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An Intrinsic Case Study of One Music Educator's Professional Development Through Podcasting

Music teachers should have opportunities to participate in professional development that focuses on their interests, learning style, and is relevant to classroom activities and goals. Online professional development allows teachers to participate in ways they see fit for their circumstances and can promote reflection and growth. Teacher-created online professional development is context-specific, inquiry-based, and includes components of choice and flexibility. Modern technologies, media, and web resources such as podcasts have provided new possibilities for teacher professional development. Podcasts offer multiple ways to support an individual's learning, and have potential to meet the characteristics of effective teacher-created professional development. The purpose of this intrinsic case study was to examine one novice music teacher's experiences using a self-created and produced podcast as a professional development tool. Research questions were (1) How did the podcast contribute to this teacher's professional development?, and (2) How did producing the podcast influence his teaching practice? Three themes emerged: increased motivation and inspiration to improve, connecting with and learning from other music teachers, and Tenuto as a reflective resource. The podcast served as part of this teacher's Professional Learning Network (Bauer, 2010, 2014), providing individualized, sustained professional development experiences involving informal means of communication and collaboration.

Keywords: professional development, novice teacher, podcasting, networking, technology

Introduction

Teachers often perceive professional development (PD) as "fragmented, disconnected, and irrelevant to the real problems of their classroom" (Lieberman & Pointer Mace, 2010, p. 77). To become more connected and relevant to the classroom, PD should have several characteristics. Desimone and Garet (2015)

created and refined a conceptual framework for effective PD that included five key features: (a) content focus, or activities focused on subject matter; (b) active learning, or opportunities for teachers to engage in PD activities rather than passively listening to lectures; (c) coherence, or content that aligns with school curriculum and goals, teacher knowledge and beliefs, students' needs, and local and state policies; (d) sustained duration, or ongoing activities throughout the school year; and (e) collective participation, or groups of teachers from the same grade, subject, or school participating in activities to construct an interactive learning community.

Music education researchers have noted concerns with one-size-fits-all and generic PD approaches (Conway et al., 2005) and with the applicability and importance of district-sponsored non-music PD (Bush, 2007; Conway, 2008). Music teachers need PD situated within a music education context, and relevant to daily classroom activities, goals, and objectives (Conway, 2007; Conway, 2008; Stanley, 2011). They value and should have opportunities to participate in individually chosen PD activities that are informal; focused on individual interests, needs, and learning style; and allow settings to connect and communicate with other music educators to share teaching ideas and stories (Bush, 2007; Conway, 2007). Professional Learning Networks (PLNs)—a collection of resources (people and things) that allow PD in a specific area of interest at the time one needs it—are one way to provide individualized, sustained PD experiences. PLNs involve dialogue and other informal means of communication and collaboration (Bauer, 2010) and make it possible to draw on experiences and expertise of individuals world-wide, which can lead to "rich, robust learning experiences that are tailored to the interests and needs of the individual" (Bauer, 2014, p. 175).

Online PD

Modern technologies, media tools, and web resources have provided new possibilities for teachers to examine their practice, network, and gain professional knowledge and development (Lieberman & Pointer Mace, 2010). Online PD is efficient, accessible, and interactive (Carpenter & Krutka, 2015). It offers convenience, focuses directly on the learner, and aims for interactions and discussions allowing teachers to develop relationships that promote learning and apply new concepts in their classroom (Holmes et al., 2010).

Carpenter and Krutka (2015) said "social media appears to have the potential to facilitate PD that is more participatory, grassroots, and supportive of teachers' roles as professionals and intellectuals" (p. 708). In music education, researchers have examined teacher participation in Facebook groups such as Band Directors Group (BDG) (Brewer & Rickels, 2014; Rickels & Brewer, 2017) and Music

Teachers (Bernard et al., 2018). Music teachers used these groups to interact with colleagues, pose questions on classroom issues, and acquire new knowledge (Bernard et al., 2018; Brewer & Rickels, 2014). They valued networking with people from all over the world, receiving advice from people who offered diverse perspectives, and believed participation contributed to their professional growth (Brewer & Rickels, 2014; Rickels & Brewer, 2017). Participation in social media groups can provide learning activities that traditional PD activities do not (Bernard et al., 2018), and allow teachers to participate in ways they see fit for their circumstances, promoting reflection and professional growth (Brewer & Rickels, 2014).

Teacher-created online PD opportunities have emerged with the expansion of social media (Rodesiler, 2017). Macias (2017) summarized literature on effective teacher-created and led PD and found: (a) components of choice and flexibility; (b) it is context-specific, inquiry-based, and tailor-made based on teachers' needs; (c) it acknowledges learning as a social process, treats teachers as active learners, and enhances teachers' pedagogical skills and knowledge; and (d) it is sustainable and includes collaborative opportunities. Rodesiler (2017) examined an online teacher-created and led PD offering and found teacher participants described designing and facilitating this PD as an opportunity to address their expressed needs and a reciprocal process of enhancing teaching confidence.

Podcasts

Berry (2016) stated podcasting "is now moving into a period of credibility, stability, and maturity" (p. 668). Podcasts are typically a program of music or talk, generally part of a series which are released at regular intervals; they are produced using Really Simple Syndication (RSS) feed and downloaded from the Internet to personal devices with listener ability to subscribe (Drew, 2017; Kidd, 2012). They are accessible and simple to create, offering greater access to audiences and powerful ways to explore learning opportunities (Berry, 2016; Kidd, 2012).

Many features make podcasts a desirable tool by teachers and students. They enable direct teacher/student communication and interaction, reaching beyond the time and space limitations of face-to-face conventional education (Harris & Park, 2008; Hew, 2009; Kidd, 2012). Podcasting offers multiple ways to support individuals' learning according to style and needs, encouraging self-empowerment, motivation, and autonomy (Dale, 2007; Hargis et al., 2008). They are portable (Hargis et al., 2008) and available anytime and anywhere without requiring extensive technical knowledge (Cebeci & Tekdal, 2006). Ease of automatic and regular downloading (Lonn & Teasley, 2009) is convenient for learning on the go (Hargis et al., 2008). Affordability allows podcasts to reach a wider commu-

nity and enables opportunities for repeated listening and learning (Harris & Park, 2008). Some find learning through listening more attractive and less tedious than reading (Cebeki & Tekdal, 2006).

Much of the literature on podcasts in education comes from higher education. Teacher-created podcasts have been used to disseminate information such as lectures or supplementary materials (Chester et al., 2011; Harris & Park, 2008; Hew, 2009), as a marketing tool (Harris & Park, 2008), and to enrich distance learning (Fernandez et al. 2009). Learner-created podcasts empower learners to be more active and independent and promote engagement, motivation, problem solving, creativity, collaboration, and listening (Nie et al., 2008; Powell & Robson, 2014).

In K-12 music education, Kerstetter (2009) discussed applications of podcasting to enrich the learning environment. Ideas included sharing course content, recording classes, providing supplemental materials, having "visiting" lecturers, and sharing program updates. Bolden (2013) described a constructivist-based learner-created podcast assignment designed for students to examine individual musical meaning and the role it played in their lives, enabling them to creatively explore their own unique experiences.

Podcasts have potential to be part of the technologies, media tools, and web resources Lieberman and Pointer Mace (2010) stated as possibilities for teacher PD, and the possibility to meet the characteristics of effective teacher-led PD and provide opportunities for teacher-created PD. However, much of the literature on podcasts in education centers on how podcasts benefit students. Educators need more studies that examine podcasts' impact on teachers, specifically their PD. Therefore, the purpose of this case study was to examine one novice music teacher's experiences using a self-created and produced podcast as a PD tool. Questions guiding the study included, (1) How did the podcast contribute to this teacher's PD?, and (2) How did producing the podcast influence their teaching practice?

Method

Participant Selection and Ethical Considerations

I purposefully chose a single intensity participant method to provide a rich understanding and a distinct insight of the participant (Patton, 2015). Kevin¹ was a novice (less than four years teaching experience) (Blair, 2008) music teacher in two middle schools in a large district in Virginia. He was one of four music teachers at each school—the remaining teachers instructed band, strings, and choir. Kevin co-taught sixth, seventh, and eighth grade band classes, an after-school jazz band, and a pep band. He also coached the Varsity Girls basketball team and

worked with a high school marching band at one of the five high schools in the district. Additionally, Kevin maintained a private trombone studio at home.

Kevin and I had an established relationship prior to this study. I have known him since he was an undergraduate music education student and I was a doctoral student at a large state university. He was in two classes where I was a teaching assistant and I was his student teaching supervisor. I would describe Kevin as inquisitive, driven, and hard-working. He is passionate about improving as a music educator, receptive to new ideas, and values different perspectives.

While I no longer have a supervisory role with Kevin, we have maintained contact through social media, where I first learned of his podcast, *Tenuto*. I was impressed by his initiative to take responsibility for his professional growth. We talked briefly about it, and he invited me to be a guest, which I accepted. I subscribed and became interested in how *Tenuto* may be impacting Kevin's PD and influencing his teaching, so I invited him to participate in this study and he accepted.

Study Design

I used intrinsic case study to examine how Kevin used *Tenuto* as a PD tool. Intrinsic case studies are exploratory, guided by the researcher's interest in better understanding a particular case, rather than generalizing across cases (Stake, 2005). The case was preselected (Stake, 1995); my interest was driven by Kevin's decision to create *Tenuto*, a unique PD opportunity for himself that best suited his needs, interests, and learning style.

To examine how *Tenuto* contributed to Kevin's PD and how it influenced his teaching practice, I focused on how he formed connections with other music educators through *Tenuto*, how he sifted through their opinions and perspectives while forming connections among and between them, and how this guided him in constructing new professional knowledge and implementing it in his teaching. Therefore, the study design incorporated elements of connectivism (Dunaway, 2011) and constructivism (Fosnot, 2005; Patton, 2015). Several principles guide connectivism, including that maintaining connections is necessary to facilitate learning and knowledge emerges from one's ability to perceive connections between diverse opinions, perspectives, and concepts that are accessed via Internet technologies (Dunaway, 2011). Constructivism touches on an individual's unique experiences (Patton, 2015) and describes knowledge as emergent and developmental, gained as one engages in contextually meaningful experiences (Fosnot, 2005).

Data Collection and Analysis

Data collection occurred over a six-month period. I conducted three semi-structured interviews (Glesne, 2011), each at specific points in time. The interviews were purposefully spaced to allow Kevin time to consider guests' ideas, if and how he would implement those ideas, and reflect on the interview-to-implementation process. The first interview occurred at the end of Kevin's first year of teaching, a few months after he created *Tenuto*. This allowed time to develop a production routine, implement ideas and strategies learned from guests, and reflect on his professional growth. The second interview was in August, as Kevin continued producing *Tenuto* and prepared to begin his second year of teaching. The third interview was in December, approximately midway through Kevin's second year of teaching, as he continued to implement new ideas and strategies and reflect on his professional growth from his first year to this point.

I had a set of initial questions for each interview, developed based on listening to *Tenuto* and from previous research (Forte et al., 2012; Rickels & Brewer, 2017). These studies helped develop interview questions centering on how Kevin engaged with guests, and how those interactions contributed to his PD and impacted his teaching practice. While I had an initial set of interview questions, other questions emerged from our conversation. I aimed to keep the attention centered on Kevin's experiences and maintain the autonomy of his words (Seidman, 2013). I audio-recorded and transcribed all interviews.

Data collection also included listening to 35 episodes of *Tenuto*—the total number produced at that time. This included 21 episodes produced before data collection began, and 14 produced during data collection. Participant-generated data can provide information and perspectives that better represent their experiences (Tobias, 2014). Listening helped me better understand the content of each episode and situate Kevin's conversation with each guest, which provided a richer context for our interview conversations and data analysis.

Data collection and analysis occurred simultaneously to continuously reflect on and organize data. I used thematic analysis, searching for themes and patterns within the data (Glesne, 2011). I took handwritten notes while listening to each episode of *Tenuto*, during each interview, and wrote memos to myself on interview transcripts and episode notes to help facilitate analytical thinking and prompt analytical insights (Maxwell, 2013). I open-coded all interview transcripts and episode, interview, and transcript notes and memos by hand, constructing themes that captured recurring patterns and categorizing data within those themes (Maxwell, 2013). Additionally, I used reflexivity (Patton, 2015) to clarify my bias, continually questioning my interpretations and taking ownership of my perspec-

tive while being attentive to Kevin's perspective and staying strongly rooted in the research process.

Using multiple types of data—conducting interviews and analyzing *Tenuto* episodes and episode notes—served as data triangulation (Patton, 2015). Member checking helped with accuracy in interview transcriptions. Kevin received a copy of each interview transcription and was allowed opportunities to modify responses, which he did, mainly to make his statements clearer and more concise. I also used member checking at three different stages during analysis regarding findings to strengthen the trustworthiness of data interpretation to be sure my interpretations were correct. Kevin agreed they were.

Kevin's Creation: Tenuto

Kevin created *Tenuto* for himself and other music teachers to learn new ideas by listening to a diverse selection of music educators. He chose a podcast format because they are simple and inexpensive to create, do not require a huge time commitment, "can reach anyone," and are typically hosted by "average" people (Interview 1). He chose the name *Tenuto* because when teaching tenuto articulation, he told students it meant "full value" (Interview 1), and thought "that could be a cool name for a podcast, trying to become my 'full value' as a teacher" (Interview 1). *Tenuto* fit Drew's (2017) description of podcasting as having a communicative purpose, "conversation between two or more participants to explore various ideas and concepts" (p. 207). Each person occupied a specific position such as "host" (Kevin) or "guest" (another music teacher). Topics and questions varied depending on the guest.

When selecting guests, Kevin sought individuals he related to and "related to things that I am doing" (Interview 2). He attended the Midwest Clinic International Band and Orchestra Conference and reached out to clinicians whose sessions he enjoyed and clinicians whose session he was unable to attend due to scheduling conflicts. Kevin also located guests through the National Association for Music Education (NAfME) website and invited friends and colleagues—individuals in similar positions starting their teaching careers—to share their thoughts and experiences.

Findings

Three themes emerged reflecting how *Tenuto* contributed to Kevin's PD and influenced his teaching practice. Theme one—increased motivation and inspiration to improve, situated how *Tenuto* increased Kevin's motivation as a novice

teacher and how he hoped it would inspire and motivate other music teachers. Theme two—connecting with and learning from other music teachers, situated how Kevin connected with and learned from music educators across the country, considered and implemented their ideas in his teaching, and how he envisioned *Tenuto* being a space for other music educators to connect and learn from one another. Theme three—*Tenuto* as a reflective resource, situated how Kevin used the podcast as a long-term PD tool, and how he hoped it served as a resource for others.

Increased Motivation and Inspiration to Improve

Kevin was motivated to become a better music teacher prior to starting *Tenuto*, but said it further increased his desire and passion to improve, providing "a whole new level of inspiration and motivation" (Interview 1). He said, "I really love teaching and I want to be good at it . . . so, I figured, talk to as many people as you can" (Interview 1). Those conversations often came to mind while he was teaching: "I'll think, like, 'what would this person be doing in this classroom right now?' . . . and it inspires me to be a better teacher than I am" (Interview 1).

When asked about his first-year PD needs, he said, "I just wanted to be this sponge and soak up as much as I could" (Interview 3). He was comfortable asking questions and seeking help, but having the podcast gave him "an excuse to reach out to people" (Interview 1). Speaking with other music educators was rewarding and energizing: "You can just tell that, man, these guys are just so great, and want to be so great at their job and it kind of inspires me" (Interview 2).

Kevin also wanted *Tenuto* to motivate other music teachers—for them to implement new ideas learned from the podcast, and to take charge of their own professional growth and find ways to meet student learning needs. He said, "I'm trying to do something good and inspire teachers" (Interview 3). Some teachers were finding inspiration and motivation through *Tenuto*. "I've got some nice messages . . . people have told me that my podcast inspired them. ... Novice teachers will say 'Hey, I really love your podcast. I'm learning from it" (Interview 3). Other teachers have said "'Hey, I really, really appreciate what you're doing" (Interview 3). Kevin said hearing positive comments made the time he spent producing *Tenuto*—researching and contacting guests, creating interview questions, conducting interviews, and editing each episode—worth it. Even when few people listened to an episode, he recalled positive comments, saying "They just make it worth it. ... So, I feel like although I haven't impacted a ton of people, I've impacted a few people, and it makes a difference" (Interview 3).

Connecting with and Learning from Other Music Teachers

Although Kevin described working with wonderful music colleagues in each school, he wanted to connect with and learn from music educators across the country. Producing *Tenuto* provided this opportunity, putting Kevin in a continuous cycle of connection, consideration, and implementation. Throughout data collection, Kevin was in various stages of connecting with music educators, considering what each guest shared and how it may or may not work in his classroom, and then implementing new ideas in his teaching practice.

Two ideas Kevin learned from *Tenuto* guests, and consequently implemented, were using more technology and journaling. Prior to *Tenuto*, Kevin had been focused on increasing technology use in his classroom. One guest, whom Kevin called a "musical technology guru" (Interview 1), described multiple ways of using technology in the music classroom, so Kevin began implementing suggested strategies. He started using his iPad to integrate interactive music theory lessons, creating a more engaging and active classroom environment, and saw greater student participation. He also increased his use of Google Classroom, from using it mainly for handouts and disseminating information, to creating a space for students to record themselves playing, allowing opportunities for students and teacher to reflect on and assess performances.

Although Kevin used journaling techniques for reflection in undergraduate coursework and student teaching, he had not kept up as a novice teacher. He was reminded of journaling's significance during an early interview with a fellow first-year teacher and friend from his undergraduate years. This guest shared how he journaled to reflect on daily teaching and guide future planning, nudging Kevin to get back in a journaling habit. Doing so gave him perspective and focus on past, present, and future teaching.

Kevin was in various stages of implementing other ideas and strategies learned from guests, actively implementing some while still still considering if and how others would best work in his classroom. Included were expectations, percussion techniques, method books, and marching band. One guest discussed the importance of setting clear and reasonable expectations and procedures at the beginning of the year, taking class time to model and practice with students, and continually reinforcing them for effective and efficient instructional time. Kevin listened and thoughtfully considered ways to modify and implement suggested expectations with his students, while being realistic about the possibilities and challenges of setting and reinforcing new expectations. He was co-teaching and had to agree with his colleague on if and what they should change, particularly after the school year was underway and students were accustomed to certain expectations.

Another guest, a well-known composer of band literature, told Kevin that looking back he wished he had focused more on percussion techniques, so Kevin spent his time at Interlochen Music Camp—where he taught for several summers in an ongoing capacity—talking to studio teachers and other percussionists to learn new techniques applicable to middle school percussionists. He started his second year of teaching with more confidence in his percussion knowledge, effective techniques to use with students, and strategies to improve their development.

Kevin interviewed one author of the band method book he used with students, who discussed the value of using the book as a tool to support students' musical skill and knowledge development, not just something to go through sequentially. Kevin heavily reflected on this conversation and started using the method book more purposefully, focusing on students' musical learning with each exercise, rather than merely trying to check them off. He involved students in questioning the musical intent of each exercise, and how it would enhance their musical skills and knowledge, leading to more meaningful use of the book.

In Kevin's second year, he began working as an instructor with a local high school marching band. To prepare, he interviewed eight different marching band directors from a major college football conference. One unexpected but significant takeaway from these episodes was the way each director listened to feedback, particularly from students and audience. "I think that's super important" (Interview 2). Kevin recalled experiences with directors who

have this weird way of thinking that their opinion is the only opinion and students should just do what they say, and, just listening to these college band directors totally go against that way of thinking, it was really cool for me to see, especially because a lot of the [student] ideas were super successful. . . it just shows that your students have great ideas and you need to listen to them. (Interview 2)

One way to encourage students to share ideas is an "idea box," a place for students to put suggestions for materials, repertoire, or ways the teacher could better help students succeed. Kevin learned this from a guest and spoke of putting one in his classroom; he hoped allowing the students opportunities to provide feedback would encourage them to make their voices heard.

Kevin purposefully selected each guest and approached each interview with an open mind, asking himself "What can I learn from this person?" (Interview 1). While he did implement or planned to implement much of what he learned from his guests, he knew not all advice was good advice, and not all strategies and ideas would be realistic or effective in his classroom. He wanted to let guests share their

experiences and expertise, take what he could use, leave what he could not, and let other music teachers listening do the same.

Confidence

Having conversations with *Tenuto* guests helped Kevin form networks that increased his confidence. "Usually the people I interview I stay in contact with" (Interview 3), often developing personal and professional relationships.

It's cool to have relationships with people that I've never really met in person. ... Anytime I have a question I have so many people to go to. It just feels like I have a bunch of people at a push of a button if I ever need anything, and it gives me a little bit of confidence. (Interview 3)

He continued, "It makes you feel good knowing that you have so many resources. ... I've got these people kind of that are rooting for me, I guess. They're in my corner and they want to help me." (Interview 3)

Tenuto helped Kevin network and feel connected to other music educators, and he hoped it could be a space for other music teachers to gain a sense of connectedness, even if only through listening. He was lucky to have music colleagues in each school but knew other music teachers were alone in their school. Kevin wanted *Tenuto* to help music teachers who may feel isolated to feel connected to other music teachers, gain a sense of community, and pick up new ideas along the way, even if it were only listening to a couple music teachers have a conversation.

He envisioned *Tenuto* expanding beyond a resource, bringing music teachers together to form a larger community. He said, "I would like to see the podcast grow and eventually have some sort of way that we can create a community based around it" (Interview 1). *Tenuto* started with only a Facebook page, but Kevin was building a website, an open forum for music teachers to communicate with one another, discuss how *Tenuto* related to them, and share other ideas.

Tenuto as a Reflective Resource

In Kevin's second year of teaching, he used *Tenuto* as a reflective resource. He always listened to each episode more than once, but continual listening to previous episodes offered two benefits. First, "I catch anything I missed" (Interview 1). In the moment of interviewing, he would occasionally find himself getting ahead of the conversation. "Sometimes in the interview I am thinking about the next question and . . . the awareness isn't as keen as when you are listening back" (Interview 2). Second, he gained new perspectives based on his teaching needs at different times. "Every time I listen to them, I still hear something different or something

that just triggers something in my brain that I can relate to now, that I couldn't relate to last year" (Interview 3).

Producing *Tenuto* helped Kevin take a proactive and long-term approach to his PD. He asked each guest the same question: "What advice would you give your former teacher self?" Kevin asked this question to "not make the same mistakes other people did" (Interview 1). He derived valuable insight by asking, saying "I really respect people who have experience or people who have done things that I really want to do" (Interview 1). Kevin hoped it would help him recognize potentially poor habits so he could change them before they developed and hindered his growth.

While Kevin spoke of a variety of ideas and strategies he implemented in his own teaching after interviewing guests, "a lot of the times it's the takeaway I can use in my classroom, but a lot of times it's also a quote or something that I can mentally take with me" (Interview 1). It was not always ideas guests shared that stuck with him, it was often their mindset. He stated:

I've learned so many mantras and themes to keep in your head when things aren't going well. And I think that's really, really tough for a lot of teachers, like, the mental side of things where you feel like you're sinking a lot of the times, and if you don't have the right mental state you just kind of get burned out and go down. And all of these things that people tell me... you know, it's just band. It's not that serious. You know, it should be magical and spectacular and amazing, and you should make your students the forefront of everything you do, but it's just band. (Interview 3)

Kevin truly hoped *Tenuto* would serve as a resource for other music educators. This idea was evident from the beginning. He envisioned *Tenuto* being "a place for music teachers that's like a conference feel where you are getting professional development but you can listen to it every week" (Interview 2). He said:

A lot of the things I am thinking about are relatable to other people...I'm asking professionals how to do things that I am coming across in my career that are stumbling me...in the hope that their answers could not only teach me but the listeners as well. (Interview 2)

Overall, producing *Tenuto* contributed to Kevin's PD and influenced his teaching practice in various ways. It gave him an extra boost of motivation and inspiration to keep learning, improving, and bringing his best self to the classroom each day. Guests reinforced the importance of individuality and multiple ways of knowing and doing. Each guest walked a different path but were all successful,

reminding Kevin of the importance of considering diverse options when planning, designing, and implementing instruction, and always having a backup plan. Producing *Tenuto* helped him become a more reflective educator by returning to journaling and relistening to past episodes for new takeaways at different stages of his career. The biggest influences on his teaching practice center on creating a more engaging and dynamic classroom. He worked on implementing technology for more student involvement, a more purposeful use of the method book, increased focus on percussionists, and thoughtful consideration of ways to give students more of a voice, showing he values their thoughts and ideas. Kevin said producing *Tenuto* provided a "calm stance on where I am right now" (Interview 1). Each guest, no matter how experienced, was still learning. "No one has really mastered it [teaching]. And it is OK to not have mastered it. …I am just doing my best" (Interview 1).

Discussion and Implications

The purpose of this case study was to examine one novice music teacher's experiences using a self-created and produced podcast as a PD tool. Findings aligned with four of Desimone and Garet's (2015) five features of effective PD: content, active learning, coherence, and sustained duration. *Tenuto's* content was centered on subject matter, and Kevin was an active learner in the process, engaging with guests and reflecting on each conversation. Kevin chose guests and questions based on specific content matter from his teaching that would improve his knowledge and skills and meet students' learning needs, and *Tenuto* was produced regularly over an extended period of time. The fifth feature—collective participation or groups of teachers participating in PD within an interactive learning community—was something Kevin aimed to develop through *Tenuto's* website. Further, findings aligned with what Macias (2017) described as characteristics of effective teacher-led PD: it was context-specific, inquiry-based, and tailor-made.

Three themes emerged that reflected how *Tenuto* contributed to Kevin's PD and how it influenced his teaching practice: (a) increased motivation and inspiration to improve, (b) connecting with and learning from other music teachers, and (c) *Tenuto* as a reflective resource. Podcasting's characteristics of anytime and anywhere increase opportunities for permanent contact between teacher and student (Fernandez et al., 2009), or, in Kevin's case, teacher and teacher. The impact of additional opportunities for permanent contact or having previous guests "on his side," fueled his motivation to improve.

The contact podcasts offer is beneficial in creating relationships based on communication and interaction (Harris & Park, 2008). Interactions and estab-

lished relationships with guests helped Kevin feel supported and cared for, which increased his teaching confidence. Authentic voices of experienced practitioners enlivened Kevin's learning experience (Drew, 2017). Throughout our interviews, Kevin reiterated he learned best through questioning and dialogue, and purposefully chose to create a podcast to have conversations with other music teachers because dialogue supported his learning style. Talking about teaching and listening to guests increased awareness of his teaching practice and led him to reflect, solve problems, and make decisions in new and clearer ways (Costa & Garmston, 2012).

Learning through podcasting can be a reflective experience (Hargis et al., 2008). This was true for Kevin in two ways. First, he reflected on conversations after each episode while considering what ideas to implement in his teaching, and how to most effectively do so. Second, relistening to past episodes guided reflection that helped him gain new insights at different times.

Because Kevin's PD needs varied according to his teaching responsibilities, music content area, and career stage, *Tenuto* became a central part of his PLN (Bauer, 2010, 2014). Connecting with others to learn and share information is an important component of PLNs (Bauer, 2014). Kevin felt connected to guests, even after the interviews, particularly when relistening to selected episodes to guide him at needed times. Guest connections and conversations kept Kevin sustained and focused on continuous development. Each guest was a resource that provided new ideas and strategies for him to implement, helping create a more active and engaging classroom. He hoped other music teachers felt connected to guests through listening too. In this sense, he encouraged music teachers to use *Tenuto* as part of their own PLN. Further, Kevin discussed plans to include a forum on *Tenuto's* website—a space for music teachers to communicate and connect, share perspectives gained from listening, ideas implemented, and the impact on their own teaching. In this sense, *Tenuto* itself could become a PLN.

Podcasting can facilitate the organization and dissemination of information specific to individual preference and learning style, potentially changing the teaching and learning experience (Harris & Park, 2008). However, podcasting is a powerful tool that could be used as a complement to traditional resources, not a substitution (Fernandez et al., 2009). Kevin still attended state and national conferences and sought resources outside of *Tenuto* for new strategies, ideas, and interactions with other music educators and PD opportunities.

Tenuto was a self-initiated, teacher-oriented PD experience for Kevin, one he created and constructed based on his teaching context and career stage (Johnson et al., 2019). He chose to interview other music teachers because he recalled being encouraged by teachers throughout his undergraduate career to ask questions and reach out to other teachers and musicians for answers. This empowered him to

find his own way to professionally develop using strategies that helped him learn best, by talking to a variety of people.

Music teachers at all career stages should be empowered to choose and create types of PD that fit their needs and learning style. This can be cultivated in teacher preparation programs. Music teacher educators should integrate PD conversations into courses, taking time to let students reflect on their individual learning styles and perceived PD needs, then identifying potential ways to meet them. This may help them better reflect on inservice PD experiences, be able to identify what is lacking in their experiences, and create unique ways to obtain it.

Preservice music teachers should be taught how to network and build relationships with other music educators early in their teacher preparation program. Music teacher educators should encourage preservice teachers to engage with novice and experienced teachers early and often throughout their undergraduate years to develop a mindset and habits of reflection, questioning, and networking. One way to do this is by creating a community of local and distant music educators and facilitating conversations, observations, and interactions between them and undergraduate students. This can occur inside or outside of class, having conversations connecting to and expanding beyond class topics and content, offering preservice teachers opportunities to gain new perspectives and ideas, and allowing conversations to continue beyond the time constraints of class.

It is also important that music teacher educators help preservice teachers understand the quality and underlying assumptions of advice received, helping them carefully sort and evaluate advice rather than just seek it. This can be done by prompting preservice teachers to reflect on the advice, and questioning in informed and unbiased ways that empower preservice teachers to mindfully and independently consider the quality of the advice. Kevin acknowledged that seeking advice is not an inherent good and does not necessarily lead to professional growth. He had to reflect on the advice, often relistening to interviews, and consider if and how specific suggestions or ideas were a good fit for his teaching style, context, and students.

Beyond music teacher programs, state and district administrators charged with designing music teacher PD should consider ways to shift PD experiences from a top-down structure to a bottom-up one (Macias, 2017), where teachers of all career stages create and design PD experiences for themselves and others. Allowing opportunities for teachers to take an active role in their own PD may have effects beyond improved pedagogy and skills. Participating in teacher-created PD honors teachers' needs, contexts, and experiences; it offers opportunities to connect and collaborate, and it may spark a desire for continued development and increased dedication to the profession (Rodesiler, 2017).

Numerous music education podcasts now exist. Future researchers should examine how music educators at various career stages and music content areas use podcasts as PD on a larger scale, including which podcasts teachers choose to listen to as a form of PD, what ideas they gain, how they implement those ideas, and how it impacts their teaching. Future researchers should also continue to examine other teachers who identified specific PD needs and created opportunities to meet those needs based on individual interests and learning styles, exploring how they did it, and how we in the music education profession can continue supporting them on their journey.

End note

¹Kevin consented to using his real name and the real podcast name for this study.

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