



# The Power of Voice: Using Audio Podcasts to Teach Vocal Performance and Digital Communication

Amanda Hill 

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**Abstract:** Today's students often speak through mediated technologies. Thus, understanding how nonverbal cues impact meaning-making is key to understanding effective communication across mediums. This case study explores a group project where students created audio podcasts to teach others about a specific aspect of communication studies while considering the way sound and vocal performance affect the transference of the message. This article examines the use of audio podcasts as a vehicle for teaching university students about the power of paralinguistic and chronemic nonverbal behaviors.

The fact that much of our communication today is transmitted through technological devices points to the need to better understand how verbal and nonverbal communication works in these environments. When texting, for example, we rely on our ability to analyze the symbols (be they letters, words, emojis, or otherwise) to know what our “speaker” is communicating. Yet, texting removes the tonal qualities of sound from the message. A similar removal happens when considering audio-only communication such as audio podcasts.<sup>1</sup> Instead of removing the sound-based qualities of the messages, however, podcasts remove all visual nonverbal messaging, leaving only aural nonverbal cues. For students today who often speak through such mediated technologies (M. Anderson & Jiang, 2018), understanding how sound and visuals work separately and together is key to understanding effective communication across mediums.

1. A podcast refers to a digital media file that can include both audio and video elements. In this article, I will use podcast to speak specifically of audio-only podcasts such as those that you might hear on radio programs.

This paper explores how audio podcasts may be used to teach a specific aspect of communication studies while considering the way sound and vocal performance affect the transference of the message.

## Why Podcasting?

Podcasting has gained traction in recent years as technologies become increasingly mobile and capable of supporting audio recording and editing practices. Podcasts became a popular teaching practice in higher education in the early 2000s (e.g., Bolden, 2013; Bolden & Nahachewsky, 2015; Powell & Robson, 2014; Struck et al., 2013). Lee and colleagues (2008) contend that podcasting “is a powerful way of stimulating both individual and collective learning, as well as supposing social processes of perspective-taking and negotiation of meaning that underpin knowledge creation” (p. 501). The project studied in this article extends these studies by composing content-driven messages prioritizing the spoken word over a written analysis.

In many ways, podcasts serve as a new composition medium for students. Podcast composition, while related to written and spoken composition practices, is markedly different in important ways. As a classroom learning initiative, media aesthetics and media literacy have become major components of our everyday communication practices, in both overt and unconscious ways (Erstad, 2010).

## Voice as a Sonic, Nonverbal Cue

Project goals included collaborating to produce a product about communication studies, as well as to contend with the sound and use of voice. By creating unscripted podcasts, students could focus more specifically on vocal performance and audio recording. As Weidman (2015) writes, “Technologies of sound reproduction, broadcasting, transmission, and amplification draw attention to powers and possibilities of voices separated from their ‘original’ bodies or voices produced at least partly through nonhuman sources such as microphones . . .” (p. 232). This attention can be felt at both the hands (and, perhaps, ears) of the listener.

Sound plays a crucial role in how we analyze a speaker’s communication. Spoken communication has at its core two layers of transference: the linguistic layer and the paralinguistic layer. The linguistic layer considers the message sent by the words spoken and the meaning of those words. The paralinguistic layer considers the way in which those words were spoken. The paralinguistic layer thus includes a wide range of acoustic vocal cues that convey the meaning of the message as well as indicate the speaker’s relationship to the content of the message. Paralinguistic factors include emphasis on certain words, pitch, intonation and musicality, tone and timbre, and vocal fillers such as “um” or “like.” Compounding the paralinguistic layer are chronemic communication behaviors, which focus on components of time in speech, such as the rate at which someone speaks, where someone chooses to pause or be silent and for how long (or the opposite—where someone omits pauses), and how people take turns in conversations. These nonverbal factors help the listener assess the likeability, authenticity, genuineness, relatability, and authority of the message being conveyed and are all paralinguistic vocal cues a listener can use to detect meaning from and assess the intent of the spoken message.

That said, these traits are, in effect, a performance of identity. Following Goffman, Papacharissi (2009) argues that “Given the level of control over verbal and non-verbal cues in a variety of online contexts, individuals may put together controlled performances that ‘give off’ exactly the ‘face’ that they intend”

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(p. 210). He further suggests that these performances are situational and “comprised of intentional and unintentional impressions given off or ‘expressions given off’” (p. 210).

As performances of identity, paralinguistic and chronemic behaviors of speech can be affected by factors such as age, gender, cultural background, and personality (Crystal, 1971; Zhang et al., 2017). Studies have shown an ability to recognize likeability (Burkhardt et al., 2011; Gallardo et al., 2017; Weiss & Schoenenberg, 2014), extroverted-ness (Mairesse et al., 2007), pleasantness (Pinto-Coelho et al., 2013); warmth and attractiveness (Gallardo & Sanchez-Iborra, 2019), and flirtatiousness, awkwardness, and friendliness (Jurafsky et al., 2009) through paralinguistic and chronemic behaviors and have shown that recognizable traits, such as likeability, are influenced by gender (see: Gravano et al., 2011; Weiss & Burkhardt, 2010). Additionally, many of these factors are influenced by the circumstances surrounding the speaker at the exact moment of speech. While these traits are critical for all public speaking, they are particularly relevant in mediated spaces such as podcasts. As Schandorf (2012) writes, “In face-to-face, physically immediate contexts, language relies on nonverbal ‘paralinguistic’ cues whose necessary functions are not entirely lost in mediated interaction, but are reconfigured as the media of their communication change” (p. 321). In the case of group podcasts, this change remediates dialogic aspects of communication. With a group recording assignment, speakers must further contend with the interaction of such factors among themselves. While this paper focuses on the nonverbal communication factors that are apparent in listening to recorded podcasts, it is worth imagining that there are physical nonverbal behaviors taking place behind the scenes of the records. Yet, even with this limited scope of nonverbal behaviors, having students create podcasts becomes a way for students to tune into their own nonverbal practices, especially those in dialogic spaces like in conversational podcasts. Understanding the conversational component of group recordings highlights the ways these nonverbal behaviors change when we encode and decode meaningful messages.

## **Focusing on Voice: The Importance of Nonverbal Communication**

Understanding the importance of nonverbal communication may lead to future success in many life situations. Significant research has been conducted on first impressions interviewees create with potential employers based on their nonverbal visual and vocal cues (see: Anderson & Schakleton, 1990; DeGroot & Motowidlo, 1999; Forbes & Jackson, 1980; Miller et al., 2018; Russel et al., 2008). As DeGroot and Motowidlo (1999) write,

Nonverbal vocal cues such as pitch (e.g., Edwards, 1982), speech rate (e.g., Brown, 1980), and pauses (e.g., Scherer, 1978) that have been linked to the favorability of impressions formed by listeners might also affect interviewers’ judgments but have not yet been studied as much as visual cues in the context of employment interviews. (p. 986)

Miller et al. (2018) suggest that unintentional nonverbal vocal cues may manifest as a result of interview anxiety, with interviewees showing “speech disturbances” such as stuttering and verbal fillers (p. 26). I focus here on the importance of interviews as they are directly linked to the career trajectory of our university students and we aim to make them competitive in their chosen career paths. Research has shown that being competitive in the career field includes being able to communicate effectively and efficiently. As Miller et al. explain, “If anxious interviewees are emitting less effective cues, then it is important to identify those cues that are negatively affecting interviewers’ perceptions” (p. 26). To which

I would second their ultimate call to action, that it then becomes necessary to educate interviewees in behaviors such as vocal quality and tonality, the use of filler words, mumbling, and effective structuring of thoughts. Podcasting allows for this thorough reflection on voice and the way it is used. At the same time, it is important to recognize that interactions, such as those described above, are formed in hegemonic social contexts, which privilege White people speaking Standard American English. Discrimination and “sounding ‘different’” (Cocchiara et al., 2016) have been shown to affect hiring and workplace practices (see also: Fryer & Levitt, 2004; Luo, 2009) and using Black English has been shown to be identified as “less credible” (Billings, 2005).

Sounding “different” additionally affects the practices of radio and podcasting. While radio and podcasts remain relevant in popular culture and have diversified to meet some needs of current audiences, radio holds tight to hosts who can speak in what is described as a standard American accent (“Talk American,” 2018). In the episode “Talk American” (2018), NPR’s *Code Switch* host, Shereen Marisol Meraji, explains,

... when we’re thinking about someone’s accent, let’s be honest—we’re making judgment calls. We’re listening to the way they speak to tell us whether they have power, whether they’re trustworthy, whether they’re smart, kind, annoying, innocent or guilty. We use people’s accents to discern if someone is like us or if they’re not like us.

Knowing this, what does it mean to teach paralinguistic and vocalic cues to diverse undergraduate students at a Hispanic Serving Institution? How can I help students learn to speak in ways that effectively express their messages without advancing a culture dominated by standard American accents and Whiteness? Balancing an educational directive that embraces teaching and understanding nonverbal communication for the purposes of confidence and success in situations such as job interviews with an understanding of society’s stereotypes of a person’s vocalics is an important and difficult consideration. Although this sort of deep reflection is outside of the purview of this article, it is a component of the project that I have greatly contemplated and one that continues to require thoughtfulness.

As Weidman (2015) writes, “Sonic and material experiences of voice are never independent of the cultural meanings attributed to sound, to the body, and particularly to the voice itself” (p. 232). Weidman (2015) contends that voice is intrinsically linked to the person who is speaking and that as such sound becomes a secondary consideration: “Almost before we can speak of the sound itself, we attribute the voice to someone or something” (p. 235). If we consider Weidman’s insight in proximity to the research on nonverbal cues and interview success, we begin to see that voice becomes an intrinsic extension of the body, and one that can have profound effects on the outcome of the person as a whole. Weidman (2015) further explains that “Voices are not only sonic phenomena; they are material, in the sense that they are produced through bodily actions” (p. 235). In this way, voice as an extension of bodily identity performance. The same cultural contexts and factors that influence how we perform identity through our bodies affects the ways we use our vocal instruments. Weidman (2015) explains that these vocal practices include both the mechanically learned skills to produce sound as well as the way in which we learn and adopt the performative qualities of voice, including traits like timbre, volume, speed, and power. Thus, the production of sound through voice become “creative expressions of social and cultural identity” (p. 235). For a diverse HSI like St. Mary’s University, where some students speak Spanish as their first language, the performance of identity through vocal sounds, language, and word choice is apparent in ways that might be overlooked by White students speaking Standard American English. These performed qualities may speak to social and cultural identities that are performed both consciously and unconsciously at any given time. Yet, despite the effects nonverbal vocal cues can have

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on students' success, I find that many have never considered the sonic practices of their own voices and the impressions these experiences make.

## Podcasts as a Teaching Tool: A Case Study

### Background and Goals

Podcasts were completed by students in three sections of a college-required, undergraduate course titled “Fundamentals of Oral Communication.” This course is currently required of all students enrolled in the College of Arts, Humanities, and Social Sciences. There are a total of 47 students, ranging from freshmen to seniors. Additionally, the school is a Hispanic Serving Institution (HSI) where approximately 70% of the student body identifies as Hispanic. The course covers intrapersonal communication, interpersonal communication, and group communication, and students engaging in practices of public speaking, group discussion, and problem-solving over the course of the semester. Because “Fundamentals of Oral Communication” is mandatory, I intentionally sought ways to engage students in meaningful and innovative learning. Podcasting became an effective tool to help students consider how the qualities of sound affect the overall effectiveness of a message's communication. The goal of the assignment was to address the following research questions:

1. How would students engage with concepts of and their own practices with nonverbal communication in a platform that allows them to record and revisit their communication? What would students gain from such a reflection?
2. How would students engage in collaborative composition using audio as the medium? What nonverbal practices would students consider in the composition process?

### Methodology

This project was informed by practices of critical pedagogy and what Freire (1970, 2005) describes as the “banking concept of education” (p. 72). The banking concept suggests that the student is an empty vessel to be filled with an educator's knowledge. Freire (1970, 2005) argues that this system “serves the interests of oppression” (p. 77) and writes that it is, “Based on a mechanistic, static, naturalistic, spatialized view of consciousness, it transforms students into receiving objects. It attempts to control thinking and action, leads women and men to adjust to the world and inhibits their creative power” (p. 77). Thus, students are pawns in a system of oppression. In response, Freire (1970, 2005) proposes “‘problem-posing’ education,” which uses reflexivity to engage students to consider larger questions of societal structures (p. 79). The podcast assignment acts as a meta-communication assignment, where students reflect on their communication practices while simultaneously speaking about a practice of communication that interests them. Hence, students share their own experiences and knowledge on topics of their choice to become “critical co-investigators in dialogue with the teacher” (Freire, 1970, 2005, pp. 80–81).

Groups of three to four students each created an educational podcast targeted toward peers about a specific aspect of communication studies. In doing so, students work with digital audio recording and editing technologies as a means to discover how composition works in a digital medium. This project afforded them an opportunity to work collaboratively on a single assignment as they discussed research, as well as how to organize the material. As students executed best practices of group communication, they also identified the various roles they played in their groups. In all but one case, students choose

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their own groups. The podcasts were expected to range between 10–12 minutes, giving each student at least 3 minutes of total speaking time throughout the length of the podcast. Students could choose between three types of podcasts: a fictional narrative, a conversational style podcast, or a radio essay.

The groups who created fictional radio dramas all chose to place their narratives inside fictional radio shows. One group's radio show let listeners call in and receive relationship advice; another addressed the topic of communication in cyber bullying; and a final group addressed intrapersonal communication in the building of one's self-concept.

While these groups' podcasts were entertaining and had some good analysis of effective and problematic communication in each of these situations, the students in these groups scripted their podcasts before recording, an action I had banned in the assignment instructions. Reading the scripted material impacted their vocal qualities such as pitch, tone, and intonation to meet their ideas of the characters/roles they were portraying. Additionally, the podcasts reflected less use of vocal fillers as a result of the scripting. As this paper seeks to explore the unintentional nonverbal vocal cues students used in the creation of their podcasts, this discussion will focus solely on the 10 conversational podcasts, which were not scripted before being recorded.

I initially provided students with a list of potential topics in which they could engage. While obviously not comprehensive to the many niche fields of communication studies, I aimed to provide a wide-ranging list of ideas to motivate and directly speak to the students' interests and imaginations. The list included:

- ▶ The gendering of voices
- ▶ How Gen Z communicates
- ▶ Relationship advice
- ▶ Cultural communication practices
- ▶ Aggressiveness/bitchiness dichotomy
- ▶ Generational communication preferences
- ▶ Advice for speaking up in class
- ▶ Advice for effective group communication
- ▶ Passive aggressive communication and other options
- ▶ Advice for public speaking
- ▶ Advice for dealing with roommate conflicts
- ▶ Direct communication
- ▶ Advice for dealing with disagreements
- ▶ Advice for intrapersonal communication
- ▶ How to talk to someone who's depressed
- ▶ How to get people to listen to you
- ▶ How to communicate for activism/making change
- ▶ How to talk to strangers
- ▶ The differences between digital communication methods

Ultimately, the 10 podcasts that employed a conversational approach to engaging with the content ranged in quality and content material. Topics addressed within these groups included the history and use of slang, the communication of fake news, sports communication (specifically communication between

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players and coaches), the intersection of gender and communication, the history of communication technologies, and effective communication in times of disagreement.

## Organizing and Recording the Podcasts

Students created projects collaboratively to create an annotated bibliography of potential research. In addition, student groups created a short one-page podcast pitch detailing what the podcast was going to be about, what question(s) it would examine, how it would relate to communication studies, and why this topic was important, both in general and to the field of communication studies. These two documents were due before production on the podcast began and required approval from myself before they could continue. This allowed me to properly gauge the scholarship and authority of their references as well as the importance and potential impact of their podcast's content.

Once the annotated bibliography and the pitch were approved, students began organizing their thoughts to begin recording their podcasts. The majority of students recorded their podcasts on their phones, although some groups accessed the Sound Recording Studios available through our Academic Media Center (AMC). This studio space proved useful to some students. As one student wrote in their final reflection,

the studio room worked out very well for us in producing the podcast because we didn't have to worry about any external noise, we had access to a mic, and the computer in the room had GarageBand already set up so all we had to do was plug in the mic and hit record.

Smartphones additionally proved well equipped to handle the needs of this assignment and many students even used their smartphones to edit the recordings directly after creating the sound file. I introduced the students to the software Garageband, which is available on Apple devices. I chose this program because it is free, easy to use, and because many of the students had either an iPhone or a Mac computer.

However, other students didn't have easy access to this software, so I additionally recommended programs like the shareware Audacity and the apps Wavepad Audio Editor and Lexi's Audio Editor, which are available on Android devices. I met individually with students using one of these additional programs to help them learn to understand and utilize the software. Realistically, the role of audio editing will fall to only one student, so having that student identified early was useful to know which students would need support in this area and to ensure that every group had access to some kind of audio editing technology.

After students edited the podcast down to the required 10–12 minutes, students were then asked to create transcripts of the audio. The transcripts easily allowed me to ensure the podcast content was coherent and cohesive as well as to ensure that the students had appropriately accounted for their sources and created appropriate citations. The transcript, recorded podcast, annotated bibliography, and podcast pitch became a package that helped me assess the work of the students individually and as a group.

This assessment was based in research about what characteristics combine to create effective aural performances. Warhurst et al. (2013) put forth a list of general characteristics of radio performances after thematically categorizing interviews from nine radio employers and educators. The list includes: content and personality (knowledge); voices can deliver certain elements; voices that suit the actual station (vernacular style and gender); easy to listen to (warmth, depth of pitch, clarity of speech, animation, no faults, distinctive voice); conversation with the listener/sound real and natural; different

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to radio voices in the past; ability to read; and multiskilled (p. 219). For this assignment, I focused on the factors that easily translated from the radio industry into the classroom: content and personality; easy to listen to; and conversation with the listener/sound real and natural. As such, students were assessed both on their content and their performance and on the ways in which these came together. Content-related criteria included the knowledge and composition of the work including the introduction, body, and conclusion of the podcast, and performance criteria included the use of language and voice, clarity, listenability, length of time engaged in speaking, and professionalism. At the intersection of content and performance, students were evaluated on the adaptation of their podcast to the audience (their peers) and whether their podcasts concluded within the allotted time (10–12 minutes). The content-related criteria specifically sought to address the research and narrative or argumentative arc of the podcast, while the performance criteria sought to engage students in a specific reflection of their voice as an instrument of audio communication. The performance criteria looked at whether or not the podcast was creative, engaging, and interesting (listenability) as enhanced by the content as well as their vocal enthusiasm; their application of language (syntax, semantics, and pragmatics); and their use of voice as an instrument to convey the message.

## Project Outcomes

Some common vocal performance issues included mispronunciation of words, monotony of vocal pitch and tone, and the use of filler words. Groups that excessively<sup>2</sup> used words such as “um,” “uh,” or “like” within their conversations were docked points for the overall performance. While it should be noted that these words are very common in everyday conversation and these podcasts were based in conversational tones, it was important that the students work to curb these filler words so that their podcasts would maintain a sense of authority and professionalism. Additionally, the transcripts allowed me to visually see instances where students used vocal fillers while they were talking. Interestingly, two groups opted to omit verbalized instances of “um” and “uh” in their transcripts, while retaining the word “like.” This distinction may indicate that the students in my class understand words such as “um” and “uh” to be vocal fillers that show a lack of forethought and authority, while “like” does not hold the same meaning for them, perhaps indicating that “like” is such a common component of modern vernacular it goes unrecognized and/or is deemed acceptable as a filler word by modern-day college students. Eight out of the ten unscripted conversational podcast transcripts included the words “uh” or “um,” while they all included the word “like” (in its common slang usage as a filler word). The most damaging to an appeal of authority was the mispronunciation of information and names. Where this lack of knowledge might be hidden in written communication, the ability for students to pronounce the names of scholars and content material is imperative for spoken works such as podcasts. Mispronunciations here act as vocal cues to inform the listener that the speaker is ill-informed, thus calling into question the remainder of their work.

Some students were aware of their vocal performance while they were recording and a desire to “make a conversation was smooth and perfect,” as one student wrote. Some students commented that this was difficult for them to achieve. One student commented that the thing he would change if he got to create another podcast “would definitely be to relax and breathe during the podcast because sometimes I tended to speed up or sound very uptight. Be smoother in having the conversation with my classmates” [sic]. Each of these students noted a desire for chronemic and paralinguistic smoothness, which they

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2. Excessively here means that the use of such filler words was distracting from the overall message.

felt would make them sound more natural. Smoothness, in this case, might best be described as a slower rate of speaking and a naturally flowing vocal cadence. Indeed, many students commented on the naturalness of speaking and related this vocal performance back to physical qualities such as tenseness and awkwardness, and the desire for smooth conversation often directly correlated with an ability to create “authenticity.” One student reflected,

The podcast was kind of awkward to try and record at first because we didn't know how to start off and how to get comfortable doing it, but we all got over it shortly because [name redacted] had us just talk for a little while we were recording (unrelated discussion) and that put us through the motions. I think it worked out nicely and flowed fairly well, we did not discuss with each other the topics we were going to talk about beforehand so that when we did record it would be fresh and be a more authentic conversation versus having a more rehearsed one.

Another wrote, “We really tried to focus on making this podcast very conversational, like many of the conversations we had in class so we tried to limit the formal tone and kept eye contact with each other. I think this helped our podcast with its authenticity.” Yet another student remarked, “the fact that we didn't have a set script help [sic] us be more conversational and sound more natural.” Notably, each of these student responses speaks to the impact (either overtly or covertly) sonic vocality has on the listener's understanding of the podcast's authenticity and naturalness. They further point to a desire to make podcasts based in unrehearsed conversation where group members could discuss their chosen topic with clarity and seemingly without effort. While this might be a goal for all forms of public speaking, for podcasts, natural conversations further indicate a chronemic ability for group members to take turns effectively and considerately in order to keep the conversation moving forward.

Additionally, the podcasts were embedded with the performative quality of the speakers and played a role in the ways in which students approached the assignment. For example, some students spoke of the comfortability they had with one another as factors that contributed to their ease with being recorded and using the recording technology. One student wrote, “What worked in the podcast was that we were all very good friends, so filming [sic] was not only fun but ran very smoothly.” Another reflected, “Each of us was comfortable with one another so recording and speaking in our group setting was not hard for anyone.” This comfort affects the ways in which students speak with one another, especially their vocalics and the ways in which they take turns to give space for others in the conversation. Other students struggled to engage in the podcast assignment due to the nuanced communication style of recording vocal performances. One student wrote,

I felt a bit uncomfortable recording myself because I felt like it was not natural. In the beginning of recording, I would look at [name redacted] and start laughing because of how weird I felt and then she would start laughing.

This discomfort would equally affect a speaker's paralinguistic layers, as this student points out. The feeling of performing can create a specific approach to speaking that takes away from natural vocal patterns. While the student eventually “got it under control,” she wrote that it ultimately influenced the role she felt she took in the group communication process, indicating that to compensate for her discomfort, she took on the role of the joker. The role of the joker (or clown) has been traditionally described as a negative, self-centered, and attention seeking (Benne & Sheats, 2007; McLean, 2005), and although I, and others (such as Hartley, 2009) don't necessarily view it as such, it was introduced in

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our classroom as a “negative” group communication role. These students seem to indicate that a level of comfortability among team members helped to eliminate added pressures to “perform” when it came time to record and speak in front of their peers. One student wrote in her reflection that she actively contributed to the smooth flow of the conversation by using nonverbal touch cues to help her peers determine when to finish talking: “as we were practicing I would occasionally hold a hand for a person to pause so someone else could jump in.” Here, this student shows how haptic and visual nonverbal communication also played a role in the creation of the podcast. This sort of communicative signal is not known to any listener unless the speaker directly indicates it to them, as in the case with this student’s written reflection.

A further consideration to the “performative” nature of the podcast assignment is the fact that the students could rerecord and edit out sections of recorded content, should it not be deemed suitable by their standards. One student commented that his group recorded 23 minutes of conversation, and then had to edit the podcast down to at least the 12-minute mark. The concessions students made about which material to include and which not to include are in themselves a type of performance as they dictate how the listener will hear and respond to the content of their podcast. Additionally, it is worth noting that some students would have been interested in utilizing more sound editing effects. One student reflected that for him, the “genuineness” of his group’s podcast was aided by the incorporation of additional sound elements: he writes, “we added an introduction along with some smooth jams and . . . an intermission as a break.” Another student wrote, “If I were to do this again I would’ve . . . incorporated some kind of soundboard and other edits to make it more interesting.” Further, even though the course may not be a class geared toward learning how to produce media using technology, it remained an important component to educate students in, as this is how the students would ultimately complete their podcasts.

Some students felt more training in audio editing would have aided their overall effectiveness in their communication. This student reflected that a visit to the Academic Media Center would have benefited the overall production of his group’s podcast: “if we could, we get trained on how to use the recording equipment from the AMC to have a clearer recording of the podcast.” Future iterations of this project will require further thought as to how to make students feel more comfortable with the recording and editing technologies.

## Final Thoughts

The podcasts created in my “Fundamentals of Oral Communication” courses encouraged students to think critically about a specific facet of Communication Studies while fostering dialogue and teamwork skills. First, the project encouraged students to think in a new way about communicating information in an engaging manner while considering the paralinguistic and chronemic aspects of their own nonverbal communication. These projects are the first step to engaging students in conversations of how voice and vocal performance affect the practice of conveying messages. For an introductory communication course, it serves as a tool to allow students to consider the behaviors and trends they employ when speaking. The podcasts allow the students to practice consolidating their thoughts through live speech (although some may choose to rerecord) as well as give them a recording through which they can reflect on their own practices. Using such reflections, we can discuss how different behavior patterns affect listener comprehension and understanding. It opens a space for communication courses to connect to course content to social issues and current events. Talking about identity and voice provides a way to make this content relevant to our students as well as deepen their understanding of how communication

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works in specific ways that affect their lives, such as interviewing for jobs. As discussed above, vocal cues and vocal performance influence the perception of the identity and body from which the voice manifests and can influence crucial interactions our students will face upon graduation. Podcasting can be an influential way to engage students in learning to contend with their nonverbal performance cues, especially their paralinguistic and chronemic behaviors, within or outside of mediated technologies and help them apply effective communication skills for success in a myriad of real-life situations.

Overwhelmingly, students were excited about the project. One student wrote,

I really enjoyed this project and making this podcast. I've always heard about them and listened to a couple and I always thought of how cool it was and always wanted to do one of my own, and this was the time I got the chance to do so.

Based on the outcomes, I plan to continue incorporating this assignment in my course. However, future iterations will require deeper thought about how to further complicate the social contexts of paralinguistics. This includes consideration of how paralinguistic traits are taught and learned across gender, culture, and economic divides. Helping students understand the barriers to effective communication, that is, helping them understand the privilege of “sounding White” and how to combat this privilege and its corresponding stereotypes can ensure students have a realistic comprehension of the ways nonverbal communication works, for better or for worse. This work will additionally help me as an educator teach in a way that does not unconsciously reinforce these standards or stereotypes. This will allow this assignment to implement more of a critical pedagogy approach to studying nonverbal communication.

## References

- Anderson, M., Jiang, J. (2018, May 31). *Teens, social media & technology 2018*. PEW Research. <https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/>
- Anderson, N., & Schakleton, V. (1990). Decision making the graduate interview: An experimental investigation. *Journal of Occupational Psychology*, 63, 63–76. <https://doi.org/10.1111/j.2044-8325.1990.tb00510.x>
- Benne, K. D., & Sheats, P. (2007) Functional roles of group members. *Group Facilitation: A Research and Applications Journal*, 8, 32–33. <https://doi.org/10.1111/j.1540-4560.1948.tb01783.x>
- Billings, A. C. (2005). Beyond the Ebonics debate: Attitudes about Black and Standard American English. *Journal of Black Studies*, 36(1), 68–81. <https://doi.org/10.1177/0021934704271448>
- Bolden, B. (2013). Learner-created podcasts: Students' stories with music. *Music Educators Journal*, 100(1), 75–80. <https://doi.org/10.1177/0027432113493757>
- Bolden, B., & Nahachewsky, J. (2015). Podcast creation as transformative music engagement. *Music Education Research*, 12(1), 17–33. <https://doi.org/10.1080/14613808.2014.969219>
- Burkhardt, F., Schuller, F., Weiss, B., & Weninger, F. (2011) “Would you buy a car from me?”—On the likability of telephone voices. In *Proceedings of the 12th Annual Conference of the International Speech Communication Association, INTERSPEECH 2011* (pp. 1557–1660). International Speech Communication Association.
- Cocchiara, F., Bell, M., & Casper, W. (2016). Sounding ‘different’: The role of sociolinguistic cues in evaluating job candidates. *Human Resource Management*, 55, 463–477. <https://doi.org/10.1002/hrm.21675>
- Crystal, D. (1971). Prosodic and paralinguistic correlates of social categories. In E. Ardener (Ed.), *Social Anthropology and Language* (pp. 185–206). Tavistock Press.

- DeGroot, T., & Motowidlo, S. J. (1999). Why visual and vocal interview cues can affect interviewers' judgments and predict job performance. *Journal of Applied Psychology*, 84(6), 986–993. <https://doi.org/10.1037/0021-9010.84.6.986>
- Erstad, O. (2010). Educating the digital generation. *Nordic Journal of Digital Literacy*, 5(01), 56–71. <https://doi.org/10.18261/issn1891-943x-2010-01-05>
- Forbes, R. J., & Jackson P. R. (1980). Nonverbal behaviour and the outcome of selection interviews. *Journal of Occupational Psychology*, 53(1), 65–72. <https://doi.org/10.1111/j.2044-8325.1980.tb00007.x>
- Freire, P. (1970, 2005). *Pedagogy of the oppressed*. Continuum.
- Fryer, R. G., & Levitt, S. D. (2004). The causes and consequences of distinctly Black names. *The Quarterly Journal of Economics*, 119(3), 767–805. <https://doi.org/10.1162/0033553041502180>
- Gallardo, L. F., & Sanchez-Iborra, R. (2019). On the impact of voice encoding and transmission on the predictions of speaker warmth and attractiveness. *ACM Transactions on Knowledge Discovery from Data*, 13(4), 1–17. <https://doi.org/10.1145/3332146>
- Gallardo, L. F., Zequeria Jimenez R., & Moller, S. (2017). Perceptual ratings of voice likeability collected through in-lab listening tests vs. mobile-based crowdsourcing. *InterSpeech 2017*, 2233–2237. <https://doi.org/10.21437/Interspeech.2017-326>
- Gravano, A., Levitan, R., Willson, L., Beňuš, S., Hirschberg, J., & Nenkova, A. (2011). Acoustic and prosodic correlates of social behavior. In *Proceedings of the 12th Annual Conference of the International Speech Communication Association, INTERSPEECH 2011* (pp. 97–100). International Speech Communication Association.
- Hartley, P. (2009). *Interpersonal communication*. Routledge.
- Jurafsky, D., Ranganath, R., & McFarland, D. (2009). Extracting social meaning: Identifying interactional style in spoken conversation. *Proceedings of Human Language Technologies: The 2009 Annual Conference of the North American Chapter of the Association for Computational Linguistics*, 638–646. <https://doi.org/10.3115/1620754.1620847>
- Lee, M. J. W., McLoughlin, C., & Chan, A. (2008). Talk the talk: Learner-generated podcasts as catalysts for knowledge creation. *British Journal of Educational Technology*, 39(2), 501–521. <https://doi.org/10.1111/j.1467-8535.2007.00746.x>
- Luo, M. (2009, November). In job hunt, college degree can't close racial gap. *New York Times*. <https://www.nytimes.com/2009/12/01/us/01race.html>
- Mairesse, F., Walker, M. A., Mehl, M. R., & Moore, R. K. (2007). Using linguistic cues for the automatic recognition of personality in conversation and text. *Journal of Artificial Intelligence Research*, 30, 457–500. <https://doi.org/10.1613/jair.2349>
- McLean, S. (2005). *The basics of interpersonal communication*. Allyn & Bacon.
- Miller, R. O., Gayfer, B. L., & Powell, D. M. (2018). Influence of vocal and verbal cues on ratings of interview anxiety and interview performance. *Personnel Assessment and Decisions*, 4(2), 26–41. <https://doi.org/10.25035/pad.2018.02.003>
- Papacharissi, Z. (2009). The virtual geographies of social networks: A comparative analysis of Facebook, LinkedIn and ASmallWorld. *New Media & Society*, 11(1–2), 199–220. <https://doi.org/10.1177/1461444808099577>
- Pinto-Coelho, L., Braga, D., Sales-Dias, M., & Garcia-Mateo, C. (2013). On the development of an automatic voice pleasantness classification and intensity estimation system. *Computer Speech & Language*, 27, 75–88. <https://doi.org/10.1016/j.csl.2012.01.006>
- Powell, L., & Robson, P. (2014). Learner-generated podcasts: A useful approach to assessment? *Innovations in Education and Teaching International*, 51(3), 326–337. <https://doi.org/10.1080/14703297.2013.796710>

- 
- Russel, B., Perkins, J., & Grinnell, H. (2008). Interviewees' overuse of the word 'like' and hesitations: Effects in simulated hiring decisions. *Psychological Reports, 102*, 111–118. <https://doi.org/10.2466/pr0.102.1.111-118>
- Schandorf, M. (2012). Mediated gesture: Paralinguistic communication and phatic text. *Convergence: The International Journal of Research into New Media Technologies, 19*(3), 319–344. <https://doi.org/10.1177/1354856512439501>
- Struck, R., Kynäslähti, H., Lipponen, L., Vesterinen, O., Vahtivuori-Hänninen, S., Mylläri, J., & Tella, S. (2013). Podcasts as learner-created content in higher education. *Curriculum, Learning, and Teaching Advancements in Online Education, 21–30*. <https://doi.org/10.4018/978-1-4666-2949-3.ch002>
- Talk American. (2018). *Code Switch*. National Public Radio.
- Warhurst, S., McCabe, P., & Madill, C. (2013). What makes a good voice for radio: Perceptions of radio employers and educators. *Journal of Voice, 27*(2). <https://doi.org/10.1016/j.jvoice.2012.08.010>
- Weidman, A. (2015). Voice. In D. Novak and M. Sakakeeny (Eds.), *Keywords in sound*. Duke University Press.
- Weiss, B., & Burkhardt, F. (2010). Voice attributes affecting likability perception. In *Proceedings of the 11th Annual Conference of the International Speech Communication Association, INTERSPEECH 2010* (pp. 2014–2017). International Speech Communication Association.
- Weiss, B., & Schoenenberg, K. (2014). Conversational structures affecting auditory likeability. In *Proceedings of the 15th Annual Conference of the International Speech Communication Association, INTERSPEECH 2014* (pp. 1791–1795). International Speech Communication Association.
- Zhang, Y., Weninger, F., Liu, B., Schmitt, M., Eyben, F., & Schuller, B. (2017). A paralinguistic approach to speaker diarisation. *MM '17*, 387–392. <https://doi.org/10.1145/3123266.3123338>
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