report themes and sub-themes concerning learner/colleague experiences of engaging with podcasts that in some way concerned teacher-learner rapport. Participants are identified following each quotation including standard details concerning participant type, discipline, gender and participant number (e.g., LPyF1 = Learner, Psychology, Female, participant #1).

Theme 1: Podcasts channel student confidence in learning environments

Podcasts provided a way of gaining familiarity and confidence in a teaching facilitator and in module-specific topic areas addressed in podcasts. Two relevant sub-themes are reported below:

1.1 Podcasts establishing credibility Feeling assured about teaching facilitator competencies was viewed by learners and teachers alike as facilitated by listening to podcasts, particularly pre-studies, *'the podcast helped prepare me for my first week of postgraduate studies. It also made me feel like (the speaker) had really planned everything and this gave me confidence'* (LPyF3), and *'the speaker's credibility comes across through introducing themselves at the beginning of the podcast and demonstrate their topic expertise'* (TPyF1). Credibility was also established via podcasts through opportunities for teachers to provide less conventional examples, potentially reflecting their own idiosyncrasies, *'the speaker has his own way of explaining key concepts and was confident in what he is saying - the tree example (for social constructivism) felt unique to the speaker'* (LEd2). Importantly, the credibility and confidence generated via podcast engagement seemed to build teacher-learner connections, *'he sounded knowledgeable and confident in what he was talking about and this created rapport with me as a listener'*, (LPyF4).

1.2 Podcasts foster enthusiasm Podcasts provided a medium for transmitting information/advice, but also to relay *'a sense of passion at certain parts through changes in tones or pace when speaking and the clear language/voice helped the listener gain insights'* (LEd2). Using the sonics of podcasts to showcase but also cultivate enthusiasm for a topic area, was identified in colleague feedback as well, *'the speaker sounds very passionate about the topic, and their confidence/interest is evident throughout'* (TPyF1), and, *'the speaker sounded engaged so I felt engaged and the tone was quite melodic'* (TEd3). Using podcasts to transmit/promote enthusiasm was viewed by one colleague as holding additional but less visible advantages, *'the podcaster is lively and engaged and transmits good enthusiasm for the course and topics- I think this imparts a good sense of genuine supportiveness'* (TPyM1). Learner feedback sometimes signalled the balancing act involved in pitching enthusiasm to learners in a way that felt authentic and not overly emphatic, *'the speaker conveyed their enthusiasm for the subject but without being overly so'* (LPyF4).

Theme 2: Podcasts help to consolidate teacher-learner rapport

Participants also talked about podcasts helping build a stronger/clearer learning relationship with their teacher. Three relevant sub-themes are reported below:

2.1 Podcasts enhance teacher approachability Podcasts seemed to help embed teacher-learner rapport in several ways. Experiencing a less formal tone seemed to partly underlie this enhanced approachability, *'rapport was developed through a reassuring pace and the speaker sounded friendly and approachable.'* (LPyF4). Points of juxtaposition seemed to highlight the instrumental role of podcasts in enhancing teacher approachability in some learners' responses. This could be via contrasting podcasts with traditional communication modes, *'it gave an interesting change from just hearing from a lecturer via email or the lectures themselves—felt more personal and more relatable.'* (LPyF3) and *'podcasts are useful as they are more accessible than reading texts'* (LPyF1), but was also apparent through contrasts with perhaps more traditional dynamics/modes of communicating with students, *'the speaker approach was supportive and encouraging and generally that of a helpful guide rather than trying to give lots of information.'* (LPyF2). One participant reported that *'(the speaker) seemed very approachable, which has given me the confidence to approach him after lectures.'* (LPyF3). Colleague feedback suggested that the 'lo fi' feel of podcasts was part of what could enhance the possibility of more effective contact with learners, *'this was a fluent and articulate presentation, without feeling overly polished which gives an authentic, communicative feel.'* (TEd2).

2.2 Podcasts can symbolise commitment to learners Taking time to produce podcasts was, for learners and teachers alike, in itself symbolic as a way of building rapport with learners, *'you get a sense of what (the speaker's) like and that he cares about student success, as he's put the time in to create these podcasts and explain key concepts and assignments.'* (LPyF7), and, *'I really like the way the speaker has responded to a student's request and created this podcast'* (TEd1). Podcasts did appear to offer a distinctive way of demonstrating commitment to learners, with direct links apparent for some participants between use of voice and promoting a sense of teacher aspirations for positive student outcomes, *'you feel comfortable because (the speaker) has authority in his voice [...] you are clear that the speaker genuinely wants the listener to have knowledge and clarity about the module.'* (LPyF1).

2.3 Knowing the speaker via podcast engagement Podcasts could help to promote the sense of teacher approachability and commitment to students, but also built rapport by providing a distinctive outlet for the teacher to communicate a sense of their background and positionality. Students appreciated a sense of teacher background, *'it was helpful to have an introduction to the module leader and his mixed methods background, which contextualised why you're teaching this course now and feel like he wants to be doing this.'* (LPyF7), and gaining details of the broader teaching team, *'It was helpful to have an introduction and overall picture of the module and to learn staff names'* (LPyF2). In one colleague response, details about speaker background could have come across more clearly still, *'there could have been more information on their research background – e.g. examples of research topics that use quantitative vs qualitative approaches'* (TPyF1). Another colleague response linked the importance of communicating a sense of teaching staff (in terms of their background) with

less tangible features of the learning environment, *'one of the strengths of the podcast is the sense of supportiveness- one gets the sense that the podcaster is committed to the topic. On that, it was helpful outlining the podcaster's mixed methods background briefly at the start.'* (TPyM1).

Theme 3: Using podcasts to reduce learning-related anxiety

A less visible but powerful way in which the role of the speaker appeared to be valued by colleagues/students was in terms of how this perceived as beneficial for addressing learner anxiety linked to the learning process. Two relevant sub-themes are reported below:

3.1 Podcasts communicate kindness Using voice to deliver a supportive/compassionate message was an appreciated feature of podcasts, helping to address learners' apprehensions and potential study-related distress, *'having a warm, kind, welcoming voice make you feel comfortable and makes listening easy'* (LPyF1). Hearing a kind/calm but also familiar voice could bolster understanding. This was evident among education students, *'it helps hearing an explanation from a familiar voice which provides comfort when developing knowledge and puts the listener at ease'* (LEd2), and psychology students *'I got the impression that the speaker wants the students to enjoy the subject and not to worry about tackling something that might be new'* (LPyF4).

3.2 Podcasts convey informality Adopting a less formal tone in podcasts seemed to help relieve learning-related anxiety perhaps partly by helping students feel more prepared the learning trajectory. Podcasts were valued when beginning a programme to prepare learners for their studies and responses could, similarly to Theme 2.1, explicitly contrast podcasts against traditional/standard text-based learning resources, *'it felt more relaxed than just having the module handbook so it was a good start to the course'* (LPyF3). For one learner, the casual tone used in course-related podcasts bolstered study preparation which helped manage learning-related anxieties, *'the casual tone in this specific podcast could help people who suffer from anxiety because it prepares them mentally for what will be covered, particularly because this (research methods) module is one that I have been more concerned about'* (LPyF3). Colleague material also supported the impression that use of a (carefully bounded) informal tone was a valuable way in which a stress-free learning environment could be cultivated, *'voice projection draws you in and speaker sounds chatty (appropriately so), so it feels like you are in a teaching session or conversation and makes you feel relaxed'* (TEd3).

Discussion

The COVID-19 pandemic has challenged both teaching practitioners and learners to rapidly adjust to online learning environments where engaged communities of learning can be established and maintained. In this small-scale exploratory study, we sought to explore podcasts as a digital resource for establishing and maintaining teacher-student connections in H.E. environments, drawing on both learner and teacher perspectives. Podcasts seemed relevant to developing learner-teacher relations whether by bolstering confidence in learning environments, building learner-teacher rapport (e.g., by

enhancing teacher approachability). Using podcasts as digital learning resources also seemed to help manage learning-related anxiety.

Developing teacher-student rapport is increasingly recognized as relevant from an inclusiveness perspective in terms of fostering connections across culturally diverse learning cohorts; for example, recent work has drawn attention to discrepancies in teacher-learner rapport along ethnic lines in different educational settings (Wandix-White, 2020). Podcasts for teaching and learning are no 'golden bullet', but our small-scale qualitative study suggests they may help bridge cohort discrepancies. These speculations require dedicated future research to explore whether and how podcasts might specifically help address an inclusiveness agenda in H.E. learning environments. Study findings accord with previous work showing links between student-teacher rapport (or 'connectedness') and academic performance (e.g., Blackwell et al., 2020; Sybing, 2019). For example, practitioner viewpoint evidence hinted how podcasts might help foster this 'more human' dynamic, perhaps by virtue of their "(not) overly polished... (and more) authentic, communicative feel" (TEd2, Theme 2.1), while learner viewpoints supported the view that podcasts could make teachers feel more relatable and supportive within the broader learning process.

Meta-analytic evidence has previously indicated that teacher credibility is closely linked with undergraduate/college student outcomes (Finn et al., 2009). Current study data hinted at how podcasts might build teacher credibility perhaps by showcasing practitioner knowledge (Theme 1.1), by conveying teacher approachability (Theme 2.1) but also by symbolizing commitment to learners (Theme 2.2). From a practitioner viewpoint, podcasts may provide one 'background' learning resource through which teachers can calibrate the tone/ climate of the learning environment. In an asynchronous distance learning climate, where access to teachers is either limited or absent, podcasts may facilitate construction of a teacher-student relationship (i.e., building trust, establishing a nurturing approach to learning), in the absence of face-to-face interactions. Study data also suggested that podcasts may help foster a climate of kindness/compassion within learner-teacher relationships. These findings are relevant to increasing H.E. sector focus on addressing student mental well-being within H.E. learning environments (e.g., Pollard et al., 2021). Findings also connect with prior scholarly discussion concerning the ethical and legal dimensions of incorporating kindness and compassion within H.E. teaching practices and the general absence of research on kindness in educational settings (Clegg & Rowland, 2010; Erikson et al., 2019).

Limitations, research extensions and practice recommendations

Our free-text data collection tool was carefully designed to be comprehensive and non-directive, but we acknowledge that potential participant 'priming' on specific issues (e.g., authenticity, presence) may have occurred. However, we note here that participant feedback was often spontaneous and bore little connection with the exact phrasing/focus of items contained in the data collection tool. Drawing

on both teacher and learner perspectives on podcasts was a demonstrative study strength with findings offering triangulating evidence that podcasts may support improved learner-teacher relations while also offering discrete learner views (e.g., on how podcasts applied to personal experiences of learning) and teacher views (e.g., on where/ how podcasts might work optimally within broader teaching activities).

Future research should gauge views of podcasts in H.E. learning contexts via in-depth semi-structured interviews and/or focus groups to identify more precisely where/ how podcasts might be most effectively drawn on to support learning outcomes. Our convenience sampling approach may have meant that individual learners and practitioners with more favourable views of podcasts as learning resources were over-represented in our data, and we only explored feedback/views based on a sample of two podcasts rather than a term-long podcast series. An expanded version of the current study could usefully explore how an entire podcast series is received, potentially within a purposively sampled (and therefore more diverse) cross-section of a student cohort.

Finally, we present three practical recommendations for teaching practitioners on how to produce podcasts designed (in part at least) to develop rapport and enhance learner-teacher relationships. Recommendations stem from, and are illustrated by, findings presented in this article but, inevitably, also reflect our own experiences of podcast production. The study subthemes most directly linked to suggestions are stated in squared parentheses following each recommendation. First, sketch out a very brief plan for a concise, pithy podcast focused on something that students will find useful/interesting and which perhaps offers a new perspective on subject materials [2.2; 2.3]. Second, aim to thread reference to specific teaching weeks/ intended learning outcomes and perhaps other learning resources as the podcast focus. This may help convince the listener that the podcast is integrated within and, ideally, helping to synthesise, the broader pool of subject learning materials [2.1; 3.1; 3.2]. Third, before recording your podcast, reflect on how you would like to present yourself as a teaching practitioner to connect with your students. Adopting your authentic style may be important to cultivating learner-teacher rapport. Reflective work might involve listening back to a pilot podcast to learn about how you use your vocal delivery in terms of tone, pace and range [1.1; 1.2; 2.1; 3.1].

Conclusion

The Covid-19 pandemic has accelerated pedagogic interest in developing effective asynchronous and synchronous online learning environments. We offer tentative insights into how podcasts may support the cultivation of learner-teacher rapport. Future research is now required to develop understanding of how podcasts might be deployed effectively within hybrid/online learning environments a post-pandemic context.

Word count: 4777

Declaration of interest statement

This research was unfunded and the authors have no conflicts of interest to report.

References

- Andersen, R. H., & Dau, S. (2021). *A review of podcasts as a learning medium in Higher Education. In European Conference on e-learning ECEL Proceedings.*
<https://www.ucviden.dk/en/publications/et-review-af-podcasts-som-l%C3%A6ringsmedie-i-videreg%C3%A5ende-uddannelser>
- Biggs, J., & Moore, P. (1993). *The process of learning.* Sydney, Australia.
- Blackwell, J., Miksza, P., Evans, P., & McPherson, G. E. (2020). Student vitality, teacher engagement, and rapport in studio music instruction. *Frontiers in Psychology, 11*, 1007.
<https://doi.org/10.3389/fpsyg.2020.01007>
- Brookfield, S. (1995). *Becoming a critically reflective teacher.* San-Francisco: Jossey-Bass.
- Buskist, W., & Saville, B. K. (2001). Creating positive emotional contexts for enhancing teaching and learning. *APS Observer, 19*, 12-13.
- Carle, A. C., Jaffee, D., & Miller, D. (2009). Engaging college science students and changing academic achievement with technology: A quasi-experimental preliminary investigation. *Computers & Education, 52*(2), 376–380. <https://doi.org/10.1016/j.compedu.2008.09.005>
- Clegg, S., & Rowland, S. (2010). Kindness in pedagogical practice and academic life. *British Journal of Sociology of Education, 31*(6), 719–735. <https://doi.org/10.1080/01425692.2010.515102>
- Coman, C., Țîru, L. G., Meseșan-Schmitz, L., Stanciu, C., & Bularca, M. C. (2020). Online teaching and learning in higher education during the coronavirus pandemic: Students' perspective. *Sustainability, 12*(24), 10367. <https://doi.org/10.3390/su122410367>
- de Villiers, M., & Walsh, S. (2015). *How podcasts influence medical students' learning – a descriptive qualitative study.* 5.
- Erickson, S., Neilson, C., O'Halloran, R., Bruce, C., & McLaughlin, E. (2021). 'I was quite surprised it worked so well': Student and facilitator perspectives of synchronous online Problem Based Learning. *Innovations in Education and Teaching International, 58*(3), 316–327.
<https://doi.org/10.1080/14703297.2020.1752281>
- Ferrer, I., Lorenzetti, L., & Shaw, J. (2020). Podcasting for social justice: Exploring the potential of experiential and transformative teaching and learning through social work podcasts. *Social Work Education, 39*(7), 849-865. <https://doi.org/10.1080/02615479.2019.1680619>

- Finn, A. N., Schrodtt, P., Witt, P. L., Elledge, N., Jernberg, K. A., & Larson, L. M. (2009). A meta-analytical review of teacher credibility and its associations with teacher behaviors and student outcomes. *Communication Education*, 58(4), 516–537.
<https://doi.org/10.1080/03634520903131154>
- Gachago, D., Livingston, C., & Ivala, E. (2016). Podcasts: A technology for all? *British Journal of Educational Technology*, 47(5), 859–872. <https://doi.org/10.1111/bjet.12483>
- Gaston, L. (1990). The concept of the alliance and its role in psychotherapy: Theoretical and empirical considerations. *Psychotherapy: Theory, Research, Practice, Training*, 27(2), 143-153.
<https://doi.org/10.1037/0033-3204.27.2.143>
- Hagenauer, G., & Volet, S. E. (2014). Teacher–student relationship at university: An important yet under-researched field. *Oxford Review of Education*, 40(3), 370–388.
<https://doi.org/10.1080/03054985.2014.921613>
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Kaufmann, R., & Vallade, J. I. (2020). Exploring connections in the online learning environment: Student perceptions of rapport, climate, and loneliness. *Interactive Learning Environments*, 0(0), 1–15. <https://doi.org/10.1080/10494820.2020.1749670>
- Kidd, W. (2012). Utilising podcasts for learning and teaching: a review and ways forward for e-Learning cultures. *Management in Education*, 26(2), 52-57.
<https://doi.org/10.1177/0892020612438031>
- Lowman, J. (1984). *Mastering the Techniques of Teaching*. (2nd ed). London: Wiley.
- Palmer, P. J. (1998). *The courage to teach: Exploring the inner landscape of a teacher's life*. London: John Wiley & Sons.
- Perkins, D., Schenk, T. A., Stephan, L., Vrungos, S., & Wynants, S. (1995). Effects of rapport, intellectual excitement, and learning on students' perceived ratings of college instructors. *Psychological Reports*, 76(2), 627–635. <https://doi.org/10.2466/pr0.1995.76.2.627>
- Pollard, E., Vanderlayden, J., Alexander, K., Borkin H., and O'Mahony, J. (2001). HE student mental health and wellbeing: sector insights. Retrieved from
<https://www.gov.uk/government/publications/he-student-mental-health-and-wellbeing-sector-insights>
- Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2020). Online University teaching during and after the Covid-19 crisis: Refocusing teacher presence and learning activity. *Postdigital Science and Education*, 2(3), 923–945. <https://doi.org/10.1007/s42438-020-00155-y>

- Salmon, G., & Edirisingha, P. (2008). *Podcasting for learning in universities*. London: McGraw-Hill Education.
- Sweller, J., & Chandler, P. (1991). Evidence for cognitive load theory. *Cognition and Instruction*, 8(4), 351-362. https://doi.org/10.1207/s1532690xci0804_5
- Sybing, R. (2019). Making connections: Student-teacher rapport in Higher Education classrooms: student-teacher rapport in higher education classrooms. *Journal of the Scholarship of Teaching and Learning*, 19(5), 18–35. <https://doi.org/10.14434/josotl.v19i5.26578>
- Vai, M., & Sosulski, K. (2016). *Essentials of online course design: A standards-based guide*. (2nd ed.). London: Routledge.
- Wandix-White, D. (2020). The impact of teacher-student (dis)connection on black student and teacher identity development in U.S. schools. *Journal of Autoethnography*, 1(3), 234–251. <https://doi.org/10.1525/joae.2020.1.3.234>

Table 1. Summary of study podcasts

Researcher and study podcast #	Sequence in series	Podcast title	Summary	Length (mins)
Author 1, #1	1 of 19	‘Module introduction’	Brief module outline including introducing me, the lecture/practical session approach, and explaining how the podcasts will work.	11:55
Author 1, #2	6 of 19	‘Week 1 synopsis’	Overview of the week 1 lecture focus and learning outcomes and required readings for this session. Also focus on the practical session for this week (SPSS orientation).	12:11
Author 2, #1	2 of 10	‘Assessment for learning’	Module outline designed to foster understanding of core topic areas, learning outcomes, and skills required for assessment.	13:35
Author 2, #2	4 of 10	‘Social constructivism’	Focused coverage of social constructivism as applied to the pedagogical experiences of trainee teaching students	16:26