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Qualitative Research in Music Education

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Table of Contents[1]

From the Editor

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Teaching is typically a bright spot of joy for me. However, this past year, teaching has been especially trying, both personally and professionally. First, I find that both myself and the students have been wholly changed by the events of the last two years. We are all weary languishing. Everyone has been affected. The students are working more hours than ever to try and support themselves while inflation is rising. Most often, they are frontline workers, which has its own set of complications. I, as their teacher, am trying to navigate what is truly crucial for my students to know and demonstrate in an ever-changing world, much of which is readily available on the internet. It has caused me to question myself and my teaching unrelentingly - Is this really important? What about this policy? Do I need to keep this information or adapt it? Is this a reasonable thing to ask the students to demonstrate or learn?

This uncertainty that I feel within myself as a teacher also extends to research. I question myself regularly – is this a research question worth asking? How do I ask these questions in an equitable and inclusive way? How do I get to the core of what I want to know such that participants are able to share their truths authentically?

Although I do not have any hard and fast answers to these questions, I am moving forward with one purpose: to be more collaborative in both teaching and research. I want to work <u>with</u> people (students, researchers) to regain our confidence in making music, in teaching, in research, and in music education. I want us to collectively rediscover the ability to teach music and conduct research in a collaborative environment that provides opportunities for us to regain confidence and competence in teaching and research in music education. I believe we can do this together, as human beings are hard-wired for connection and collaboration.

Fundamentals of Qualitative Research in Music Education: An Introduction

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Abstract

Qualitative research continues to grow in popularity in the music education community. Data collection and analysis methods associated with qualitative inquiry allow researchers to investigate the complex realities created by individuals as they experience music and music education. The purpose of this article is to offer a brief overview of fundamental concepts and terminology associated with qualitative research in music education, including philosophical underpinnings, common methodologies, data collection and analysis methods, and important considerations for ensuring rigor and accuracy of findings. This methodological article may serve as a first introduction to qualitative inquiry for novice researchers and practicing educators seeking a primer, or as a refresher for more seasoned scholars seeking high-quality current examples in the literature. To those ends, I have included references to frequently cited methodological sources and examples of qualitative research methods in prominent music education journals to guide readers in further learning.

Keywords: methodologies, music education, paradigms, qualitative data collection and analysis

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Introduction

Over the last several decades, qualitative research has grown in popularity among music education researchers (Conway, 2014). This fact has been expressed both anecdotally (Walter, 2019) and via content analyses of some of the prominent music education journals in the United States, which have revealed an increasing rate of submissions and publications of qualitative studies over time (Killian et al., 2012; Lane, 2011; Sims et al., 2016; Yarbrough, 2002). For example, in a review of *Update: Applications of Research in Music Education*, Silvey et al. (2019) found an increase in the percentage of published articles that were qualitative studies, from 2.67% (1989-1998) to 7.48% (1999-2008), and then to 15.09% (2009-2017). They surmised that authors and editorial committee members have become more accepting of qualitative methodologies and expressed that qualitative research's reliance on "descriptive narrative and storytelling as compared with the statistical analysis employed in quantitative methodologies" (p. 60) makes it more accessible to those untrained in research methodologies. It is important to note, however, that as qualitative research emerged out of quantitative traditions in the early 20th century and matured over the last hundred years (see West, 2018, for more detail), it has developed its own set of ever-evolving philosophies, methodologies, methods, and accompanying terminology.

The purpose of this article is to offer a brief overview of important concepts and terminology associated with qualitative research in music education. It is hoped that this may be useful as a resource for educators who wish to evaluate qualitative research findings and apply them to their practice, as well as for novice researchers at the beginning of their qualitative research journeys. More seasoned qualitative researchers may also benefit from this overview and the examples of recent applications in music education literature. Each concept covered here

has received extensive attention from scholars in dedicated articles, handbooks, and guides. This article merely scratches the surface of each and offers references for further investigation in the form of frequently cited methodological sources and exemplar studies from prominent music education journals. First is a brief explanation of philosophical underpinnings, followed by descriptions of methodologies, data sources, analytical techniques, and quality assurance methods.

Philosophical Foundations

Qualitative research is grounded in philosophy. A researcher undertaking qualitative inquiry inherently takes on a set of philosophical assumptions that guide decisions related to their study. Creswell and Poth (2018) identified four such assumptions: *ontology*, *epistemology*, *axiology*, and *methodology*. Ontology relates to the nature of reality. Some scholars believe in a single, universal reality that exists independently of human experiences. Contrarily, many qualitative researchers believe in multiple realities, created by individuals as they interpret the world around them (*interpretivism*) and construct meaning out of their everyday lives (*constructivism*/*constructionism*). Although the labels interpretivism and constructivism are often used interchangeably to describe qualitative research, they do not fully encapsulate all the ontological stances taken by qualitative researchers. Epistemology relates to the nature of knowledge (i.e., how it is possible to know something, and the relationship between knower and knowledge). In quantitative inquiry, objective evidence from strict adherence to systematic experimentation is used to back up claims of new knowledge and reveal universal truths about the world. Because qualitative researchers are interested in unique individual experiences, they expect to use subjective evidence collected from participants to generate knowledge rather than reveal it.

Axiology relates to the values and biases researchers bring to inquiry and their implications on research. Quantitative researchers generally attempt to maintain distance from the phenomenon under study to reduce their influence on new knowledge. Qualitative researchers, on the other hand, acknowledge that bias is inevitable, and sometimes even valuable to the process. Finally, methodology relates to researchers' beliefs about research processes and designs. In quantitative research, deductive reasoning is common, in which researchers begin with a theory in mind, make hypotheses about how the world works, and test those claims, moving from abstract theory "down" to the evidence collected in the study. Qualitative researchers are more inclined to use inductive reasoning, which begins by closely examining the data and working "up" to theory by making inferences. Creswell and Poth's use of the term *methodology* in relation to philosophical assumptions should not be confused with its other common use of describing specific sets of research methods (what Creswell and Poth termed *approaches*), which are discussed in more detail later.

Paradigms

Beliefs about ontology, epistemology, axiology, and methodology are lumped together in different combinations to create research *paradigms*, what Herbert Kohl (1992) described as "orientation[s] of mind that determines how one thinks about the world" (p. 117). Scholars take different approaches to defining and classifying qualitative research paradigms. Terminology is often confusing as terms are mixed, matched, overlapped, and applied in different ways that mean the same thing (Butler-Kisber, 2018). For example, paradigms have also been called *interpretive frameworks* (Creswell & Poth, 2018) or *worldviews* (Butler-Kisber, 2018). Several varying lists of paradigms exist in the literature, but most prominently cited are those of Creswell

and Poth (2018), Guba and Lincoln (1994), and Patton (2015), which describe paradigms such as postpositivism, social constructivism, transformation/critical theory, postmodernism, and more.

The role of paradigms in research is not universally agreed upon among scholars. Some (e.g., Allsup, 2014) contend that these philosophical beliefs affect every decision related to a study, whether the researcher is conscious of it or not. According to Scheib (2014):

> The researcher's worldview shapes the entire investigation—the design of the study, research questions, data generation, and findings. Identifying and disclosing this worldview is therefore critical to sufficiently presenting, understanding, and contextualizing the research for both the investigator and the consumer. (p. 78)

Other scholars, however, argue that philosophy should be subordinate to practicality, and that research methods should be "a function of the nature of the topic, the milieu or context within which the focus of inquiry lives, and the types of complementary and interrelated understandings desired" (Myers, 2018, p. 100). One embodiment of this idea is *pragmatism*, a kind of anti-paradigmatic paradigm which supports setting aside ontological and epistemological considerations to focus on methods best suited for the context (Kaushik & Walsh, 2019; Morgan, 2014).

According to Butler-Kisber (2018), researchers are allowed flexibility in how they embody a paradigm, but "it is the way researcher perspectives are explained and made transparent that is most important" (p. 15). Unfortunately, many researchers fail to disclose their paradigm(s), leaving readers to read between the lines and guess the principles guiding the study. You might find paradigmatic stances mentioned in article introductions, but you will more likely find their descriptions and influences in methods sections. For examples of well-stated

paradigmatic stances in music education research, see Sweet (2018; constructionist), Fitzpatrick et al. (2014; critical theory), and Parker and Draves (2017; transformative).

Methodologies

Research *methodologies* connect the abstract philosophical issues that concern paradigms with the methods (i.e., processes and tools for performing data collection and analysis) that are used to carry out research. You might also see them labeled as *approaches* (Creswell & Poth, 2018), *designs* (Merriam & Tisdell, 2016), *genres* (Marshall & Rossman, 2016), or *theoretical traditions* (Patton, 2015). Common methodologies in music education research include *phenomenology*, *ethnography*, *case study*, *grounded theory*, *narrative*, and *basic*.

Phenomenology

Researchers who undertake phenomenological research are interested in capturing the *essence* of a phenomenon, or the "basic underlying structure of an experience" (Merriam & Tisdell, 2016, p. 27). In other words, they are interested in creating new knowledge about a phenomenon (e.g., surprise, anger, love) not just by describing the phenomenon alone, but by investigating *how* humans experience it. Researchers conduct several lengthy, in-depth interviews with many individuals about their experiences, and then use analytical techniques specific to phenomenology to develop a description of those individuals' shared experiences. Scholars often cite Moustakas (1994) when describing their phenomenological methods. For an overview of 18 phenomenological studies across five prominent music education journals, see Joubert and Van der Merwe (2020). Specific examples worth investigating include the work of Bovin (2019) and Robison (2017), who described the essences of being a female high school band director and a male elementary general music teacher, respectively. Also, Shevock (2018) interviewed a bluegrass fiddler, a jazz bassist, and a baroque violinist to explore what it is like to

experience confidence in improvisation, while Sweet and Parker (2018) examined how females experience the development of their vocal identities.

Ethnography

The traditions of ethnography stem from anthropology and sociology of the early 20th-century when researchers would travel to remote areas to study indigenous populations. The root "ethnos" means culture, which is the key focus of this type of study (Marshall & Rossman, 2016). A group's culture can include social behaviors and norms, rituals, ideas and beliefs, languages, and more. Ethnographies require that researchers immerse themselves in the culture for extensive periods of time, collecting data in the form of interviews, observations, and extensive field notes. Contemporary ethnographers in music might study groups such as ensembles, schools of music, music organizations, specific sets of music consumers, or even social movements in music. Wolcott (2008) and Van Maanen (2011) are two scholars that have substantially influenced contemporary ethnography. Two examples of studies in music education include the work of Howard (2018), who immersed herself in a class of culture-sharing fifth-grade students to learn how they would respond to a multicultural music curriculum, and Silverman (2018), who examined the culture and lived experiences of participants in a university-level West African drum and dance ensemble.

Case Study

A researcher performing a case study focuses on explaining one thing well. It could be something unusual (an *intrinsic case*) or something important to understanding a broader issue (an *instrumental case*; Creswell & Poth, 2018). A case study is characterized by "the unit of analysis, *not* the topic of investigation" (Merriam & Tisdell, 2016, p. 38). Merriam and Tisdell describe this thing as a "bounded system" (p. 37). In other words, the researcher should be able

to draw a boundary around the subject of study, limiting it to a specific time and context. Many studies focus on an individual person, but the bounded system could be a class, ensemble, program, project, curriculum, organization, policy, or relationship. A researcher might be interested in AP music theory instruction (the topic), but it is in choosing to study a single AP music theory teacher (the unit) that the researcher performs a case study (see Buonviri, 2018). For the sake of comparing like things, researchers can also group them together to perform a *multiple-case* or *collective-case* study. For example, Parker (2016) performed a multiple intrinsic case study to explore how four public-school choral teachers create and sustain a sense of community. Other examples of case studies in music education include Haning (2021), who investigated a collaborative learning approach in a choral class, and Shaw (2018), who highlighted an urban school district that cut its elementary arts programs. For more on case studies, see Yin (2018).

Grounded Theory

In many studies, researchers apply theories of how the world works to guide their inquiry. For example, someone interested in motivation might search for themes in their data based on ideas from self-determination theory, expectancy-value theory, or some other theory of human motivation. Grounded theorists, on the other hand, seek to generate a theory based on (or "grounded" in) the data. They often collect data in multiple waves, performing the *constant comparative method* (Birks & Mills, 2015; Glaser & Strauss, 1967), which involves cycling between data collection and analysis, constantly comparing new data against developing categories and themes, and sometimes tailoring subsequent interview questions based on new revelations. There are two well-established approaches to grounded theory. While researchers sometimes borrow analytical techniques from these approaches, a true grounded theory study

will adhere to the rigorous procedures established in each. For an example of Charmaz's (2014) approach, see Weidner (2020), and for an example of Corbin and Strauss's (2015) approach, see Parker (2018).

Narrative

Narrative studies focus on stories. Because stories "are how we make sense of our experiences, how we communicate with others, and through which we understand the world around us" (Merriam & Tisdell, 2016, pp. 33-34), investigating them gives us a method to explore individuals' lived experiences through their own interpretations. There are numerous approaches to performing narrative research, but they primarily fall into two categories. In the first, the narrative is the subject. For example, a researcher might analyze the story an individual tells of how they joined orchestra, or the stories told by a group of minority students navigating the music conservatory. In the second category, the narrative is an analytical method in which the researcher *restories* data in a framework that consists of a beginning, middle, and end, with characters, a plot, and a context (Creswell & Poth, 2018). Examples of narrative studies include the works of Minette (2021), who explored the stories of two lesbians navigating the complex interaction between their sexuality and careers as music educators, and Parker and Draves (2017), who re-storied the experiences of two music education majors with visual impairments. While phenomenology and grounded theory have traditional and prescribed methods, narrative studies can be quite flexible. For more on narrative research, see Clandinin (2013) and Riessman (2008).

Basic

The previous five methodologies focus on specific dimensions of human experiences: phenomena, cultures, cases, theories, and stories. However, a qualitative study is not required to

adhere to one of those methodologies. In fact, the most common methodology in qualitative research is the *basic* interpretive study, in which "the overall purpose is to *understand* how people make sense of their lives and their experiences" (Merriam & Tisdell, 2016, p. 24). In a basic study, researchers simply adopt qualitative paradigms and methods to investigate lived experiences in seeking answers to their research questions. Basic studies are particularly recommended for novice researchers (Conway, 2014). Escalante (2020) and Pellegrino (2015) both described their investigations as basic qualitative studies.

Methods: Collecting Data

Decisions regarding the type of data collected in qualitative studies are guided by the researcher's paradigm, methodology, research questions, and participants. At the simplest level, one can categorize data that are expressed in numbers as quantitative and data that are expressed in words as qualitative. There are three common sources of qualitative data: interviews, observations, and documents/artifacts. In music education, we also have the potential to use music-making as qualitative data.

Interviews

The interview is the most common data collection tool used in qualitative research. Researchers may choose to interview multiple individuals at a time, which is known as a *focus group*. However, most interviews are performed one-on-one. Interviews are valuable because they reveal information that cannot be gathered via observations; they provide access to participants' perspectives by allowing them to share their lived experiences (Patton, 2015). Prior to beginning the interview process, the researcher carefully creates what is called the interview *protocol*, or *guide*, which consists of prompts, initial questions, and possible follow-up questions. The protocol can take one of three forms: structured, semi-structured, or unstructured (Roulston,

2010). Structured interviews are exactly as they sound; questions and their order are predetermined, and the researcher strives to interview each participant in the exact same way. In semi-structured interviews, the protocol leaves some flexibility for follow-up questions or adapting questions on the fly. However, all participants are mostly asked the same set of questions. In unstructured interviews, questions are more open-ended and conversational, allowing the dialogue to wander as the researcher and participant explore the phenomenon together. Unstructured interviews are typically used when little is known about the research subject, to inspire the creation of questions for future interviews and/or studies. For an example of a semi-structured interview protocol, see Mio (2019).

Interview protocols can be influenced by relevant methodologies and theories. For example, questions in phenomenological interviews are constructed to elicit participants' experiences around a phenomenon, ethnographic interview questions are designed to gather participants' knowledge about their culture, and questions in a narrative study are meant to encourage storytelling. If a theory guides the inquiry, the researcher will likely create questions based on themes found in the literature of that theory. For an example of how a researcher created an interview protocol based on research questions, see Gavin (2016). Interviews are typically recorded, given permission of the participant, and transcribed verbatim (i.e., word for word). Once recordings are transcribed, they are destroyed to protect participants' anonymity, making the transcripts the remaining source of data.

Observations

Used particularly in ethnographies, but useful in all forms of qualitative research, observations involve capturing and describing individuals or communities in their ordinary settings. The structure of observations will vary depending on the research questions and

participants. An observation can be unstructured and focused on discovery, allowing the researcher to enter the setting with an open mind toward noticing patterns in behaviors and interactions, or it can be structured and focused on specific themes. When researchers perform observations, they must decide the level of which they will engage with the subject. Creswell and Poth (2018) described four types of participants: (a) complete participant (entails full immersion in the activity); (b) participant as observer (involves participation in the activity but allows moments to step aside and record data); (c) nonparticipant or observer as participant (requires maintaining distance and taking notes from the periphery); and (d) complete observer (the presence of the researcher is not noticed).

Field notes are critical to ensuring that data generated from observations are accurate. Just as with interviews, it is recommended that observers use a protocol to guide their note taking. The chosen level of involvement partially determines the type of note taking that the participant will use. Observers that are more actively involved may need to make brief notes known as *jottings* (Emerson et al., 2011; Saldaña & Omasta, 2018), and return to them later to more fully flesh-out the sights, sounds, and smells of the environment. No detail is too small to include in field notes. These details are later used by researchers to create *thick descriptions* (Geertz, 1973; Jorgensen, 2009) in the presentation of their findings, which are critical to immersing the reader in the environment and backing up analytical claims based on the observation. For an excellent example of thick description, see Parker (2016).

Documents and Artifacts

Although the analysis of documents and artifacts can be the sole focus of a study, they are most often used in qualitative research to validate or enhance data gained from interviews and observations (Marshall & Rossman, 2016). Documents come in many forms. They can exist

already, independently of the study (e.g., newspaper articles, websites, posters, emails, mission statements, purchase orders, policy manuals), or they can be generated as part of the data-gathering process (e.g., participant journals, reflections, writing samples). A researcher studying the phenomenon of composing in a high school music theory class might analyze the class syllabus (a pre-existing document), collect drafts of student compositions (writing samples), and ask participants to complete journal entries about positive and negative feelings as they succeed and fail at writing music. For an example of the use of pre-existing documents, see Shaw (2018), and for an example of the use of student reflections as data, see Haning (2021).

Artifacts can include any material objects related to the study. They can be natural or manmade, used in everyday life or customary rituals, or even consist of residual traces of human behavior (e.g., worn grass on the marching band practice field as evidence of the band's many hours of rehearsal). A researcher performing a critical study on underfunded music programs might use dilapidated school-owned instruments as artifacts, while another researcher examining competition culture in high school show choir might highlight the plaques and trophies displayed around the choir room. Researchers who use documents and artifacts as data must be careful, as these items are usually not created with research purposes in mind. Therefore, some interpretive leaps must be taken in the analysis process, and researchers should avoid jumping to conclusions too quickly.

Music-Making as Data

It seems sensible that music education researchers would utilize music-making as data. However, as Pellegrino (2014) noted, "music-making as data has not often been addressed as a separate topic in American music educational research" (p. 321). While quantitative researchers might find it easier to use music-making as data because of the ways in which tempo, rhythm,

intonation, dynamics, etc., can be quantified, qualitative researchers might struggle with music-making as data because of the messy and complicated steps involved with interpreting how music-making exhibits meaning for the participants. Pellegrino categorized three types of music-making data: *process-of-music-making*, *product-of-music-making*, and *meanings-of-music making*. Process-of-music-making data are generated from the occasions in which musicians are developing their craft or preparing for performance, including practice sessions, rehearsals, private lessons and masterclasses, the act of composing, etc. Haning (2021) used process-of-music-making data by incorporating observations from student-directed rehearsals into his analysis. Product-of-music-making data come from the finished product, which could be a recording, performance, or composition. In his study of confidence in improvisation, Shevock (2018) attended performances in which the participants improvised and weaved that data into future interviews and analyses. Meanings-of-music-making data are used to "derive the meanings participants make of the music-making in the moment" (Pellegrino, 2014, p. 314), which fits well within qualitative research's aims of understanding how humans interpret their worlds and construct meaning. In examining a West African drum and dance ensemble, Silverman (2018) incorporated many hours of rehearsal footage into her analysis and discovered how the musicians found spirituality, community, and joy in their music-making. Although incorporating music-making as data into qualitative studies provides unique challenges, it also has the potential to offer great insights.

Other Data Collection Considerations

Sampling is the process by which researchers select the individuals or settings for a study. Sampling methods in qualitative research vary tremendously based on the selected methodology and research questions. For example, in phenomenology, it is crucial that each participant has

experienced the phenomenon under study, while in an intrinsic collective-case study, the researcher might desire a collection of individuals with contrasting backgrounds and experiences (*maximum variation sampling*). In ethnography, it is recommended that researchers immerse themselves in the culture and then rely on intuition to select individuals based on pre-established criteria (*criterion sampling*) or work with the individuals that are available (*opportunistic* or *convenience sampling*; Creswell & Poth, 2018). Most often, qualitative researchers use some form of *purposeful sampling*, which involves selecting participants based on their ability to contribute to the understanding of the research topic. For detailed descriptions of several sampling techniques, see Patton (2015).

Just as quantitative researchers focus on validity and reliability to ensure rigor and accuracy in their studies, qualitative researchers focus on credibility, dependability, confirmability, and transferability (Marshall and Rossman, 2016). Several of these concerns can be addressed during the data collection process. *Triangulation* entails using data from more than one source to corroborate findings, which is why many researchers will interview different types of participants (e.g., teachers, students, and parents) or combine data from multiple sources (e.g., interviews, observations, and documents analysis). *Member checking* involves conferring with participants on the accuracy of interview transcripts and analysis findings to ensure that their interpretations of the world were correctly captured. *Prolonged engagement* in the field and *data saturation* are meant to demonstrate trustworthiness by highlighting how a researcher has done enough to capture the phenomenon in question. Saturation occurs when a researcher has collected enough data that they begin noticing the same patterns repeatedly in analysis and feel that continuing data collection will no longer contribute to new knowledge. The concept of saturation in qualitative research is gradually being replaced with *theoretical sufficiency*, which

"acknowledges the fact that we can never know everything and there is never one complete Truth" (Marshall & Rossman, 2016, p. 229).

Methods: Analyzing Data

Although descriptions of data analysis processes are often condensed to just a few sentences in research articles, they are perhaps the most important part of a study. According to Flick (2014), "Data analysis is the central step in qualitative research. Whatever the data are, it is their analysis that, in a decisive way, forms the outcomes of the research" (p. 3). The analysis process is the act of creating meaning out of data, which inevitably requires interpretation by the researcher. This interpretive process is unavoidably impacted by a researcher's values and biases, which is one reason why examining axiological beliefs is so important. To help readers understand and evaluate personal values and beliefs that might affect interpretation of the data, researchers should share their relationship with the research in a *positionality* or *subjectivity* statement (Bourke, 2014). For examples of positionality in music education research, see Anguiano et al. (2020) and Salvador et al. (2020).

Although qualitative research is emergent in nature (utilizing primarily inductive reasoning without predetermined outcomes), the common phrase "themes emerged from the data" is misleading and does not accurately represent what happens (Radina & Humble, 2019). Analysis requires hundreds, if not thousands, of small decisions that accumulate as a researcher tries to make sense of what are often messy and massive piles of interview transcripts, observation notes, and documents. Themes are not inherently present, but rather, researchers *create* themes as they interpret and make meaning out of the data. In fact, if you gave the same data set to five researchers, you might get five different sets of findings depending on the theoretical lenses and analysis methods used (e.g., see Sword et al., 2018). It is important for

researchers to fully and precisely disclose their analysis methods so that readers can judge the findings for themselves.

Thematic Analysis

The most common approach to translating qualitative data into findings is via *thematic analysis*, which involves condensing large sets of data into a few core statements that capture a phenomenon or answer a research question. Like all qualitative data analysis methods, thematic analysis is ideally part of a data analysis spiral (Creswell & Poth, 2018), in which data collection and analysis happen concurrently throughout the study. In most quantitative studies, analysis happens only after all data have been collected and can be included. If qualitative researchers wait until all data have been collected to begin their analysis, they will likely become overwhelmed with the enormity of it (Merriam & Tisdell, 2016). Instead, it is recommended that researchers sit down with their very first interview transcript or observation notes and begin reflecting on their methods and what they have learned. As the spiral continues, researchers can begin to notice patterns in the data, alter interview and observation protocols if necessary, and reflect on the progress of the study (e.g., have they achieved data saturation/theoretical sufficiency?). Throughout the process, researchers should write *memos*, or reflective writings about what methods are or are not working, evolving thoughts about meanings in the data, and possible connections between the data and related literature (Marshall & Rossman, 2016). These memos serve to create an *audit trail*, or a log of methodological decision-making that can back up findings and the validity of the study.

Thematic analysis begins with coding. As researchers process their data, they search for meaningful segments (as small as a word or as large as a paragraph) that might offer insight toward answering a research question. They then assign each segment a *code*. Saldaña (2015)

defined a code as "a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (p. 3). Codes come in many varieties. *Inductive codes* are created directly out of the data, summarizing phrases or sentences into a few words, sometimes using the participants' actual spoken words (*in vivo coding*). Other codes might be summaries of emotions, settings, participant characteristics, actions, keywords, or other features that might be relevant to the research questions. Inductive coding is encouraged because it allows the researcher to stay immersed in the data throughout the analysis process. This type of coding originated in grounded theory approaches and is typically referred to as *open coding* or *initial coding* (Saldaña, 2015). *Deductive codes* are based on important concepts in the existing literature on the phenomenon and are created before analysis begins. Deductive codes act to focus an analysis and prevent it from getting unruly; it is not uncommon for novice researchers to end up with over a hundred inductive codes, which can become overwhelming to analyze.

Once the first cycle of coding is complete, researchers reread their data and codes multiple times over, recoding if needed and seeking patterns that will eventually develop into categories/themes. Some researchers perform this step intuitively, while others follow prescribed second cycle coding methods described by Saldaña (2015), including *pattern coding*, *focused coding*, *axial coding*, *theoretical coding*, *elaborative coding*, or *longitudinal coding*. In addition to answering research questions, Merriam and Tisdell (2016) described four other criteria for categories, themes, and findings: "be *exhaustive* (enough categories to encompass all relevant data)…*mutually exclusive* (a relevant unit of data can be placed in only one category)…as *sensitive* to the data as possible…*conceptually congruent* (all categories are at the same level of abstraction)" (p. 213). In research articles, coding and categorizing processes are often presented

as linear, but in actuality they are usually messy, time-consuming, and require tremendous reflection and thought.

Other Analysis Methods

Just as statistical procedures vary in complexity and application in quantitative research, qualitative researchers have developed a plethora of analytical methods to meet their various needs. Entire texts have been written to describe the methods that have developed over the last several decades (e.g., see Flick, 2014; Freeman, 2017; Grbich, 2013; Miles et al., 2019; Radina & Humble, 2019). Although thematic analysis is applicable in most qualitative studies, prescribed methodologies often require the use of specific techniques. For example, phenomenological analysis often includes *bracketing* (a special technique for setting aside researcher bias), *phenomenological reduction* (a particular approach to realizing the essence of a phenomenon), and *horizontalization* (a process of laying out data and equally weighting it in the early stages of analysis; Merriam & Tisdell, 2016). Ethnographic and case study methods revolve around different ways of describing and interpreting characteristics of a culture or case, grounded theory methods depend on the constant comparative method, and narrative methods rely on a variety of techniques that explore the *chronology* of stories (Creswell & Poth, 2018). As it is with paradigms, researchers are afforded a lot of freedom when it comes to how they choose to make meaning out of their data. However, it is critical that they are transparent and thorough in describing their analysis processes to avoid "misunderstandings and misconceptions about the nature of the methodology" (Radina & Humble, 2019, p. xix).

Conclusion

Qualitative inquiry provides researchers with tools to capture and communicate the complexities of lived experiences in music and music education. Rather than utilize experiments

and surveys to create generalizable cause and effect statements about the world and the people in it, qualitative researchers immerse themselves within a specific context in the natural world, using interviews, observations, document analysis, and music-making data to deeply examine some aspect of the human experience. Through qualitative methodologies and methods, researchers can explore social phenomena that are difficult to quantify, or for which prior theories have not been established. For example, Talbot (2018) highlighted the lived experiences of individuals from traditionally marginalized communities in music education by featuring the work of numerous scholars who used narrative, autoethnographic, and case study methodologies. Additionally, phenomenology has been used to explore topics such as teachers' micropolitical literacy, multicultural music education, melodic dictation in music theory class, professional development communities, musical identity, informal music learning, popular music pedagogy, and more (Joubert & Van der Merwe, 2019).

In their analysis of publication decisions for *Journal of Research in Music Education* between 2009 and 2014, Sims et al. (2016) found that qualitative research constituted 29.39% of submissions and 27.20% of acceptances. This stark shift for such a prominent journal (up from 5% of articles categorized as qualitative between 1983 and 2008; Lane, 2011), highlights the relative embracing of qualitative research within the field. According to Matsunobu and Bresler (2014), qualitative research in music education has developed into "a legitimate, central methodology, with its own conferences, research journals, and ventures" (p. 21). As qualitative research becomes more accepted and utilized in the field, it is critical that researchers and practitioners stay abreast of best practices surrounding qualitative inquiry. To that end, the purpose of this article was to explain fundamental aspects of justifying and performing qualitative research, to prepare those less experienced with the field to evaluate studies, transfer

their findings, and undertake qualitative studies of their own. I recommend exploring the methodological texts and exemplar studies cited throughout this article as next steps in developing an understanding of the many intricacies of qualitative inquiry.

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Instrumental Music Education in Rural North Carolina: A Case Study

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Abstract

Teaching in a rural setting can be challenging regardless of the teacher's community background (i.e., rural, suburban, or urban) because some aspects of teaching in a rural area are different than those in a more populous region (Azano & Stewart, 2015). Secondary school music educators are faced with issues such as low student enrollment numbers, fewer resources, lack of support, and geographic isolation (Bates, 2011; Causby 2019).

The purpose of this pilot case study was to examine a rural band program in the southeastern United States seems to have overcome some of these challenges to potentially inform other rural music educators and music teacher preparation programs. Researchers conducted observations and interviews with two directors and two students. Themes of teacher personality, philosophical values, community engagement, and proactive processes emerged as significant contributors to success in this program. These themes are discussed through the lens of the Personal Investment (PI) Theory (Maehr & Braskamp, 1986), which has three elements: (1) sense of self, (2) perceived goals; patterns of behavior and engagement, and (3) facilitating conditions; socio-cultural environment. Implications are made for rural music educators, future research, and music teacher preparation.

Keywords: rural music education, Personal Investment Theory, music teacher preparation

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Introduction

The limited previous research about teaching instrumental music in rural areas, has explored how educators can experience success with a rural band program in general terms. Characteristics of given educators such as personality traits, philosophical values, being creative with resources, having a strong work ethic and drawing on proactive processes play significant roles in the success of a program (Albert, 2007; Causby, 2019). The purpose of this pilot case study was to examine what led to the success of a one rural high school band program, by conducting observations and interviews with directors and students. The coded results revealed themes related to the director's personality, philosophical values, community engagement, and proactive processes. These were ultimately situated within the framework of the Personal Investment (PI) Theory (Maehr & Braskamp, 1986).

Related Literature

Rural schools have often been characterized primarily by the challenges they face. They typically serve student populations typically of a low socioeconomic status, have limited resources within the school system, and report lower test scores than do suburban schools (Logan & Burdick-Will, 2017). Other challenges that instrumental music programs have often faced include insufficient additional resources, limited access to instruments, geographic isolation, low enrollment – which created instrumentation, repertoire, and scheduling problems – and inadequate rehearsal and/or performance space (Isbell, 2005). Howard and Reynolds (2008) stated that "under-qualified teachers, deteriorating and overcrowded schools, inadequate learning materials, high administrator and teacher turnover . . . have become far too commonplace in many urban and rural schools" (p. 81). Funding was also emphasized as one of the largest challenges (Fitzpatrick, 2008; Prendergrast, 2017). These factors contributed to teacher burn-out

and high teacher turnover rates, and the cycle continued. Additionally, because of these circumstances, there has been a perceived hierarchy in the profession: jobs in rural schools were considered as entry level and moving to a "bigger and better" school was supposed to be a music educator's goal (Bates, 2011; VanDeusen, 2016).

Albert (2006) outlined strategies for recruiting and retaining band students in low socioeconomic areas; his suggestions were not specifically applicable to rural music teaching. He found that students were helped significantly through early exposure to the band program, access to instruments, a culturally relevant ensemble, student ownership, and a teacher with a clear understanding of student perceptions of their band program. Teacher personality, philosophical values, being proactive with planning and scheduling, a sense of family in the band, and affording unique activities and opportunities also played a role in student retention. Participants believed that teacher quality, their expectations for their students, classroom management, and positive interactions with students also play a large role in the recruitment and retention of students.

The role of community can be especially critical in rural settings. Isbell (2005) indicated that "community dynamics play a major role in determining the duties of music educators" (p. 30), and that understanding the community in which one teaches is crucial to rural music teaching. "Schools are often connected to their communities and are often deeply cherished in rural communities. School music programs hold the potential to influence a small community's identity" (VanDeusen, 2016, p. 56). Although challenging, teaching music in a rural area can be extremely rewarding because smaller programs allow one to develop relationships with students, and many times, teaching in a rural school involves coping with less politics-generated red tape than in larger school systems (Isbell, 2005; Prendergrast, 2017).

In addition, rural music educators have indicated that their teaching positions required specialized skills, and their undergraduate university experiences prepared them very little for either the urban or rural settings (Causby, 2019; Fitzpatrick, 2008; Prendergrast, 2017, 2018). Prendergrast went on to suggest that teachers new to the rural setting were not prepared to deal with limited resources nor for the need to educate the whole student (2018). A participant in Prendergrast's (2018) study echoed these sentiments:

> Universities should do a better job of explaining the BENEFITS of teaching in rural schools . . . I wish that university advisors would stop telling music education students that "you get a job in a small school to get some experience and then go get the job you really want." What's wrong with blooming where you're planted? (p. 1)

Undergraduate music education students should have field experiences in various settings (Causby, 2019; McCracken and Miller, 1988) to develop "intercultural competence" (Emmanuel, 2003, p. 33).

It has been suggested that a director must show dedication to the students and the profession to lead a successful band program (Albert, 2007). Albert indicated that good teachers can be successful wherever they choose to teach; the qualities these educators possess are being proactive, hard-working, dedicated, persevering, patient, and passionate. Hicks (2010) found that "flexibility, sense of humor, ability to take charge, and being marketable" were necessary traits for rural music educators to possess; "marketable" would mean versatile in ability to teach various grade levels and music classes other than instrumental music. It was also indicated that "the [rural] music educator's role is wide and varied" (p. 33) as her subject had been called upon to teach choir, voice lessons, general music, coordinate special music events, and even serve as librarian (Spring, 2018).

Despite challenges, music educators have found their positions rewarding and have enjoyed a strong sense of community, strong relationships with students and their families, autonomy, fewer bureaucratic hurdles, and easier access to administrators than in urban settings. These educators have sometimes used their sense of place (i.e., their personal experiences in a rural setting) as a way of relating to students (Azano & Stewart, 2015). Included in this sense of self can be the director's personality, interaction style and management skills, as these also factor into the successes of the program (Diesler, 2011). These personal and teaching skills can sometimes be viewed as more important to the success of the program than the teacher's musical abilities and skills (Diesler, 2011).

Method

Because the related literature points us to limitations of rural instrumental music education, the importance of non-musical skills related to teaching and program building, and a need for improved pre-service teacher training (Causby, 2019), the purpose of this pilot study was to discover what led to the success of a particular rural high school band program in southwestern North Carolina. This school was selected as a purposeful sample (Creswell, 2013; Merriam & Tisdale, 2016). The school and band program were not only accessible to the researcher (convenience sampling), but the director at this school had seemingly overcome many of the challenges associated with rural instrumental music education such as lack of support, limited funding/resources, limited student involvement (Causby, 2019), and high teacher turnover rate as compared to suburban areas (Isbell, 2005; Van Deusen, 2016) making it an "information-rich case" and "unique sample" (Merriam & Tisdale, 2016, pp. 96-97).

For this pilot study, the researchers employed the use of a single case study, conducting interviews and observations over several months (Merriam & Tisdell, 2016). One researcher

conducted the field observations during a school day. Interviews were conducted by both researchers with the director of the program, an assistant instructor to the program, and two students. Some interview sessions with the director and assistant instructor were held in person during the school day, while others took place via email and video conferencing following the initial visit. The student interviews, which took place in the band room during the school day, focused on allowing students to describe their experience in the band program and their plans following graduation as they related to continuing their music-making experience. Interviews were later transcribed for data analysis purposes.

Data were structurally coded to categorize findings, examine relationships, and discover commonalities and themes (Saldaña, 2016). The researchers each coded the data separately, then discussed and reviewed existing related literature to triangulate data and establish codes. This intercoder agreement along with peer review was utilized to establish reliability (Creswell, 2013).

Theoretical Framework: Personal Investment Theory

Because the data revealed themes related to student and teacher attitudes, personal beliefs, and motivation, philosophical values, and community engagement, we found it helpful to use Maehr and Braskamp's (1986) Personal Investment (PI) Theory as the research framework. According to Granzin and Mason (1999), "Maehr and Braskamp's (1986) Personal Investment Theory provides a general conceptual scheme for studying motivation" (p. 101).

The "PI Theory rests on the assumption that whether persons will invest themselves in particular activities… depends on the interaction among three facets of meaning: sense of self (who am I?), perceived goals (what do I want to achieve?), and facilitating conditions (what is the environment like?)" (King & McInerney, 2014, p. 175).

A person's *meaning* is developed from their "beliefs, perceptions, feelings, purposes, and goals" (Granzin and Mason, 1999, p.101). This meaning, or sense of self, along with one's placement in a specific situation (facilitating conditions) serves as impetus for one's behavior, or motivation (perceived goals). This motivation "is inferred based on collective, observable behavioral patterns" (Lindholm, 1997, p. 428), meaning that in essence, behavior is a display of personal investment (Granzin & Mason, 1999).

Our goal was to define factors that lead to the success of this program through investigating the three major elements of the PI Theory: (1) a person's sense of self, (2) their perceived goals as related to their patterns of behavior and engagement, and (3) their facilitating conditions, or socio-cultural environment (Maehr & Braskamp, 1986). According to King, Yeung, and Cai (2019), the PI Theory aims to answer the question of "when and why do individuals invest time, talent, and energy in a particular activity" (p. 2). By investigating the motivation behind the when and why the directors and students invested in this program, we would potentially learn about some of their keys to success, thus informing music teaching, future research, and music teacher preparation pedagogies.

Personal Investment Theory in Teacher Motivation

Lindholm (1997) used the PI Theory to investigate the work motivation of secondary physical education teachers. They found the following:

> Although teacher attitudes, behavior, efficacy, and experience are among teacher-centered variables that have been studied… we still know extremely little about how perceptions of self, job, and work interact with personal, training, and experience variables to determine teacher work motivation and effectiveness. In marginal curricular areas like physical education [and music education], the link between perception and

> practice may prove especially crucial in improving both the image and quality of school-based programs. (pp. 426-427)

This quantitative study used a Likert-type response questionnaire to measure participants' incentives and motivations, as well as job satisfaction and personal fulfillment. The survey instrument was a modification of the Braskamp and Maehr (1985) Inventory of Work Investment. Results indicated that although participants were satisfied with their jobs, they were largely lacking in self-esteem, and many indicated a desire for more organization and direction from their school administration. Participants also indicated that although most felt that their pay was insufficient, the vast majority enjoyed their jobs overall.

Other prominent publications related to PI Theory investigate student motivation, indicating that there is a need for further research related to teacher motivation, music teacher motivation, and rural music teacher motivation.

Findings

Field Observations

The school housing the studied program is a basic, brick building with an American flag and a North Carolina flag posted in front of it, surrounded by farmland with cattle visible in an adjacent field. The enrollment in the band program was approximately 75 students out of a total school enrollment of 731, equaling 10.26% of the ~~total~~ school population (Public School Review, 2020). At the time of the study, the student population was 8% Latinx, 8% Black, 79% White, and 5% two or more races; 98% percent of the student population was eligible for free lunch. (Public School Review, 2020). This data is based on student and parent self-identification and reporting.

The director of the band program had been teaching at this particular school for ten years, the entirety of his teaching career. Although originally from the area, he had attended a different high school than the one at which he was presently teaching. He held undergraduate and graduate degrees in Music Education from schools within the state. He was married with four children. His wife, who had extensive experience with color guard, served as the color guard instructor for the program. The school was on a 4x4 block schedule, meaning that the school year is divided into two semesters with four classes in each semester. Students attend four classes each day for 90 minutes in the fall, and a new set of four classes each day for 90 minutes in the spring. For the director, this means that of the four class periods throughout the day, they teach three and one is a designated planning period. During the planning period, the director would often visit the middle school to provide assistance. The schedule was as follows:

7:50am	First Bell
8:00 - 9:30am	1st Period: Percussion Class
9:35 - 10:00am	Homeroom
10:05 - 11:35am	2nd Period: Planning
11:40am - 12:10pm	Lunch
12:10 - 1:40pm	3rd Period: Concert Band
1:45 - 3:15pm	4th Period: Chorus

When the first researcher entered the school, she was greeted by students with a polite "hello" or a nod. Her status as a visitor may have been obvious. One student held the door open for her as she entered. Inside the main office, the secretary was very attentive and helpful. As the researcher explained the reason behind her visit, the secretary indicated that they were expecting

her, asked her to sign in, and called the band director to the office. He welcomed her and escorted her to the band room.

The band room was a large room with the sort of white cinderblock walls often found in schools. The room also contained two smaller rooms, each approximately six by seven feet – a storage closet and the band director's office. The flooring in the space was blue carpet that appeared old and worn but was clean. The room was mostly flat except for built-in risers on its right side. The risers were three levels high with blue plastic chairs along each row. Several large bulletin boards filled the back wall and the wall behind the risers. The bulletin boards were lined with paper and replete with decorative music notes and inspirational quotes. One quote read "Would you want to watch an actor read from a script? No? Then why should you just play notes on a page? MAKE MUSIC!" Another read "Whether you think you can or you think you cannot, you're right. - Henry Ford." There was also a list of the different careers one could have in the field of music. Posted on the board along the back wall closest to the percussion area were rudiment charts. The left wall featured a shelf a few feet below the ceiling, which housed many trophies, old and new. Percussion equipment took up space next to the bottom portion of this wall, and it was neatly stored away from the main floor space. The front wall had one white board to which five music staves were permanently affixed. There was also a smart board mounted beside the white board with a projector mounted in the ceiling. Below the white board was a table that housed a sound system that could be plugged into the smart board system via a laptop.

The instruction for the day began in the first period Percussion Class. Thirteen students entered the room and immediately set up practice pads in an arc. This seemed to be routine as they did it without any instruction. The students were casually dressed in jeans, athletic pants,

hoodies, t-shirts, and jackets with a few students wearing hats. The director positioned himself with a snare drum at the front of the arc, centered in front of the students. The director and students proceeded to play through a series of rhythmic exercises. When needed, the director would stop and give instruction related to the time signature, the practice of subdividing to maintain tempo and rhythmic precision, and appropriate stick gripping.

Once they completed all of their exercises, the director gave the class reminders about payments in preparation for their upcoming trip to Washington, D.C. He also discussed the meeting for parents and students that had been held the previous night. This meeting was an informational meeting for the next year's marching band, and it included a "reveal" of their fall marching show. Some of the students were unable to attend the meeting, so he played the promotional video for the class that served as a "hype" video, announcing that the show theme would be "Neverland." The video contained portions of the music that would be included in the show as well as images associated with Peter Pan. At the conclusion of the video, the director discussed the show with the students, describing the music they would be performing which included some original music and some songs from "Peter Pan" arranged specifically for their band. He also described the storyline of the show and some possible props and visual aids that would be used to enhance the general effect.

As they were discussing the details of the show design, a cafeteria worker rolled a cart into the room and placed a box on a chair in the front row. At the conclusion of the discussion, students moved over to the box and picked up their breakfast. The box appeared to contain an assortment of packaged muffins, applesauce, and milk cartons. While students were distributing the breakfast items amongst themselves, the director explained to the researcher that students were afforded free breakfast and lunch across the entire school system because all of the schools

in that county system were Title I schools, meaning that the majority of the students they serve were from low-income households. Federal funds were provided so that no student paid for either meal. Prior to the start of that school year, there had not been enough students participating in the free meal program to maintain the program's status, so the schools began delivering breakfast to the classrooms to increase participation. Once items were distributed – efficiently and without fanfare – rehearsal resumed.

Students then moved to setting up equipment for a rehearsal of concert band repertoire for their upcoming performance at the state-sanctioned Music Performance Adjudication (MPA). For the MPA performance, the percussionists in this class would combine with the wind players in the Concert Band class. Most of the pieces only required four to six percussionists, so some students would eat their breakfast while others were rehearsing a piece on which the students eating breakfast did not play; they would then switch out as needed. Students seemed accustomed to this process of eating in spurts as well as cleaning up their area and properly disposing of trash.

At the time of this observation, the percussionists had rehearsed with the winds only twice. On that evening, they would give a concert in preparation for their MPA performance. The students played through each piece with a recording, and the director corrected rhythmic and dynamic issues as needed. To further their preparation for MPA, the director took the students through the sight-reading process. While he passed out the music, the director explained to the students that they would be given a folder in the sight-reading room, and they were to leave it closed until the judge tells them to open it. They were also not to touch or play the instruments in any way. For the current walk-through of the process, music was simply placed face down on the stands. Once everyone had a part, the director set a timer for five minutes and instructed the

students to turn over their music and look through the piece. Student questions pertained mainly to rhythms, and the director responded accordingly by clapping and counting rhythms aloud. During the five minutes, students were also allowed to collaborate and ask each other questions. When the timer concluded, all talking and clapping stopped, and the director sight-read the piece with the students. Following the sight-reading exercise, students used the last few minutes of class to move all of the percussion equipment to the auditorium in preparation for that evening's concert.

During his second period planning time, the director regularly visited the middle school program that serves as a direct feeder to his school, which we did on this particular day. The teacher at the middle school was a first-year teacher struggling to establish discipline and to meet high expectations established by a departed experienced educator. During this time, the eighth-grade band was rehearsing. Both the high school and middle school directors were woodwind specialists, and they admitted to struggling to develop an appropriate trumpet tone with this group of students. The researcher was asked to work with the students on tone because of her background as a brass player. This was the only time during the day that she took an active role in any instruction.

When the director and the researcher returned to the high school campus, they ate lunch in the teacher's lounge, a largely empty room containing a refrigerator, a sink, a microwave, a coffee pot, a large table with chairs, and a copier. It was during this time that the researcher conducted her first interview with the director. Once they returned to the band room, a few students trickled into the room to hang out during the remainder of the lunch period. At this time, the researcher was able to interview the two students.

Shortly after the lunch period concluded, students began entering the room for the Concert Band class (winds only). Students quickly retrieved their instruments and music folders and reported to the auditorium where the chairs and music stands had been set up the previous day in preparation for that evening's concert. Once all of the students were on stage, a designated student took attendance. Following attendance, the ensemble began to play a warm-up choral with no conductor. The students maintained eye contact and listened to each other to align their entrances. During this time, the director was busy propping open doors, running fans, and trying to communicate with administrators because the air conditioning in the auditorium had not been turned on, and the room was extremely hot.

Once the director had addressed the air conditioning issue, he was able to lead the ensemble through a set of scale and technical exercises, periodically stopping to provide instructions such as "use more air," "pay attention to the key signature," and "don't keep making the same mistakes." During tuning, it became apparent that the majority of the students were playing on older equipment that was greatly in need of repair. One tuba, two euphoniums, and two horns were unable to move the appropriate tuning slides, which frustrated the students. The adjusted the ones they could and tried their best, but there was little that they could do. The director moved the ensemble on to the next activity.

After the attempt at the tuning process, the director took the group through each piece in concert order. Because their concert was that evening, larger chunks of music were rehearsed at a time, and issues such as balance and dynamics were addressed because of the difference in performing locations (i.e., band room versus auditorium). At one point during the rehearsal, an administrator and a maintenance employee came in to speak with the director and assure him that they were working to get the air conditioning up and running, and it would be cool before the

concert began. The students went through the same sight-reading process that the percussion class completed earlier in the day. Several minutes before the bell rang to end class, the director reminded the students about their concert attire and call time for that evening. The students then proceeded to return their instruments and folders to the band room and retrieve their personal belongings.

Once the bell rang, the band students left in an orderly fashion, and the chorus students entered the room. The students took their places in the chairs along the risers on the right side of the room. The director led them through a rehearsal of all their repertoire in preparation for an upcoming concert. While the researcher noted that the students in the band classes were engaged and created very few discipline issues, the tone changed with the chorus students. Some students were less engaged and were often off task. In one instance, the director addressed a young lady as she was talking at an inappropriate time, and she became very disrespectful, raising her voice as she talked back to him. He gave her a final warning, and although she was no longer a distraction to the class, she never re-engaged in the class activities. Aside from this particular student, all of the students throughout the day seemed to have a genuine bond and friendship with each other as well as a deep respect for their director.

Interviews

The information gleaned from the director and program assistant come from both formal interviews as well as informal conversation throughout the day of observation and other times, both in person and virtually. Only formal, in person interviews were conducted with students. After transcription, the interviews were structurally coded, and revealed the themes of teacher personality, philosophical values, community engagement, and proactive processes. Because the themes related to student and teacher attitudes and motivation, the researchers chose to use the

Personal Investment (PI) Theory as the research framework (Maehr and Braskamp, 1986). To better relay the findings from the interviews, the responses will be grouped under the three elements of the PI Theory. The elements represented in this theory served to categorize the codes and will lead to a better understanding of the findings.

Sense of Self

Included in "Sense of Self" are sense of purpose, personal goals, abilities, and strengths (Maehr & Braskamp, 1986). The students who were interviewed found a strong sense of self through their involvement in band. Student A, a senior percussionist, expressed interest in wanting to continue playing his instrument in college. Even though he had plans to attend community college directly following graduation, his goal was to transfer to the major university in the area and be in band. He described himself in the following manner: "I used to be hard-headed and didn't listen to anyone, but band taught me to be responsible and made me a better person." Student B, a sophomore euphonium player, expressed that had he not been in band, he would not have been involved in anything at school. He believed that he had grown more in band than anything else.

The director of the program possessed a strong sense of purpose as it related to the band. He stated that he felt like his purpose at the high school was to provide an experience for his students that would cause them to have a wider worldview through the window of music education. He felt as if he accomplished this target goal in several ways including: performance of music composed by a variety of diverse composers, performance and travel opportunities, and trying to build a sense of community. He shared that his goals for the program were pretty broad. He had had a wonderful high school band experience, and he wanted to give his students what he had had, only better. He knew that most of his students would not continue in music after high

school, but he wanted their time with him to be memorable. He would tell them that his hope is that when they looked back on their time in band, that it would make them smile. Through music education, he wanted to teach them the value of hard work and perseverance. He also wanted to teach them about how to work in a community that works within a broader world around them.

These responses from the director were supported by one of his assistants, a local college student who had worked with the band for several years. When asked about his perception of the director's purpose and goals within the program, he noted that the director wanted the students to believe in themselves and know they can do this [music], and anything they diligently pursue. The assistant felt the director's purpose was to give his students the opportunity to see more in life. The assistant stated:

> [The county in which the school was located was] very rural but also if you don't get outside of that county, you will never leave. He [the director] started to notice a trend that kids were never leaving. He wanted his students to have similar experiences to his own (i.e., traveling and major performances). He wanted to show them that there is this whole big world that they could be a part of. He used music to help show them how to get to those places.

The assistant insisted that some of the students would have never left the state had it not been for their involvement in band.

The assistant revealed one of the director's greatest strengths was his ability to build relationships. The assistant indicated:

> He could get anything he wanted in the county because he knew people, and he took the time to build relationships. He was fantastic at building relationships! And not building just to get something out of it. It was truly building friendships.

The assistant noted that this was something that helped the director, and in turn the program, succeed significantly. According to the assistant, the director knew how to get people to buy into their program. He could make them see the potential end results and how those results would have a lasting impact, not just on the students but on the community as a whole.

Perceived Goals; Patterns of Behavior and Engagement

The third element includes engagement, involvement, and productivity (Maehr & Braskamp, 1986). The engagement and involvement within the program were described in various ways. The director stated that a consistent 10-12% of the school population was consistently enrolled in the band program. He worked closely with the middle school director to keep the younger students engaged and involved. This action also extended to the feeder elementary schools. The band participated in their state's Music Performance Adjudication event annually. Their involvement during marching season included four competitions in addition to the one that they hosted at their school.

Although the director estimated that approximately three students of the previous graduating class of 25 continued to play their instrument, the students who were interviewed seemed to be the exception to that rule. Both shared that they had plans to continue making music after graduation; one as a Music Education major and the other as a non-music major. Student A made it clear that he would not have changed anything about his experience in band, and his favorite thing was the pieces they played. Student B loved the memories that he had made in band and was excited that there seemed to be something new each year in band.

The assistant believed that much of the involvement in the program and its productivity was due to the director's work ethic. "It [his work ethic] was very strong because he knew where his school was. It was very poor, and things weren't just going to fall in his lap." He noted that

the director knew he could not fix everything by himself, and that is when he worked to build relationships with the surrounding universities. The assistant noted:

> His work ethic is strong for the sake of the students. He's not just working so it looks on him. He knows he has to have a strong work ethic for his students so that they can succeed and have the opportunity to succeed.

The director also spoke of what he considered the productivity of the program and its successes. Beyond performing difficult music, he felt that during his time at the high school, they were able to build a brand that brought a massive amount of attention to their band program from the local community. He thought that they were progressive for their size and tried to push the envelope of what a small band could do. "I refused to be boxed in to the idea of a small band having to do a certain kind of marching band show or being limited in what music we could perform just because of our size," he stated. Throughout his time at the high school, the band program had opportunities to perform at Walt Disney World, Universal Studios in Orlando, as well as performances in Williamsburg, Virginia and Chicago, Illinois. They received commendations from the governor, lieutenant governor, both United States senators, and their representative in the United States Congress for their performances. The director was clear:

> The biggest thing for me was that I don't see us as a small band because I don't need that label. I see us as a band. We have our own unique challenges just like every program does, but we still try our best to have a quality level of performance and attitude.

Facilitating Conditions; Socio-Cultural Environment

Included in socio-cultural environment are culture, curriculum, co-curriculum, and communities (Maehr & Braskamp, 1986). The director described the community as rural with most of the job opportunities within the area being "blue-collar." He included that typically,

parents of his students have only graduated high school. The rurality of the community had its effects on the band program. The director stated that some of their challenges include adequate funding, getting students ~~on~~ quality instruments, funding repairs for instruments, and food sustainability; many of these factors were supported by the field observations. He included that each year, the band program receives $10,000 from the school system, and each student pays $100 to participate in band. Every other dollar they receive had to be fundraised. It is important to note that the band program had raised approximately $33,000 in the previous school year. Approximately 50% (or more) of the students in the program were playing on school-owned instruments. Out of the 75 students in the band program, he reported that he had 20-25 active parent volunteers, though other parents would donate items if needed.

As for curricular offerings, in addition to the courses listed in the daily schedule (i.e., Percussion Ensemble, Concert Band, and Choir), the band program also had a Winter Guard (indoor color guard) that met after school. At the time of this case study, choir was a yearlong class, but because the director had a voice in the scheduling and course offerings, it was the plan for choir to become a one semester course the following school year. The open semester would be filled with Advanced Placement (AP) Music Theory.

The assistant had similar views as it pertained to the community in which the school was housed. In addition to these thoughts, he shared his views on the band's role within the community and the culture of the band program. It was his belief that the band played a vital role within this rural community. "People showed up to the football game to see the band," he shared. He described how the director worked to build a sense of community within the band program. He indicated that while the band program was competitive, it was more important for the students to share their artform with audiences within the community than it was for them to win

a competition. The assistant shared the following memory to provide insight into a cultural shift that happened in the program: "A visible shift was seen from the students after a band student committed suicide. It happened on a Friday afternoon before a football game that also happened to be the weekend of their second competition (that fall)." This event seemed to change their purpose; they were now working as a group toward a greater good.

Discussion

This Discussion will be organized by the three elements of the PI Theory (Maehr & Braskamp, 1986).

Sense of Self

The director was very grounded in his sense of self. He was proactive in the process of securing resources for his program, both through building and maintaining relationships with a nearby university and ensuring success at the middle school level that fed into the high school band program. He valued hard work and striving to do one's personal best over any award or trophy. His mission to help better the lives of his students was very clear. He was also very intentional about building and maintaining relationships with students, parents, administration, colleagues, and the community at large, which Azano & Stewart, (2015) and Albert (2007) deemed necessary.

Just as Bates (2011) indicated was important, the director placed emphasis on working together as a group to accomplish common goals. It proved beneficial for him to display his dedication to the students, the program, community, and profession, as evidenced through the retention within the program and the enrollment of new members. The director was also able to use his sense of place (i.e., his experiences growing up in a similar rural setting and in a rural band program) to connect with his students, a finding supported by the research (Azano &

Stewart, 2015). He knew what was possible from his own experience and strived to offer similar opportunities to his students.

Perceived Goals; Patterns of Behavior and Engagement

Much like the findings of Albert (2007), teacher personality, philosophical values, and proactive processes have contributed to the success of the band program in this case study. Evidenced by both the director's and student responses to interview questions, the patterns of behavior and level of engagement were indicative of a perceived success within the band program. In agreement with existing research, the band director's high expectations were influential on the success of the band program (Diesler, 2011). While this rural program aligned with the typical description of a music program in a lower socioeconomic level (i.e., fewer students in private lessons, lower parental support, lower funding, and fewer resources; Costa-Giomi & Chappell, 2007), it was evident through the engagement witnessed by the researchers that the participants were able to overcome many of these challenges. Also consistent with existing research, the relationship between the band director and his/her students was influential on the enrollment numbers for the program (Justus, 2001).

Facilitating Conditions; Socio-Cultural Environment

In contrast to Causby's (2019) findings concerning challenges in rural instrumental music programs, this director did not indicate low enrollment in or a lack of support for his program, implying that retention and enrollment numbers are not perceived to be low, and that the program is generally well supported. The interviewees testified that the band played an important role in the community, which Albert (2007) and Bates (2011) indicate aids in retention and support.

The program director indicated that the biggest challenge he faces is limited funding and access to quality instruments due to that limitation, and that the band must fundraise often. This is similar to Causby's (2019) finding that limited funding and resources was one of the top three most experienced challenges facing rural instrumental music educators. The $10,000 that this program receives from their county, however, is above the average county funding of rural instrumental music education programs in North Carolina of approximately $3,000 (Causby, 2019). Additionally, the program was able to fundraise $33,000 the year prior, which is well above the approximately $8,300 average fundraised in North Carolina's rural instrumental programs (Causby, 2019). Although the director viewed limited funding as a challenge for this program, the funding amounts received and raised were unusually high as compared to Causby's (2019) findings, indicating a large amount of administrative and community support. The researchers pose that the strikingly strong financial support of the program from this rural community is a direct result of the director's intentionality in relationship building. Not only does he prioritize building individual, personal relationships within the community, but the band itself is a central part of community events.

It is also crucial to the success of a program that a director have some autonomy in curricular decisions as well as support from administration (Bates, 2011; Isbell 2005). In this instance, the director was allowed to leave campus during his planning period to travel to the feeder middle school, and also alter the schedule for the following school year to include an Advanced Placement Music Theory course.

Implications for Music Teaching, Future Research, and Music Teacher Education

This pilot study is intended to inform and encourage further research in this area. Although a pilot study is limited in scope, directors in similar rural teaching situations may be

able to transfer the findings of this study to their own teaching and program management. Additionally, this study could serve as a model for a more in-depth study in the future and has implications for music teacher education.

Further research related to rural music teaching is needed, including research related to rural music teacher motivation. Quantitative studies of teacher motivation like Lindholm (1997) could benefit this area of the literature to help us better understand what rural music teachers value about their positions, and potentially what shifts in the profession might be warranted. More qualitative studies in this area would also be beneficial. It is suggested that future case studies of this nature include more total observation days as well as more interview participants, including school administrators, parents of students in the program, and more students. This will likely yield richer descriptions and more data, resulting in more themes revealed. A multiple case study should also be considered to look for commonalities among multiple rural programs.

Additionally, the information found in this investigation can also impact the curriculum in pre-service teacher education programs. An inclusion of place-based pedagogy would be critical to inform pre-service teachers of the connections between environment, culture, and education (Gruenewald, 2008). Pre-service teachers must be aware of their function in field experience and student teaching settings to be prepared for a teaching opportunity in a rural school (White & Reid, 2008). It is important that pre-service teachers be provided the opportunity to participate in field experiences and student teaching in rural school settings. Most colleges and universities are situated in suburban or urban areas, therefore leading to field placements in similar settings for convenience and travel purposes. Given that rural schools are distinctive in their makeup and function, students need to have spent time in their pre-service field experiences in rural schools. “Unless purposeful attempts to have pre-service music

teachers observe or student teach in rural settings, they are likely completing these requirements in urban or suburban environments" (Causby, 2019, pp. 91-92; McCracken & Miller, 1988).

Lastly, focus on the development of interpersonal skills would benefit pre-service music educators. Reinforcing Causby's (2019) findings, relationships between teacher and student, teacher and colleagues, and teacher and community played a large role in the success of this program, but non-musical skills such as developing rapport and communication are often not a part of pre-service music teacher education. Students need to be aware of the impact that these non-musical skills will have on their programs and provided with opportunities to develop these skills in their undergraduate curricula.

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Music's Monarch Speaks:

A Content Analysis of Leonard Bernstein's Young People's Concerts

Jacob Holster[5]

Abstract

Leonard Bernstein influenced the world of music throughout his lifetime, crafting a legacy through the orchestral soundscapes which emanated from his classical and film scores, as well as an unforgettable and energetic disposition as a conductor. Bernstein is also known for his work directing the Young People's Concerts, educational concerts which were broadcast live on CBS from 1958 to 1972. Through the Young People's Concerts, Bernstein exposed a generation growing through trying times to the notion of music appreciation through musical listening. To better understand the essence of Leonard Bernstein as an advocate of music education, I analyzed all transcripts of the Young People's Concerts through content analysis, using a clustered topic modeling method to re-organize sentences into similar topic groups. Bernstein referred to several common topics at varying rates over time including, but not limited to, philosophy, orchestration, good vs. evil, and breaking the rules. The organization and categorization of the Young People's Concerts transcripts allows for the representation of Bernstein's most highly valued topics over time, as he consistently asked his audiences to focus on development of sounds and stories in the music he presented.

Keywords: Leonard Bernstein, Young People's Concerts, content analysis, topic modeling

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Introduction

Leonard Bernstein was known as the academy award-nominated film composer, the concert pianist, the maestro who clashed with orchestra members, and "the ideal explainer of music, both classical and modern" (Horowitz, 1993, para. 1). On October 14th, 1990, the New York Times honored Bernstein with his final title, "Leonard Bernstein, 72, Music's Monarch, Dies" (Henahan, 1990). This title was earned through his illustrious career as a Maestro, his remarkable skill as a public speaker, and his advocacy for music education. Not surprisingly, Bernstein often demonstrated how much he valued music education, and music teachers, once calling for the appreciation for "all the great teachers on earth who work so hard to give young people a world that is a better, richer, and more civilized place" (Bernstein & Englander, 1963b, para. 22).

Despite his position as the music director of the New York Philharmonic, Bernstein did not fit the paradigm of 20th-century music directors at major symphony orchestras. Early on, Bernstein decided to devote his energy to many pursuits, once writing "I don't want to spend my life, as Toscanini did, studying and restudying the same 50 pieces of music" (Henahan, 1990, para. 62). "Bore[d] to death" by the notion of following the path of his predecessors, Bernstein was driven by a more general curiosity. A jack-of-all trades, he passionately defended his refusal to specialize, once claiming (Henahan, 1990):

> I want to conduct. I want to play the piano. I want to write for Hollywood. I want to write symphonic music. I want to keep on trying to be, in the full sense of that wonderful word, a musician. I also want to teach. I want to write books and poetry. And I think I can do justice to them all. (para. 62)

Bernstein's daughter, Jamie, claimed it would be "accurate to say he was a born student who just couldn't wait to share what learned" (J. Bernstein, n.d., para. 11). Two years before his death, Bernstein reflected on his experiences in teaching and learning, saying "I love learning, I'm an eternal student, and that's maybe why I'm a pretty good teacher" (Bernstein, 1988). Bernstein would oscillate between student and teacher throughout his career, driven by a thirst for knowledge and a desire to talk about the things he learned. Furthermore, Bernstein's educational philanthropy, the way he used his musical status to elevate music education on the national stage, were central to his passions.

The Young People's Concerts

As CBS made a fortune from a variety of popular shows, they began to emphasize cultural television programs in the 1940s. Concurrently, Bernstein met Roger Englander who would later assist him develop his Omnibus series, and subsequently would "bring the Young People's Concerts to a global audience" (Page, 2021, para. 1). The idea was Bernstein's however, as he held a special respect for young musicians and their potential to create music. More importantly, he appreciated the capacity for non-musicians everywhere to hear music in a worthwhile manner. Bernstein's daughter, Jamie, once described his appointment to the New York Philharmonic as "a chance [for her father] to do something else he loved to do; teach kids about music" (J. Bernstein, 2018, para. 5). The YPCs paralleled his career as Music Director of the New York Philharmonic, as Bernstein conducted his first Young People's Concert (YPC) two weeks into his first season (Young People's Concerts, n.d.). YPCs are part of an educational outreach series that are held with the New York Philharmonic in Carnegie Hall since 1885 (Young People's Concerts, New York Philharmonic, n.d.). Between 1958 and 1972, Bernstein directed and produced 53 episodes of the YPCs for a primetime slot on CBS. Jamie expounded

upon her father's unique opportunity to expose children, and a national audience, to music (J. Bernstein, 2018):

> Leonard Bernstein put Young People's Concerts on television! This was back in 1957 when TV was still in black and white. All around the country, kids and their families sat in front of their big, clunky living room TV sets and watched my father explain what was beautiful and fascinating about music—but also what was FUN about it. (para. 5)

In front of millions of live viewers, Bernstein masterfully created his form of school-television. Bernstein prepared the script and music to be played for each episode. A typical YPC would include a premise, sometimes a question, such as in the first episode titled "What Does Music Mean?" (Bernstein & Englander, 1958a). Picture the moment; The orchestra plays the Overture to William Tell. As Bernstein cuts off, he quickly turns and poses a question; "O.K. Now, what do you think that music is all about? Can you tell me?" He pauses for the shouts of hundreds of well-dressed and highly attentive children of all ages, before interjecting "That's just what I thought you'd say: cowboys, bandits, horses, the wild west." and adding his view that "You see, no matter how many times people tell you stories about what music means, forget them. Stories are not what the music means at all. Music is never about anything. Music just is" (Bernstein & Englander, 1958a, para. 2).

The remainder of the episode included multiple musical thought experiments, where Bernstein would challenge the audience's assumptions in classical music listening and leave them with a new perspective on music and a tune in their heads. His overarching goals for the first episode were captured in a handwritten note, a sort of lesson plan, which outlined his goals for the show, including: "A. Show main passages + tell meanings. B. Invent whole other story - show (with piano) new relationships" (L. Bernstein, n.d.-b, image 1). These quick scribbles

summarized the ideas that Bernstein would expand on over the next 14 years as director of the YPCs. Often, he would return to guide viewers and audience members to listen to music through his ears.

Impact on Music Education

Bernstein was not the first to produce music appreciation for the masses, however, he may have had the most impact on music education. In the early 20th century, Walter Damrosch became a pioneer for popularizing classical music through radio and television broadcasts (Horowitz, 1993). Unlike Damrosch, however, Bernstein spoke to the inherent value of music education. Vlieghe and Zamojski (2019) offer the view that Bernstein's motives in producing YPCs "[did] not aim at the popularization of classical music, but at being events of teaching" to support an "educational equality in regard to music" (pp. 141–142). Put otherwise, he consistently highlighted the power of the individual to see the same value through his vision of musical listening. In the YPCs, Bernstein dismantled and analyzed famous music as opportunities for music learning instead of simply sanctifying them. Through this broad focus on the experience of music listening, Bernstein was able to bring children and adults from 40 countries into his musical world.

Throughout the series, Bernstein demonstrated his unique ability to engage a television audience through the medium of classical music. In essence, Bernstein wanted his audience to hear music how he did, with all the excitement and joy he felt from the podium. Bernstein was driven by a love for his work in music, a characteristic posited as a model for post-critical "thing-centered" instruction; in essence, an educational model that places at its center the present activity rather than the student or the teacher (Vlieghe & Zamojski, 2019, p. 22). Bernstein believed that there were educative benefits to being focused on a musical moment, just as

Bernstein invited his guests to be lost in his take on the sounds and stories that emanate in the experience of classical music listening. Jamie also identifies this connection in an essay about Bernstein's life as an educator (J. Bernstein, n.d.):

> Are any of you familiar with the ideas in the book "Flow," by Mihaly Csikszentmihalyi? The subtitle is "The Psychology of Optimal Experience." His idea is that when we're completely engaged in a task that we find enjoyable, we enter a magical state where we lose all track of time, forget about our fatigue or our aches and pains, and produce our most creative and focused work. Leonard Bernstein was one of the luckiest people in the world because so much of his work put him in that enviable state. Maybe as a result of being in flow so much of the time, he had a very heightened sense of the meaning of the word FUN. Fun was a serious thing to Leonard Bernstein — because he loved his work so much. And he was able to impart this sense of serious fun to everyone around him: his colleagues, his audiences, his students and his family. So when my father talks in one Young People's Concert about the overture to "Marriage of Figaro" as "a roller coaster ride," he's not kidding! Conducting Mozart's music was every bit as thrilling to him as riding the Cyclone at Coney Island - and take it from me: he brought the same heightened level of engagement to both activities. (para. 18–19)

Jamie was referring to a moment in 1959 where Bernstein invited his audience to share in a musical experience with him during an episode called "What is classical music?": Bernstein exclaimed "Just listen to it. [ORCH: Mozart - Overture to the Marriage of Figaro] Isn't that fun? It's like a ride in a roller-coaster, full of laughing and good humor" (Bernstein & Englander, 1959a, para. 30). We have it on good authority to take Bernstein literally here. Is it possible to

think that the visualization of a rollercoaster alongside the musical experience of Mozart might promote lifelong musicianship for those in the audience? Bernstein might have thought so.

Furthermore, Bernstein used the power of music listening as a coping mechanism. He offered the public, and the audience of the YPCs guidance during troubling times, always connecting it to music teaching. Four days prior to the inauguration of John F. Kennedy—as tensions between the Soviet Union and the United States were mounting—Bernstein (1961a) said

> Well, that hard-boiled idea is the reason for some of the rocky, thorny sounds you will hear in this piece, but not for all of them. After all, don't forget that this is modern music, music of our time; and we are living in some pretty rocky times. (para. 7–8)

This excerpt is demonstrative that Bernstein was not afraid to openly address the issues that were adding stress to his viewers' lives. Two years later, many Americans leaned on this famous quote penned on November 22nd, 1963, after Bernstein learned of the assassination of JFK, saying "This will be our reply to violence: to make music more intensely, more beautifully, more devotedly than ever before" (Buchenholz, n.d., para. 11).

Diversity, Equity, and Access and the Young People's Concerts

While no demographic data are available to describe the population of those attending YPCs, video footage suggests that the audience was predominantly white and middle-class or above. The problem of access was exacerbated by segregation during Bernstein's time, which influenced the diversity of the attending audience, and the ability for those who could not attend to afford a television. Due to the sociopolitical climate of the mid-20th century, CBS would have been unlikely to develop a prime-time arts-education television show that was not about music grounded in the western classical tradition. Even still, Bernstein's used music as a political tool to support discriminated and oppressed populations off-screen. For instance, Bernstein marched

in Selma, integrated the Phil by hiring a Black violinist, invited Black conductors to the Tanglewood Symposium, and hosted fundraiser concerts for the Black Panther Party at his home (WQXR Features, n.d.). As a Jewish gay man who the FBI believed to be communist, Bernstein was a member of several minority communities himself (*Radical Chic Flap*, n.d.). Moreover, Bernstein's political beliefs and lifestyle choices were controversial which, at times made him a pariah in a capitalist, heteronormative society. That said, his actions tend to support the argument that he is a trustworthy humanist and a student-centered teacher-leader—despite the society he thrived within, and the privileges he personally enjoyed through his status.

Need for Study

Bernstein's career was well documented, and as a result, there are many examples of his teaching to track the development of his teaching philosophy. In 1973, a year following his last year as director of the YPCs, Bernstein was hired as a Visiting Professor at Harvard University. As part of this position Bernstein was required to present a series of lectures to a group of graduate students, known as the Norton Lectures (n.d.). The New York Times published a summary of the topics outlining this series of talks (The Norton Lectures, n.d.):

> In the first three lectures, Bernstein analyzed music in linguistic terms of phonology, syntax, and semantics--focusing on music from the Classical period. In the fourth lecture ("The Delights and Dangers of Ambiguity"), Bernstein looked at music from the Romantic period, with its heightened harmonic uncertainties and structural freedoms. The fifth lecture ("The Twentieth Century Crisis") outlined the movement toward atonality and the crisis provoked by this crucial change in our musical language. (para. 8)

Bernstein provided funding to have these lectures be meticulously documented through video cassette recordings, transcripts, and television airings to promote his legacy as a teacher-

entertainer (Burton, 1994). This action suggested that Bernstein valued his insights on phonology, syntax, semantics, and change in classical music. Moreover, he wanted to share his knowledge with as many people as he could. Though many books were written about Bernstein's career, there is a gap in our historical understanding of Bernstein, specifically regarding his pedagogy for music appreciation as presented in the YPCs. At the Norton Lectures (n.d.), Bernstein solidified his views on music listening with a non-music listening audience, however, these lectures were also the product of a long and devoted career in music teaching and learning. Analysis of the YPC transcripts may yield an opportunity to witness the development of Bernstein's teaching approaches across a 14–year span. More specifically, Bernstein's educational presentations have not been analyzed using comprehensive content analysis techniques that might illuminate Bernstein's priorities as a music educator. An investigation of the YPCs transcripts might inform music education practices today in that by identifying what Bernstein chose to communicate to young non-musicians, teachable concepts and engaging educational moments can potentially be highlighted and discussed for present-day implications.

Purpose and Research Questions

Through this content analysis, I represented Bernstein's development as a music educator by highlighting important topics as they emerge and shift over Bernstein's tenure as director of the YPCs. More specifically, I constructed topic models that might provide a structure for the semantic focus of Bernstein's YPCs. The research questions for this study were as follows:

1. What are the common topics that Bernstein discussed throughout the YPCs?
2. To what extent do topics vary in frequency over time?

Method

Primary sources included full transcripts of all 53 episodes. I obtained fifty transcriptions through direct access and transcribed three. I then conducted a quantitative content analysis of the YPCs transcripts and used other primary sources to contextualize the data. As Bernstein's career was well documented, there were many photographs, handwritten notes, and interviews available regarding Bernstein's attitudes towards his career and the teaching profession. Appendix A includes a list of all episodes and airdates that were utilized in the content analysis.

Topic Modeling with Latent Dirichlet Allocation

A traditional content analysis study might utilize keyword counting, thematic coding, and other human-driven data categorization to contextualize Bernstein's development from a music education perspective. Instead, I am using a *Latent Dirichlet Allocation* (LDA) process on the Bernstein corpora (i.e., collection of written documents) using a machine learning technique that emerged as part of developments in the artificial intelligence field (Gropp et al., 2016). In essence, LDA identifies latent constructs within a corpus through the identification of co-occurring word patterns and semantically similar clustered word combinations. These methods have increased in popularity across the social sciences in the past decade, as robust algorithms allow researchers to investigate the inner workings of text-based data while limiting their bias. LDA algorithms examine entire corpora in minutes, illuminating "statistical regularities in word co-occurrence that often correspond to recognizable themes, events, or discourses" (Baumer et al., 2017, p. 1398). The output of these algorithms is referred to as a *topic model*.

Topic model data typically includes a numerical set of topic labels (e.g. topic 0, topic 1, topic 2), a set of keywords that are associated with each topic, and a list of representative sentences for each topic. The algorithm assigns these sentences to each topic based on the prevalence of the topic keywords within the text. In the LDA process, unique keywords are

assigned numerical values (e.g., Young = 0, People's = 1, Concerts = 2, and so on). Using these values, the representativeness of each sentence is measured with a logistic distribution and is then assigned a *document-topic probability* score between 0 and 1. The higher the score, the better the probability that the topic of the sentence provides represents a larger subset of a corpus.

Dynamic Topic Modeling

The longevity of the YPCs brings one to consider the impact of time on the use of certain topics. The purpose of LDA is to organize text-based data. However, LDA does not consider the order of text documents. Due to this assumption, LDA is not capable of capturing change in a topic over time. A time-based topic analysis requires the division of a larger corpus into subsets that are theoretically aligned with the research questions of a topic modeling study. *Dynamic* topic models, also known as Dynamic LDA, are inclusive of the change of the topic models over time. To construct dynamic topic models, the LDA process is repeated on categorized subsets of data. For example, dynamic topic models are used to display the frequency of topics as a proxy for the measurement of priorities in legislative bodies such as the United Nations or the United States Congress over time.

As history repeats itself, so do the topics humanity engages in. However, the extent to which each topic is discussed, as well as the leading keywords within the topic, tend to shift with social, political, and other circumstances. To assess changes in meaning over time, dynamic topic models are *clustered* from a set of individual topic model datasets into a single merged dataset. Clustering allowed for the comparison of local topic models (e.g., individual subsets of the corpus) as they represent the aggregate of a global topic model (e.g., a topic model of the clustered corpus).

In the literature, grounded theory and topic model analyses were compared, with evidence that the two seemingly opposing methods "involve surprisingly similar processes and produce surprisingly similar results" (Baumer et. al., 2017, p. 1398). The advancement of algorithms and computing power has enabled researchers' ability to aggregate text documents into hierarchical categories in a similar manner to working in grounded theory, with far less potential for the inclusion of researcher bias which might obstruct the best representation of data. Beyond an appeal to "computational objectivity", the topic modeling process is scalable to "billion-word datasets" (Baumer et al., 2017, p. 1398).

Programming Languages

I utilized the Python 3 programming language to conduct these analyses, which offers a breadth of packages and tools which can be customized and utilized per the user's needs (Python, n.d.). Python is an object-based programming language that was first deployed in 1989. In the present day, Python is one of the most popular programming languages for software engineers, web developers, data scientists, statisticians, and other computational professionals (Van Rossum & Drake, 2009). Python's popularity is in large part to the open-source development of libraries that can be called by using programming code.

Several Python packages were utilized in the present study. Of particular note, the Natural Language Processing Toolkit (NLTK) was used for data preprocessing procedures as well as for the construction and analysis of trigrams and bigrams (Bird et al., 2009). The *gensim* package was used to build the LDA algorithms and evaluate the topic models (Radim & Sojka, 2010), and the *pyLDAvis* package was used for the visualization of topic distributions in a two-dimensional space. Visualization of topic models is useful for identifying and rejecting models

with overlapping topics (Sievert & Shirley, 2014). A table of all packages and their use in the present study are listed Appendix B.

I also used the R programming language (Rosseel, 2012) within RStudio (RStudio Team, 2020) to visualize topic frequency over time using both static line graphs and other media, including Graphics Interchange Format (gif) files. Python packages for topic modeling have been in development for longer than R packages, and for that reason can be easier to deploy. However, R produces more aesthetically pleasing data visualization than Python packages. For this reason, I used *ggplot2* for all visualizations (Wickham, 2016).

Data Preprocessing

Transcription data were converted to a text file, which was subsequently converted to a list of sentences in a rectangular Python data frame. The data were then formatted for time-based inquiry. To do this, I labeled each sentence with the appropriate episode title and airdate. I then chose to split the data by year as concert cycles, and all programs that the New York Philharmonic conduct are often planned to start in January and end in December. This choice allowed for changes to appear in the final models in conjunction with programmatic changes that may impact production from year to year. Furthermore, it was useful to conceptualize potential sociological and other circumstantial antecedents for the development of the YPCs' topical content from year to year. I also accessed several secondary sources, primarily in the form of newspaper articles and scanned images of artifacts from Bernstein's career.

The full set of transcripts were disaggregated in preparation for 14 year-based 'local' LDA analyses. There were many steps to prepare data for analysis, and several other steps to appropriately model and visualize topics. First, the sentences from the formatted datasets were imported to the algorithm (e.g., "The first episode was called 'What does Music Mean?'").

Superfluous words and syllables were removed to improve the clarity of interpretation. First, s*top words,* liaisons between important words, were removed from each sentence (e.g., "first episode called 'What Music Mean?'"). The algorithm allowed the researcher to introduce unique stop words that were connected to the topic. To avoid potential topical bias towards popular composers, such that a topic about Beethoven was not as relevant in the present study as the way Bernstein taught Beethoven, I added composer's names to the list of stop words. After stop words were removed, the remaining sentence data are converted to lists of words, and all punctuation was removed for further model clarity (e.g., "first, episode, called, what, music, mean"). *Trigrams,* or sets of three words*,* were then constructed by the preprocessing algorithm (e.g., "first, episode, called", "episode, called, what", "called, what, music", "what, music, mean"). Then the data were *lemmatized*, such that only nouns, and adjectives, verbs, and adverbs remained in the trigram sets (e.g., "first episode called", "episode, called, music", "called, music, mean"). Trigrams were then converted to integers to support the calculation of logistic probabilities for each topic's representative sentences (e.g., [0, 1, 2], [1, 2, 3], [2, 3, 4]). Lastly, term frequency was extracted for each word (e.g., "first," 1, "episode," 1, "called," 1, "music", 1, "mean", 1). In conjunction with trigram frequencies, term frequencies were used to model common keywords and semantically similar sentences that represented coherent topics.

Data Modeling

After data were preprocessed, LDA models were deployed for each concert cycle (i.e., calendar year). At this stage, I adjusted model parameters, including the number of topics, an alpha value for topic uniqueness, and the number of times the corpus should be scanned while models are constructed. These parameters were fine-tuned to produce readable output. To assist with readability, gensim provided topic coherence (i.e., readability of topics) and topic perplexity

(i.e., uniqueness of topics) metrics. For example, after running several models, I found the best model for coherence and topical independence came when three topics were assumed for the 1958 data subset. For each year, I used a combination of the perplexity and coherence scores alongside my assessment of the human readability of the output to estimate the sensibility of the model to produce a model with the most parsimonious number of topics for each year.

As previously discussed, similar topics were assumed to be discussed at differing rates over time in the corpora. Furthermore, topics derived from one model could not be readily compared to other models due to the independence of the data in this stage of analysis. To make a comparison across time, and after conducting the 14 LDAs, I merged the data subsets into a single dataset and conducted a final LDA. The purpose of this step was to organize the topic models from each year into several topical categories for the full dataset, thus allowing for an examination of the development of a topical category, as informed by changes in local topic model content and frequency from year to year. Data were then sorted by global topic and year; such that global topics were represented by the initial year-based topic model output.

Data Interpretation

The final LDA output included the most representative keywords and representative sentences for each local and global topic. Global topic keywords were consistent within a topic through time, allowing the local topic keywords to illuminate shifts in the use of a topic. However, these keywords alone did not provide a rich description of the topics in the corpus. To interpret the output of topic models, it was necessary to label topics in a manner that summarized their content.

The literature on topic model labeling provided practical solutions to contend with potential researcher bias in labeling tasks. Wan and Wang (2016) recognized that it is sometimes

difficult for researchers to identify topics based on short data excerpts and propose the use of longer text summaries for labeling purposes. More specifically, their method included a display of the 10 leading keywords, three leading bigrams, and several sentences to provide a summary of the text data. However, it was still necessary to provide a succinct description of the topics to clarify their content. To this end, I used Wan and Wang's (2016) interpretation method in conjunction with Moretti's (2000) conceptualization of *distant reading.* Distant reading is a process by which patterns in large sets of text data are identified through objective, mostly computational methods. In contrast, close reading methods require the reader to identify the subjective meaning of individual, smaller sets of text data. Distant reading was useful in this study as it allowed data to be "organized around loose family resemblances rather than crisp definitions" (Underwood, 2017, para. 31). Moreover, distant reading methods are not "committed to historical breadth, but [are] a version of the scientific method appropriate for a historical discipline" (Underwood, 2017, para. 22).

Using these methods, I labeled topics with a basic qualitative coding scheme (Miles et al., 2019). It was not practical to label the full corpus; therefore, I reduced the dataset to only include sentences that represented their assigned topic at a level of .90 or higher. This resulted in a final dataset including 758 sentences, belonging to 72 local topics. I consistently referenced the text summaries, bigrams, and keyword lists as I ascertained the main idea of the data collectively.

Limitations

Data were analyzed only from Bernstein's time as director of the YPCs, while the YPCs ran for decades before and after his time. Additionally, analyzed data was limited to transcript and video of the broadcasts and related documents. No attempt was made to establish causality, although patterns and analysis techniques may appear to describe linear relationships between data. Additionally, while important keywords and representative sentences for each topic are

identified through the topic modeling process, topics were ultimately named by the researcher, which introduced the possibility of researcher bias in the labeling of each global category.

Results

The purpose for the investigation of topics in each year was to use the leading keywords to summarize the content of a YPC season, whereby changes in topical content might be captured over time with the dynamic LDA process. The individual LDAs yielded 76 aggregated topics, with topic frequencies ranging from three in 1958 to eight in 1963. The count of unique topics and the frequency of the most important keywords reveal the words that were most connected within the corpus. The keyword *music* had 1,057 mentions in the full dataset, followed by *like* (n = 714), *sound* (n = 491), *play* (n = 428), *piece* (n = 419), and *hear* (n = 348). There were 75 appearances of the bigram *going, play* as in going to play, 68 instances of *sound, like*, as in sounds like, and 57 mentions of *going, hear* as in *going to hear*.

Labeling Global Topics

These keywords and bigrams outline the general thrust of the YPCs; including descriptive introductions of music with an emphasis on what the audience might listen for. However, these data did not provide a view toward detailed topical content or changes over time. For this purpose, the merged and reduced dataset was analyzed with a final LDA. Data best fit a model with ten topics. For each global topic, a set of six keywords, three bigrams, and two sentences were retrieved from the reduced dataset. These data were presented for each global topic in Table 1. Using the summaries in Table 1, I assigned a descriptive label to each topic.

Topic one tended to include references to *musical development* throughout a piece of music. For instance, Bernstein described how Tchaikovsky develops a theme: “Then he breaks that in half and develops only that half, [ORCH: Tchaikovsky - Fourth Symphony] and now

we're down to four notes only, [SING: Tchaikovsky - Fourth Symphony] which he's developing in sequences. [SING: Tchaikovsky - Fourth Symphony] But now it divides again, like an amoeba, and the sequence builds on only the last two notes. [SING: Tchaikovsky - Fourth Symphony] Just that" (Bernstein & Englander, 1958d, para. 61–65). The leading bigrams for this topic were *second theme*, *joined together,* and *something exciting*. The most representative sentence for this topic references the construction of a theme; "and lo and behold, it is again built out of three notes of the scale, only in descending order, as if contradicting the first clue, like Three Blind Mice" (Bernstein & Englander, 1965a, para. 14). There were 77 representative sentences assigned to this topic in the reduced dataset comprising 10.16% of the corpus.

Topic two included several references to the arc of stories. As an expert storyteller, Bernstein sought out the dichotomy of *good vs. evil* in music listening. Here, Bernstein describes how conflict can be demonstrated through music: "This painful problem is shown in terms of a conflict, the struggle between man's tremendous need for immortality, and his equally strong need to accept the fact that he is mortal" (Bernstein & Englander, 1971, para. 5). The leading bigrams were *tell you*, *kind bird*, and *triumph devil*. Sentences in this topic typically described the inherent conflict in classical music. For example, the second most representative sentence in topic 2 summarized this dichotomy; "Because they are both romantic story-ballets, they are both filled with magic, and both concerned with the forces of good versus evil, with evil finally conquered by love" (Bernstein & Englander, 1969b, para. 3). There were 79 representative sentences assigned to this topic (10.42% of corpus).

In topic three, Bernstein often referred to the choices composers must make as they are writing music: "Sometimes it takes you days or weeks to make up your mind. Well, imagine how hard it is for a composer to make up his mind and choose, not between two things, like a pair of

skates or a bicycle, but among all those instruments to say nothing of the hundreds and millions of possible combinations of all those instruments" (Bernstein & Englander, 1958c, para. 24). The leading bigrams for this topic were *many instruments*, *sound hear*, and *endless variety*. Additionally, the leading keywords *instrument*, *choose*, *love*, *sound*, and *use* also support the topic label of *orchestration.* In another example, Bernstein described Holst's decision to utilize "a big orchestra, a very big one, in fact as befits so large a subject as the solar system" (Bernstein & Englander, 1972b, para. 5). There were 55 representative sentences assigned to this topic (7.26%).

Bernstein referred primarily to *young people* throughout topic four, largely from an inspirational perspective: "They said, What? You're going to play that long, slow, highbrow music for young people? You're crazy—they'll get restless and noisy" (Bernstein & Englander, 1960, para. 31). Young People's Concerts: Holst: The Planets). This statement was the antithesis to the central motivation behind the YPCs, and Bernstein made clear efforts to include the perspective of young people in the presentation of his concerts, where he might add: "I hope you all find it as much fun as I did when I was your age" (Bernstein & Englander, 1961a, para. 11). Bigrams included *year ago*, and *dear friend*, suggesting that Bernstein used a conversational tone to address the children in the audience. There were 76 representative sentences assigned to this topic (10.03%).

Bernstein discussed the rules of music composition frequently throughout topic five. Broadly, it was noted that composers would often stretch the rules of composition and conductors the rules of performance, leading to the topic label *breaking the rules*. Bernstein found this topic useful over time. For instance, Bernstein describes the way a melody can be manipulated: "But the remarkable thing is not just that a melody is upside-down like a pancake;

it's the fact that its upside down, and it sounds wonderful upside-down" (Bernstein & Englander, 1958d, para. 95). To the end of compositional rule-breaking, Bernstein described bitonality in a manner that was easy to understand for his audience (Bernstein & Englander, 1962a):

> Higher instruments are playing one set of chords in one key: And the lower ones are playing a whole different set of chords, in another key: And together they make the bitonal sound, like this: you hear how misty that is it's even a little woozy. (para. 16)

This was the most popular topic across the YPCs with 177 representative sentences assigned (23.35% of corpus).

Within topic six, Bernstein made references to the production of *the show*, to the writing and planning of the show, sometimes including the context of audience feedback (Bernstein & Englander, 1958d):

> I've received so many letters from you in the television audience expressing disappointment because our final program of last year was not televised due to technical difficulties I won't go into, that I have been persuaded to repeat it and so we are going to open this year's series by again discussing the subject what makes music symphonic. (para. 1)

The leading bigrams were *produced directed*, *happy birthday*, a frequent focus of the show, and *special project*. There were 41 representative sentences assigned to this topic (5.41%).

The bigrams *ever since*, *real joke*, and *that's enough* are less cogent than in other topics, however, the keywords and representative sentences suggest that topic seven tended to discuss *endings.* This topic can be interpreted quite literally, as many of the statements within this topic are about musical endings. For example, "And now, as you listen to the fourth movement, which we are about to play with its triumphant ending, you may find different meanings in this ending"

(Bernstein & Englander, 1965a, para. 26) or "Here's the end of the introduction as it leads into the first feverish outburst of the theme— and listen for those psychedelic fireworks" (Bernstein & Englander, 1969a, para. 11). There were 70 representative sentences assigned to this topic (9.23% of corpus).

In topic eight, Bernstein referred to the connection between many composers' *heritage* to the sounds they compose. For instance (Bernstein & Englander, 1958b):

> Because in most countries, the people who live there are descended for hundreds of years from their forefathers, and their forefathers' forefathers, who all sang the same little tunes and sort of own them; so when the Russians hear a Tchaikovsky symphony, they feel closer to it than say, a Frenchman does, or than we do. (para. 21)

The leading bigrams were *Latin American*, *Cuban dance*, and *Russian composer*. There were 47 representative sentences assigned to this topic (6.2% of corpus).

Throughout the ninth topic, Bernstein used *philosophy* as a guide for music listening but also expounded upon the philosophy that is laden within the music he presents. On Strauss's 'Thus Spoke Zarathustra' and Nietzsche's Zoroastrian fable (Bernstein & Englander, 1971):

> The connection is a German philosopher named Nietzsche, sorry about all these names, but they're necessary if we're going to make sense out of all this, Friedrich Nietzsche, a highly poetic philosopher who was all the rage in Germany when Strauss was a young man. (para. 2)

The bigrams *good sense*, *word man*, and *conversation beauty* support the influence of philosophical considerations on Bernstein's approach to music listening. However, at times the sentences in this topic reflected an air of mysticism: "So naturally, this music is going to be a sudden and immense contrast to the noisy gaiety of the first movement - this one is all mystery

and twilight solemnity" (Bernstein & Englander, 1970, para. 79). There were 85 representative sentences assigned to this topic (11.21% of corpus).

While the bigrams *dissolve doubt*, *opposing pair*, and *suddenly aware* were not demonstrably related to other summary data, the keywords and representative sentences indicated that the tenth topic tended to discuss *music and space*. In this topic, music and space were discussed in the contexts of outer space, physics, and even impressionist art: "You can see the form of a painting, or a church, more or less all at once because their forms exist in space" (Bernstein & Englander, 1964, para. 6). Bernstein frequently used this topic to illustrate the form of a musical work concerning its story-like qualities. For instance, "Strauss's piece has turned into a ball, a gas, high, high, with cocks crowing, the stratosphere trilling away, planets whirling, space rushing by all in maniacal good humor" (Bernstein & Englander, 1971, para. 20). There were 55 representative sentences assigned to this topic (7.26% of corpus).

Dynamic Topic Model

To visualize global topic mentions by year comparatively, I grouped the data by global topics and year, where counts for each global topic were imported and plotted using ggplot2 in RStudio. Global topic frequencies were projected on the y-axis, and time to the x-axis on a two-dimensional line graph. A plot for each of the ten global topics is displayed in Figure 1. To aid in the display of topic frequency over time, each plot includes a smoothed line and a shaded area representing a confidence interval of 90%.

There were several topics where large jumps were observed in topic frequency from year to year. For instance, the topic Young People spiked in 1963 and 1967 with 17 and 11 mentions respectively, while the topic was mentioned 5.4 times per year throughout the YPCs. Aberrations in data distributions such as this merit further discussion, as large jumps might represent

formative changes in Bernstein's approach to talking about music. Other examples include the topics development (13 mentions in 1966; $\mu = 5.5$), philosophy (10 mentions in 1968, 11 in 1971; $\mu = 6.1$), heritage (13 in 1963; $\mu = 3.4$), music and space (18 in 1971, $\mu = 3.9$), and breaking the rules, with 17 mentions in 1959, 1961, and 1964, as well as 20 in 1961 ($\mu = 12.6$). Upward trends (e.g., music and space and philosophy), downward trends (e.g., breaking the rules, the show, and heritage), fluctuating (e.g., development, good vs. evil, young people, and endings), and flat (e.g., orchestration) trends were also observed in Figure 1.

Discussion

The purpose of this study was to illuminate topical patterns in the YPCs and potentially outline Bernstein's priorities as a music educator. With the support of a machine learning algorithm, I identified 10 global topics comprised of 76 unique local topics over 14 years. Data were suggestive that a key lever in Bernstein's instruction was the ongoing invitation to the audience to participate in the universal experience of music listening, which at first glance seems lackluster. However, when you examine the extent of his joy, and his love for his craft, the invitation becomes more than to simply listen to this particular music, and as you listen, you might be elevated to love music in the same way that Bernstein has, and did. No wonder that when Bernstein planned a sabbatical in 1965, he "canceled all appearances except for the [YPCs] … [as] the series would be lost without him, for in this area of pedagogical showmanship he has no real competitor" (Bernstein Gives Children Lesson, 1964, para. 6).

The leading topics across the YPCs were breaking the rules, philosophy, good versus evil, and musical development. The least frequently mentioned topics were the show, heritage, orchestration, and music and space. This prevalence of breaking the rules possibly indicates that Bernstein saw value in the manner in which compositions deviate from presupposed

compositional rulebooks. In the following quote from the year 1965, Bernstein refers to multiple sound-specific elements to guide the listener through a performance of the finale from Vaughn Williams Fourth Symphony. Bernstein referred to a broken expectation, and how he perceived the effect of a counterintuitive compositional choice (Bernstein & Englander, 1965b):

> It finally works itself up to a frenzy of major and minor seconds, but at the very height of this exciting build-up, when everything is going like gangbusters, on the very last page, the composer suddenly hurls us back into the dissonant rage of the opening movement, and with six final hammer-blows the symphony comes to a savage end. (para. 47)

While it is not clear why Bernstein might have valued the topics derived from the corpus, they do share consistencies with Bernstein's Norton Lecture Series (n.d.). For instance, the leading Norton topic was related to phonology in music, or the nature of the relationships between musical sounds. As musical sounds were an inherent focus of the YPCs, the resulting topics might be interpreted as the means of listening. Through the lens of the Norton Lectures (n.d.), Bernstein presented musical sounds as comprised of *musical structure* through the topics of development, orchestration, and endings, *musical meaning* through the storytelling topics of good vs. evil, heritage, philosophy, as well as music and space, and ideas of *musical change* through the breaking the rules topic.

Dynamic Topic Model Aberrations and Trends

There was a sharp increase of space-related discussion in 1968, a year in which the National Aeronautics and Space Administration's (NASA) Apollo program would launch four missions, including the first lunar orbit completed by the United States (The Apollo Program, 1963-1972). However, Bernstein's focus on music and space would peak in 1971 with 18 mentions in the reduced dataset. In the last YPC in 1972, Bernstein conducted the Philharmonic

through a live improvisation, situated as an extension to Holst's masterwork The Planets, and as a surprise "for Holst too, if he's listening somewhere out there in the Universe" (Bernstein & Englander, 1972b, para. 33).

To a lesser extent, the philosophy topic also held an upward trend peaking in 1971. There was only one episode of the YPCs produced in 1971, called 'Thus Spake Richard Strauss. Bernstein opened this YPC promising the audience that "by the end of it you're going to wind up experts on Zarathustra" (Bernstein & Englander, 1971, para. 1). The entire episode outlines Strauss's attempts to mirror the structure of Nietzsche's book 'Thus Spake Zarathustra.' The primary theme of which is man's transcendence beyond the übermensch, or a self-mastered individual who has "as Darwin put it, the survival of the fittest, the constant growth of the human race from the Ape of long ago to the Superman of the future" (Bernstein & Englander, 1971, para. 3). These top ten keywords for philosophy (*man*, *high*, *story*, *minor*, *be*, *go*, *beauty, become*, *beautiful*, *even*) seemed to align with the representative sentences from the topic. In the same episode, Bernstein offered a potentially autobiographical view that "Man feels, in his hopes and dreams, so close to immortality, and yet it just manages to elude him." (Bernstein & Englander, 1971, para. 5). There was also a spike in the heritage topic in 1963 with 13 references. This may be partially due to the episode 'The Latin American Spirit,' but also due to the detail in which Bernstein describes each musical work he presents throughout the series. This finding illuminated Bernstein's ability to successfully grounded music listening experience as a historical, geographical, or ethnically situated activity. For example, Bernstein once connected West Side Story to ancient Rome: "Those languages are called 'Latin' languages because they developed from the old language of ancient Rome" (Bernstein & Englander, 1963a, para. 11).

A consistently divergent relationship emerged between the development and good vs. evil topics, as these topics oscillate while sharing the function of describing tension in the music. While Bernstein was outspoken in the public on the assassinations of President John F. Kennedy, Reverend Martin Luther King, Jr., and Secretary of State Robert F. Kennedy, he attempted to make light of the serious topics that classical music can often bring about. Here, there is a potential for another hierarchical relationship, where good vs. evil, music and space, and philosophy are each representative of the development of stories in a variety of musical performances.

Implications for Music Educators

Kratus (2017, p. 46) asked "How can music educators engage their students' creative thinking when listening to music?" Kratus expounded upon objectively convergent music listening (e.g., what to listen for) and subjectively divergent music listening (e.g., ways of listening), arguing that "traditional approaches to teaching music listening emphasize convergent listening" (Kratus, 2017, p. 48). Bernstein was an advocate for getting lost in active listening experiences, as he would carefully direct his audience through active music listening in each YPC. I believe that the global topics presented in this study are representative of the ways Bernstein attempted to provide an educative yet meaningful music listening experience to non-musicians.

Bernstein's main role in the YPCs was to offer his experience as a music listener so that his audience might find more personal connections to the music he presented, and thereby learn new ways of listening to music. Kratus (2017, p. 48) claimed that "a listener's mental representation of the music is, in essence, the music for that individual," and through a similar maxim, Bernstein acted as a mirror for the musical curiosity of the nation. To this end, music

teachers might have their students engage in active listening to find personal connections to musical excerpts. Furthermore, music teachers might direct students to listen for musical structure (e.g., development) musical meaning (e.g., philosophy), and musical change (e.g., breaking the rules) through the lens of such personal connections. Furthermore, students' experience of intrinsic value and autonomy within a music activity is predictive of future enrollment in music courses (Freer & Evans, 2018). Thus, a push toward subjective music listening experiences that allow students to make meaning based on preconceived interests might positively impact students' motivation to continue enrolling in music classes beyond elementary school.

Future Research Considerations

The methods presented in this study do not represent all potential uses of artificial intelligence and machine learning in music education research. About LDA, there are recent developments that allow for algorithms to automatically select model parameters, such as the number of topics, which further removes the researcher from potential bias. For the present study, in particular, a variant of LDA known as hierarchical LDA (hLDA) would allow topics to be displayed in topical hierarchies. Such analyses would allow for a more nuanced investigation of the syntax in a corpus and allow for more accurate representations of the topics discussed (Blei et al., 2003). These analyses result from the field of Natural Language Processing (NLP). Other NLP processes include text and speech processing, syntactic analysis, semantic analysis, sentiment analysis, discourse analysis, document summarization, and question-answering algorithms (Stanford NLP Group, n.d.). Each of these tools can be harnessed to respond to issues in music education research using large-scale qualitative data. However, it is not pertinent to rush to adopt tools due to their novelty and potential power. Instead, it was suggested that social

scientists who enter into computational methods "highlight a zone of intersection, where new literary questions happen to overlap with new technical opportunities" (Underwood, 2017, para. 34).

Conclusion

Aaron Copland once wrote an emphatically prophetic letter to 22-year-old Bernstein, celebrating the might of the young pianist's penmanship, noting "What terrifying letters you write: fit for the flames is what they are. Just imagine how much you would have to pay to retrieve such a letter forty years from now when you are conductor of the Philharmonic" (Lunden, 2013, para. 9). As a historical researcher, I was also struck by Bernstein's gift with words. More specifically, one of Bernstein's greatest strengths was the range of his storytelling prowess. For instance, some stories he told were light and relatable to children of all ages (Bernstein & Englander, 1959b):

> You've all seen it in cartoons on TV or in the movies: like whenever Pluto suddenly crashes into a tree, you're likely to hear something like this: [PERCUSSION AND BRASS: dissonance] or then suddenly Donald Duck is shot out of a cannon you'll hear something like this: [VIOLINS: glissando] But it's not only in Mickey-Mouse music: it's in grown-up movies as well. (para. 43–45)

While others are thoughtful and vivid but full of directives for an enriching listening experience (Bernstein & Englander, 1962a):

> You hear how misty that is, it's even a little woozy, but I think that in this moment Gershwin is trying to show his American visitor to Paris a bit tipsy with too much good French wine, and that explains why it's so misty and woozy. In fact, he adds to it an even mistier color of the celesta: and then the plucked strings: and behind it all he adds the soft

> hiss of the cymbal, like a ringing in your ears. and then he puts all those sounds together to make this lovely, unreal, tipsy, woozy, impressionistic sound that he learned on the road to Paris. Now, all that is just one little example of the French influence on Gershwin, but perhaps this one will help you hear this piece in a new way, if you remember that Gershwin not only wrote An American in Paris but as a composer, he was an American. (para. 21)

Bernstein believed that non-musicians could become musicians through musical listening. As demonstrated, Bernstein was a master with guiding our ears towards richer musical experiences through the YPCs. That said, I do not believe that Bernstein would be such an inspiring music educator if he were to limit the usefulness of his lectures to instrumentalists, singers, or other types of music performers. Instead, Bernstein invited those who consider themselves non-musicians to be exposed to musical experiences, with the guidance of a maestro's ear.

Throughout the YPCs, Bernstein proselytized the power of musical listening, demonstrating that those who actively hear music through the lens of stories can become captivated, and lost in a musical experience that is bigger than the sum of its parts, a Tamino[2] for the next generation of music listeners: "While the orchestra plays spooky music, the old magician makes some hocus pocus at the three puppets, and he plays to them on his magic flute, and suddenly, one, [FLUTE,63] two, [PICC,2nd bar of 63] three, [PICC,3rd bar]. They magically come to life" (Bernstein & Englander, 1962b, para. 14–17).

[2] The protagonist "magician" in Mozart's "The Magic Flute."

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Table 1

Keywords, Bigrams, And Representative Sentences for Global Topics

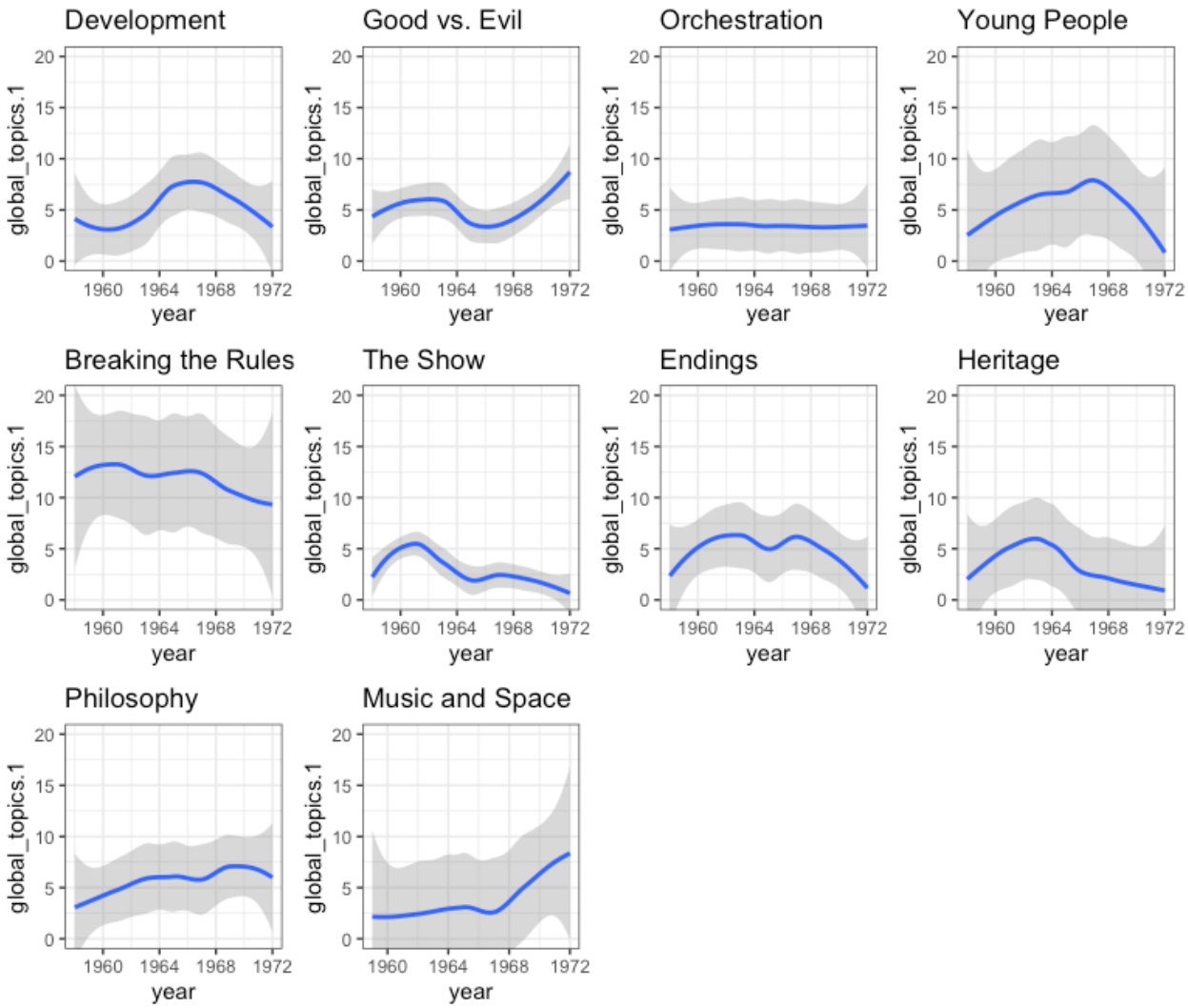
T.	Keywords	Bigrams	Sentence 1	Sentence 2
1	theme, note, play, also, sing, movement	second theme; joined together; something exciting;	Now over that accompaniment figure appears the first main theme; and lo and behold, it is again built out of three notes of the scale, only in descending order, as if contradicting the first clue, like Three Blind Mice.	And then when the theme did come in, did you hear how those rising and surging phrases are each written with its own little burst of crescendo?
2	faust, bar, orchestra, life, tell, devil	tell you; kind bird; triumph devil	There are only the grisly shrieks of witches and there's the blood-curdling laughter of demons and devils, and the diabolical dancing of Halloween hags and grinning monsters.	Because they are both romantic story-ballets, they are both filled with magic, and both concerned with the forces of good versus evil, with evil finally conquered by love.
3	instrument, choose, love, sound, use, jazz	many instruments; sound hear; endless variety	And so, correspondingly, Holst uses a big orchestra, a very big one, in fact as befits so large a subject as the solar system.	Well, imagine how hard it is for a composer to make up his mind and choose not between two things, like a pair of skates or a bicycle, but among all those instruments to say nothing of the hundreds and millions of possible combinations of all of those instruments.
4	young, name, famous, piece, major, great	year ago; dear friend; assistant conductor	In this part there is even a wind machine in the percussion section to give you the effect of the wind whistling by as they whoosh up and down through the clouds.	In the hall, listening very hard, were specially invited conductors, acousticians, recording experts, broadcasting and television experts, plus a number of cathode ray tubes, very sensitive mechanical instruments with very fact names like an oscilloscope.

5	call, know, way, first, new, come	german composer; french horn; hear piece	The higher instruments are playing one set of chords in one key: And the lower ones are playing a whole different set of chords, in another key: And together they make the bitonal sound, like this: you hear how misty that is its even a little woozy.	The way he uses variation and puts two and three melodies together at a time in counterpoint; the way he uses that breaking-up system we talked about before; the way he takes little scraps of melodies and develops them by themselves; or the way he turns themes upside-down like pancakes.
6	much, program, strange, piano, study, concert	produced directed; happy birthday; special project	I've received so many letters from you in the television audience expressing disappointment because our final program of last year was not televised due to technical difficulties I won't go into, that I have been persuaded to repeat it and so we are going to open this year's series by again discussing the subject "what makes music symphonic?"	And so to end this program, we're going to play for you that exciting little hoe-down from Rodeo; and we trust that what you'll be hearing will not be the sound of the Philharmonic, but the sound of Aaron Copland.
7	end, ever, find, little, come, bring	ever since; real joke; that's enough	Here's the end of the introduction as it leads into the first feverish outburst of the theme—and listen for those psychedelic fireworks.	And now, as you listen to the fourth movement, which we are about to play with its triumphant ending, you may find different meanings in this ending.
8	full, dance, piece, sometimes, simple, century	latin american; cuban dance; russian composer	[The] Mother Goose Suite is a model of orchestration; the orchestra Ravel uses is relatively small, as you can see, no trumpets, no trombones and so forth, but Ravel is so inventive in his combinations and choices of	This Finlandia by Sibelius, like many other pieces of his, was a part of that national revolution; and in fact it proved to be so exciting to the Finnish audiences, with its warlike rhythms and its inspiring, hymn-like

			instruments that his orchestra seems unlimited.	middle part, that for a while the Russian authorities had to forbid performances of it.
9	man, high, story, minor, be, go	good sense; word man; conversation beauty	So naturally, this music is going to be a sudden and immense contrast to the noisy gaiety of the first movement - this one is all mystery and twilight solemnity.	The orchestra quickens with excitement, and Florestan, in delirium, has a mystical vision of his beloved wife, Leonore, shining through the dark like an angel come to lead him to freedom.
10	finally, planet, chapter, space, light, understand	dissolve doubt; opposing pair; suddenly aware	That's reverberation; and that's what gives the chord liveness, fullness, and richness	And so suddenly Strauss's piece has turned into a ball, a gas, high, high, with cocks crowing, the stratosphere trilling away, planets whirling, space rushing by all in maniacal good humor.

Figure 1

Mentions over time for the sounds and stories global categories.



Appendix A

Episode Titles and Airdates

Ep.	Title	Airdate	Ep.	Title	Airdate
1	What Does Music Mean?	1/18/58	**28**	What is Sonata Form?	11/6/64
2	What is American Music?	2/1/58	**29**	Farewell to Nationalism	11/30/64
3	What is Orchestration?	3/8/58	**30**	Young Performers No. 6	1/28/65
4	What Makes Music Symphonic?	12/13/58	**31**	A Tribute to Sibelius	2/19/65
5	What is Classical Music?	1/24/59	**32**	Musical Atoms: A Study of Intervals	11/29/65
6	Humor in Music	2/28/59	**33**	The Sound of an Orchestra	12/14/65
7	What is a Concerto?	3/28/59	**34**	A Birthday Tribute to Shostakovich	1/5/66
8	Who is Gustav Mahler?	2/7/60	**35**	Young Performers No. 7	2/22/66
9	Young Performers No. 1	3/6/60	**36**	What Is a Mode?	11/23/66
10	Unusual Instruments	3/27/60	**37**	Young Performers No. 8	1/27/67
11	The Second Hurricane	4/24/60	**38**	Charles Ives: American Pioneer	2/23/67
12	Overtures and Preludes	1/8/61	**39**	Alumni Reunion	4/19/67
13	Aaron Copland Birthday Party	2/12/61	**40**	A Toast to Vienna in ¬æ Time	12/25/67
14	Young Performers No. 2	3/19/61	**41**	Forever Beethoven	1/28/68
15	Folk Music in the Concert Hall	4/9/61	**42**	Young Performers No. 9	3/31/68
16	What is Impressionism?	11/23/61	**43**	Quiz-Concert: How Musical Are You?	5/26/68
17	The Road to Paris	1/18/62	**44**	Fantastic Variations (Don Quixote)	12/25/68
18	Happy Birthday, Igor Stravinsky	3/26/62	**45**	Bach Transmogrified	4/27/69
19	Young Performers No. 3	4/14/62	**46**	Berlioz Takes a Trip	5/25/69
20	The Sound of a Hall	11/21/62	**47**	Two Ballet Birds	9/14/69

21	What is a Melody?	12/21/62	**48**	Fidelio: A Celebration of Life	3/29/70
22	Young Performers No. 4	1/15/63	**49**	Anatomy of a Symphony Orchestra	5/24/70
23	The Latin American Spirit	3/8/63	**50**	A Copland Celebration	12/27/70
24	A Tribute to Teachers	11/29/63	**51**	Thus Spake Richard Strauss	4/4/71
25	Young Performers No. 5	12/23/63	**52**	Liszt and the Devil	2/13/72
26	The Genius of Paul Hindemith	2/23/64	**53**	Holst: The Planets	3/26/72
27	Jazz in the Concert Hall	3/11/64	**54**	Bernstein at 100: Young People's Concert	9/28/18

Appendix B

Python packages and R libraries used in analysis, organized chronologically.

Python Packages

Package	Purpose	Use in Present Study
re (regex)	Regular expressions are matched using looping search functions.	Convert paragraph data into sentences.
numpy	Supports large multidimensional arrays and matricies in python.	Plotting text distribution graphs.
pandas	Flexible data cleaning and analysis tool primarily used for spreadsheet manipulation in python.	Temporarily stores modified datasets for analysis.
Pprint and print	Presents large and arbitrary data in an easily interpretable form.	Display data for user confirmation following the steps in table 5.
genism	Python library for topic modelling and document indexing	To construct, verify, and store LDA models.
spaCy	Natural language processing package with multiple parsing features	To limit lemmatized text to certain parts of speech, see table 5.
pyLDAvis	Interactive topic model visualization tool.	To visualize LDA topic models.
matplotlib	Plots data in two dimensional formats, providing a variety of plot types.	Create keyword distributions of each topic.
NTLK stopwords	Removes stop words from corpora.	Removal of stop words in the IST corpus.
seaborn	Data visualization library extending from matplotlib.	Create a distribution of sentence word counts by topic.
wordcloud	Data visualization library using the top keywords from text data.	Create word clouds to support analysis methods.
counter	Counts hashable objects such as sentences or words	Creating frequency maps for LDA modeling.

R Libraries

Package	Purpose	Use in Present Study
ggplot2	Data visualizations	Displaying Figure 1.

Integrated Music Education Perspectives and Practices of Middle School Music, English, and Science Teachers

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Abstract

The purpose of this study was to investigate Integrated Music Education (IME) as a pedagogical approach to address both music and non-music learning. We explored middle-school music and non-music teachers' perceptions of IME and observed their instructional practices. Our corresponding research questions were: (a) what were participants' perceptions of IME; and (b) how did participants' observed instructional practices demonstrate IME quality (i.e. disciplinary and interdisciplinary instruction)? Using a case study design, we recruited a purposeful sample of three teacher-participants: one music teacher and two of their non-music teacher colleagues. We collected interview and observation data. To rate the level of observed integrated instruction, we used a protocol adapted from existing models. Using inductive and deductive analysis, four themes emerged from the interview data: defining IME, benefits of IME, obstacles to IME, and supports for IME. We identified a disconnect between teachers' perceptions and practices. In general, our interviews indicated higher-level IME perceptions while the observational ratings revealed lower-level practices. Implications of this study include the importance of defining

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IME, bridging the gap between perceptions and practices, and developing effective PD to foster effective IME instruction.

Keywords: middle school education, music education, music integration, arts integration

Introduction

Authentic interdisciplinary arts education, also frequently labeled integrated arts instruction, typically involves multi-modal and interactive learning activities and collaboration among teachers or specialists (National Coalition for Core Arts Standards, 2015). As one of the most commonly offered arts subjects in American public schools (National Center for Education Statistics [NCES], 2012; O'Keefe et al., 2016), music is well situated for efficiently delivering integrated arts curricula. Accordingly, Integrated Music Education (IME) offers interdisciplinary ways to foster critical and creative thinking skills, to promote abstract reasoning, and to involve students with multi-sensory and multi-modal activities in academic learning (Barrett et al., 1997; Fowler, 2001; Harney, 2020: LaGarry & Richard, 2018; Smithrim & Upitis, 2005).

Ideas and strategies for designing and delivering interdisciplinary curricula that integrate arts and non-arts subjects have existed for decades. Innovative educators have emphasized conceptual and practical integration between arts and non-arts subjects, addressing standards in multiple disciplines (Barrett, et al., 1997; Bresler, 1995; Burnaford, et al., 2013; Cslovjecsek & Zulauf, 2018). Such instruction is more common at the elementary level (Battersby & Cave, 2014) but has promise for middle-school learners based on their responsiveness to interdisciplinary teams (Boyer & Bishop, 2004). Recognizing this and other developmental differences of the middle-school learner, we undertook this study as the next step in our research agenda to investigate middle-school teachers' interdisciplinary perceptions and practices (Johnson et al., 2021).

The Connecting process strand of the National Core Arts Standards [NCAS] (National Coalition for Core Arts Standards, 2015) advances IME pedagogy by explicitly promoting standards-based instruction between music and other disciplines. The National Association for

Music Education, however, emphasizes the other three NCAS artistic processes of Creating, Performing, and Responding, by embedding Connecting within them (Shuler et al., 2014). This deemphasis on the Connecting process is unfortunate because educators using integrated arts curricula have documented enhanced student engagement, achievement, attitudes, attendance, and behavior (Noblit et al., 2000; Noblit et al., 2009). Through connecting, both students and teachers develop an understanding of the relationships, contexts, and connections among various disciplines while utilizing practical applications for linking music with other subjects in meaningful ways.

Among the models that describe integrated arts education, Bresler's (1995) influential categorization defines four different levels of integration: subservient, affective, social, and co-equal. The first level, subservient integration is characterized by superficial, trivial connections, typically involving the arts serving another discipline (e.g., memorizing song lyrics to help remember a set of facts). Affective integration is exemplified by the use of music to influence the classroom atmosphere or affect mood (e.g., playing background music to help students relax or concentrate, or drawing while listening to music). When music is used to facilitate student routines, manage classroom behaviors, or elevate community functions, social integration occurs. Finally, in co-equal integration, skills and understandings in arts and non-arts disciplines are equally valued and emphasized (e.g., exploring the concept of contrast in music and literature).

Bresler's (1995) characterization of the co-equal style of arts integration places music as an "equal partner, integrating the curriculum with arts-specific content, skills, expressions, and modes of thinking" (Bresler, 1995, p. 33). Other labels for this style of integration appear in previous literature with different descriptors, such as "concept-based arts integration" (Wolkowicz, 2017, p. 42), "conceptual connections" (Wiggins, 2001, p. 42), "two-way

integration" (Barry, 2008, p. 33), "syntegration" (Russell-Bowie, 2009, p. 1), and "integrity between the disciplines" (Barrett et al., 1997, p. 35). Similarly, Burnaford, Aprill, and Weiss (2013) describe an "elegant fit" (p. 23) between disciplines, highlighting the importance of arts integrated lessons in which arts and non-arts content and objectives are addressed. While researchers differ in their specific labeling of arts integration approaches or styles, they agree that arts integration activities associated with Bresler's co-equal style occur infrequently in schools, and that instructional practices aligning with Bresler's subservient level are the most common (Bresler, 2002; O'Keefe et al., 2016; Wiggins, 2001).

Both music and non-music teachers commonly face multiple challenges that inhibit their ability to create and deliver successful IME lessons. Those challenges include lack of sufficient instructional training in music integration, effective collaboration, administrator support, and planning time (Battersby & Cave, 2014; Cosenza, 2005; LaGarry & Richard, 2018; May & Robinson, 2016; O'Keefe et al., 2016; Wolkowicz, 2017). More generally, for teachers across the arts who often have expectations to present public performances and outreach events (Hallmark, 2012), planning time is regularly a limiting factor. Other researchers have reported the importance of collaborative efforts between arts specialists and their non-arts teacher colleagues (Bresler, 2002; Della Pietra, 2010; Munroe, 2015; O'Keefe et al., 2016; Strand, 2006) and of effective professional development for arts integration (Burnaford et al., 2013; Krakaur, 2017; LaGarry & Richard, 2018). Consequently, previous scholars have reported that although some teachers have used an integrated music approach, this pedagogical strategy is frequently limited and sometimes of low quality (Abril & Gault, 2006; Bresler, 2002; Giles & Frego, 2004; Hallmark, 2012; NCES, 2012; O'Keefe et al., 2016; Saunders & Baker, 1991). With respect to integrating music with other subject areas, non-music teachers generally hold positive attitudes

about music (Giles & Frego, 2004), but do not take responsibility for teaching musical concepts (Johnson et al, 2021; O'Keefe et al., 2016).

On balance, the benefits of IME instruction are many and varied. Academic and social outcomes are the chief among these for students (Catterall, et al., 2012; Goff & Ludwig, 2013; May & Robinson, 2016). Generally, for teachers, the primary advantages are enhancing classroom learning environments (Cosenza, 2005; Deasy, 2008; Irwin, et al., 2006; Montemer, 2020; Vaughan, 2008). Specifically for arts teachers, Hallmark (2012) advocated for high-quality and integrated arts education as a way to combat isolated and disconnected instruction. Considering both students and teachers, other scholars have identified additional rationales for arts integration including supporting student academic achievement (Burton et al., 2000; Moss et al., 2018), fostering student creativity (Baer & Kaufman, 2012; Deasy, 2008; Root-Bernstein, 2001), promoting student engagement (Mark et al., 2021), and facilitating active participation in collaborative curricular planning (Barrett et al., 1997; Bresler, 2002; LaGarry & Richard, 2018; O'Keefe et al., 2016; Strand, 2006).

Previously, we examined IME at the elementary level and found a disconnect between teachers' perceptions of IME and their actual practices (Johnson et al., 2021). More specifically, elementary music and non-music teachers demonstrated less robust levels of music integration than they described. Because schools with vibrant arts programs have more student involvement, engagement, and higher graduation rates at the secondary level (Johnson & Howell, 2009), we have elaborated on our previous study to examine IME at the middle school level. More specifically, the purpose of our study was to explore middle school music, science, and language arts teachers' perceptions of IME and to observe their instructional practices. Our corresponding research questions were: (a) what were participants' perceptions of IME; and (b) how did

participants' observed instructional practices demonstrate IME quality (i.e. disciplinary and interdisciplinary instruction)?

Methodology

We chose a case study design for this investigation because that approach offered a deeper understanding of the problem from both music and non-music teacher perspectives. Including views from both types of teachers strengthened our data and added confidence to our findings. We used purposeful sampling, strategically selecting participants to focus on the specific research questions in the context of music and non-music instruction (Miles et al., 2014; Stake, 1995, 2006). To explore our research questions with qualified participants (Creswell, 2013), we recruited one music teacher and two of their non-music teacher colleagues who constituted one case. All three participants had experience with and interest in practicing IME. The team of middle school teachers was located in the Southeastern United States and consisted of: Mary, a general music teacher (grades 6-8); Eleanor, a sixth-grade English Language Arts (ELA) teacher; and Sarah, an eighth-grade science teacher.

Data Sources

We collected data via participant interviews and teaching observations (Miles et al., 2014). As related to our previous study focused on teams of elementary teachers (Johnson et al., 2021), we invited one middle school music teacher who then identified two non-music teachers with IME experience and interest as additional participants at their school site, for a total of three participants. All participants planned their lessons with some collaboration but taught each lesson independently. For this IRB-approved study, we used pseudonyms for all participants and described their professional backgrounds in Table 1.

Consistent with qualitative research, our investigation included multiple forms of data; we interviewed each teacher once after they taught their integrated lessons, as detailed in Appendix A and observed four lessons as described in Appendix B (Emerson et al., 2011; Siedman, 2013; Stake, 1995). We observed one sixth-grade ELA lesson, one eighth-grade science lesson, one sixth-grade ELA and music lesson, and one eighth-grade science and music lesson. We video-recorded each classroom observation (between 30 and 45 minutes each) and transcribed each individual interview (between 40 and 90 minutes each) for later analysis. In addition, we collected instructional materials as artifacts to enhance our understanding of each lesson.

Data Analysis

We were cognizant of the themes from our original elementary school study (Johnson et al., 2021), though we did not use those themes as pre-existing codes during our analysis of the middle school data. Instead, we started anew and allowed codes to emerge during data collection and analysis (Miles et. al., 2014). We analyzed data sets inductively and deductively, searching for themes within each case and across cases. Each single-case analysis began with open coding. By reading complete sets of data for each individual participant, we gained a holistic understanding of the perceptions and experiences of each teacher (Emerson et al., 2011; Saldaña, 2016). We conducted the cross-case analysis using focused coding; by identifying recurring themes and quoting participants' own words, we maintained each participant's uniqueness through the data (Creswell, 2013; Miles et al., 2014; Saldaña, 2016; Stake, 1995).

We analyzed each classroom observation for IME quality, paying particular attention to disciplinary and interdisciplinary standards. After consulting a number of widely-used rubrics and other measures of instructional quality (e.g., Danielson, 2007; Interstate New Teacher

Assessment Support Consortium, 1992; Marzano & Toth, 2013; National Commission on Teaching and America's Future, 1996; North Carolina Department of Public Instruction [NCDPI], 1998/2013; US Department of Education, 2002), we designed a focused observational protocol with four dimensions: disciplinary instruction, interdisciplinary instruction, classroom climate/culture, and facilitating learning (Johnson et al., 2021). We evaluated each observed lesson in terms of these four dimensions, according to four standard rankings: emerging, developing, proficient, and exemplary. In our findings, we compared these ratings with Bresler's four levels: subservient, affective, social, and co-equal (1995). We also used these ratings to confirm or disconfirm our findings across data sources. For a display of our protocol, see Appendix B.

We ensured trustworthiness and validity through data triangulation, peer review, and participant checks (Creswell, 2013; Miles et al., 2014). Collecting data from a variety of sources also allowed us to confirm and disconfirm evidence for emerging themes (Stake, 1995). As advocated by experts in the field (Emerson et. al, 2011; Yin, 2014), we used our researcher-generated observation protocol to aid in categorizing and organizing observations. Furthermore, we analyzed all of the data independently and then collectively agreed upon final ratings for each observation.

Findings / Discussion

After analyzing participant responses, we identified four emergent themes that described IME in terms of the participants' perspectives and practices: (a) defining IME; (b) benefits of IME; (c) obstacles to IME; and (d) supports for IME. See Table 2 for a display of the supporting topics of each theme. In this section, we connect our findings with the related literature to show

points of intersection and inconsistencies. Although not transferable to all middle school settings, our findings may directly benefit other music and non-music teachers, along with their students.

Defining Integrated Music Education

Initially, we asked participants to define IME. We also looked for implied definitions throughout the interview data. Every participant defined IME in ways that aligned with multiple aspects of Bresler's four arts integration levels (1995). All three teachers noted ways that music served other disciplines or teaching goals, aligning with Bresler's subservient level. For example, science teacher Sarah described music's role as a memory tool in her science class, stating, "the more neural connections they [students] make, the more likely they are to remember all of the material." Music teacher Mary defined IME as "using music skills, using the standards, the content, and the knowledge of music, to help teach other subjects." While Mary's definition mentions musical competencies, we labeled her definition as subservient because the overall focus was on music in a supportive role.

Participants' descriptions of activities in which music served to enhance the classroom atmosphere aligned with Bresler's second level, affective integration (1995). For example, ELA teacher Eleanor emphasized the role of music in promoting student engagement, stating, "[Music] definitely influences them in a positive way…. it's amazing. They enjoy it a lot." She added that incorporating music in her science classes was "really fun" and highlighted the role of music as a "motivation factor" for her students.

Articulating Bresler's third level, integration addressing social functions (1995), Sarah reported that she used music as a tool for classroom management, but the music that she incorporated was simply a "bell ringer" to start class. Mary described music's social function with more depth, stating that "music helps with cooperative skills...collaborative skills, and

working together." She also cautioned, however, that she did not believe using music as a management tool is where educators should "hang our hats," indicating a preference for more substantial musical connections.

Finally, aligning with Bresler's fourth level, two teachers defined IME in ways that described co-equal relationships between disciplines. Probably as a function of her professional background and graduate-level work in music, Mary spoke passionately about deep connections between disciplines. She stated:

> I do think it is important for me to help the students make a connection…that there is a relationship between music and art, and music and social studies, and music and math, and music and English…because that's just the way the world is...each subject is not isolated, even though that's the way it's generally taught.

Eleanor also described a co-equal balance between disciplines, stating, "I can do music through my language arts and she [the music teacher] can do language arts through music."

In addition to examining teachers' stated and implied definitions of IME, we sought to observe evidence of Bresler's levels in their classroom practices. In some instances, teachers' definitions aligned with the teaching practices we observed, and in other cases, there were clear mismatches. Sarah's definition of IME and her teaching practices were closely aligned. She frequently referred to student motivation and the value she placed on creating a fun, engaging classroom atmosphere. Her use of music for these non-academic purposes in her observed lesson was obvious. Using our observation protocol, we rated her at the emerging level in two areas: in the authenticity of the relationship between music and science content, and in the balance of emphasis between subject areas. Eleanor's definitions of IME and her teaching practices, however, did not align. Her definitions of music centered in Bresler's subservient and affective

levels (1995), but her observed lessons demonstrated authentic connections between music and ELA. Of all the lessons we observed, she showed the most equal balance between music and non-music disciplines. She was the only teacher we rated as proficient in balancing disciplinary emphasis and in presenting an authentic interdisciplinary relationship. Mary enthusiastically expressed the importance of such an equal partnership between disciplines in her interview, stating, "I think it's important for the integration to work both ways." Looking for alignment between Mary's definitions and her practice, we sought evidence showing authentic relationships between the content areas in Mary's observed lessons. While we observed rich, substantial musical content in her lessons, the science and ELA content was presented more one-dimensionally. See Table 3 for all observation rating data.

Benefits of Integrated Music Education

When we analyzed the data, two categories of benefits emerged: curricular and instructional. The first category defined and described cross-curricular content while the second category described student engagement and critical thinking.

Curricular Benefits

The non-music teachers often described connections between disciplines such as ELA and music, or mathematics and music in terms of encouraging students to see an overall connection between subject areas. For example, Eleanor said:

> . . . They can see there's a connection between things. And I think that's the biggest factor for me. They understand that there is a connection between everything that we do. . . . If they can learn that, then their education will be a lot more beneficial to them. Anytime you can make a connection with children, that

> just broadens their horizons. . . . My four walls connect to somebody else's. So, integration of all subject areas is important.

In a parallel example, Mary expressed similar cross-curricular learning goals from a music-teaching perspective. She said:

> I am trying to reinforce what they are learning, or what they may learn in another class. And so for the students to get this information in two different classes, I think it's going to help them remember and they will be able to make better connections and be able to broaden their knowledge of the skill or content or whatever it is.

In some cases, participants spoke about the connections between music and another discipline that highlighted student learning in multiple subject areas. Eleanor said:

> She [Mary] will have kids write poems and set those to music, which is perfect because she will usually do that for sixth grade when we are studying poetry. She does that, too, and it just brings it all together.

Sarah shared how collaboration not only benefited student learning, but also benefited her ability to teach her content area. She said, "It enriches learning, [makes] more neural connections, more personal experience, [and] shared curriculum time [means] more curriculum time." In a similar vein, Mary's view of collaboration was that "It's important for the children to be well rounded and to understand that even though you're studying these individual classes, there is a relationship, and there is a connection between all of these subjects."

These teachers' accounts of music integration supporting their students' academic achievement and focusing on the importance of cross-curricular learning aligned with the findings of previous studies (Barrett, et al., 1997; Bresler, 1995; Burnaford, et al., 2013;

Cslovjecsek & Zulauf, 2018; Vaughan, 2008). During the classroom observations, however, we did not rate any lesson as demonstrating exemplary interdisciplinary instruction. This inconsistency between perception and practice relates to the obstacles and needs we observed and discuss later in this section.

Instructional Benefits

All participants regarded student engagement as an instructional benefit of IME. Mary said, "That was the most engaged that I have seen those kids. ...this is the most active my students have been since they've been back in the classroom [from remote learning]." Similarly, Eleanor stated that using music in her ELA classroom "gets them excited. So anytime they're excited, they're going to learn." Sarah discussed her reasoning behind her decision to incorporate a song writing project in her science class as "that engagement factor with the kids who are like, 'Science sucks, but I like music, so let's do it!'" She continued describing her students and classroom during this project:

> That was THE most engaged that I have seen them this school year. ...And I had a student in another class that actually emailed me his video from his mom's phone because his laptop didn't have a webcam. And it was just beautiful, I was about to cry watching it. So I got some engagement from students that have not otherwise been engaged this year.

Issues related to critical thinking emerged as a second instructional benefit. Sarah described the role of music integration in terms critical thinking as:

> Extremely valuable, even though I haven't practiced it a whole lot yet. Because the more you're crossing over [between subject areas and] making those neural connections, the more things go into the long term [memory]. So I would say

> [it's] extremely important, because the more crossovers you make, the more real-life applicable the results.

In a parallel statement, Mary said "I think it helps the kids develop their critical thinking skills. And that's very important, because we want our students to be able to think on their own." Mary continued this line of thought by stating:

> Because we do want to produce well rounded students, and students who can think. ...eventually, they will begin to make their own connections, to see that there is a relationship between music and English, and music and math, that they aren't separate classes. And I think that that will make a better student, a more thoughtful student, who thinks a little bit more critically about their education and learning in general.

The instructional benefits of IME discussed in this section most closely pertain to the disciplinary instructional dimension of our observation protocol. Considering these ratings, our classroom observations were inconsistent with some of the participant perceptions. In particular, we rated two lessons as proficient and two lessons as developing in terms of student engagement. In terms of critical thinking, we rated three lessons as exemplary or proficient and one lesson as developing (see Table 3). Consistent with our observations, participants also described multiple instructional benefits related to music integration that promoted critical thinking and student engagement in the classroom. These align with previous research and suggest a positive connection between critical thinking skills, student engagement in learning, and music integration (Barrett et al., 1997; Fowler, 2001; Irwin, et al., 2006; Mark et al., 2021; Montemer, 2020; Smithrim & Upitis, 2005).

Obstacles to Integrated Music Education

Four obstacles to IME emerged as deficits in teachers' experiences. Those were a lack of: teacher efficacy, time, professional development (PD), and administrative support. We identified these as impediments or challenges that the participants encountered in their experiences with IME.

Teacher Efficacy

We found a noticeable imbalance between music and non-music teacher roles and responsibilities. Perhaps because of their self-perceived lack of efficacy, the non-music teachers often expected the music teacher to initiate IME. They regarded the music teacher as a valuable colleague and IME resource, but they did not feel obligated to teach the music standards. This assumption created an unequal level of teacher responsibility, as the music teacher was more inclined or expected to teach the non-music standards. Eleanor, the middle school ELA teacher, explained her reliance on the music teacher at her school by saying:

> Thank God for [Mary] because she's the one who usually initiates the integration. When she just came to me, it was to work together, but I could not do it alone, or I wouldn't be very comfortable. I could do it, but I would have to do a lot of studying myself to do that.

The non-music teachers also strongly voiced their lack of confidence to use and teach music concepts and standards. For example, when asked about her comfort level regarding integrating music in her middle school science classroom, Sarah responded, "I say that I try. I'm not necessarily comfortable with it because I don't have, like, the knowledge base but I'll try anything once. So, as far as comfort, no - way out of my comfort zone." Collaboration with their colleagues was key in enhancing confidence among all participants. As Mary reported:

> Just [to] be able to have, I think, discussions with teachers of other content areas. . . . being able to talk with that person, and find out more about that particular concept and then as this person is talking to me or explaining it to me, then the wheels inside my head begin to start turning as to how I can include that information in the music lessons . . . to help make those, those real deep, deep connections.

Eleanor echoed the importance of collaboration in her classroom as a pathway to increase teacher efficacy by saying:

> . . . the collaboration part, someone with that knowledge. I mean, I know what I teach in social studies, so if I share that with the music teacher, then the music teacher says, "Oh well I have this," and so, just the idea that you can collaborate would be the most important key.

This obstacle of low teacher efficacy is directly related to the gap between the idea of quality arts integration and its actual practice in schools, as reported by Hallmark (2012).

Time

All participants indicated that insufficient time for planning, collaboration, and instruction was an obstacle to IME. For example, Sarah said:

> With me being eighth-grade science, it's a matter of time. I'm a big environmental nerd so I could spend the entire year on my environmental science unit. So, it's hard to find the time to maybe be like, "Okay, music needs to go in here, art needs to go in, dance needs to go in here." [I] have a hard time prioritizing those things because I am so environmentally passionate. It's time.

Similarly, Mary stated, “Time. I could have all the time in the world and still need more time.” Eleanor also described her lack of classroom time to teach everything she needed to cover with her students and how she struggled to find any instructional time remaining to integrate music:

> So it's selfish, selfish on my part I’m sure, but I don't know that I feel responsible for [IME] because it’s not what I teach. That's how the mentality is. I’d say it's in all grades but especially in middle school because we are blocked. That's your block of time. That’s what you have to do.

When discussing IME, all participants frequently mentioned the lack of instructional time and common planning time with other teachers. They stated that collaborative IME planning was only practical before or after school. Without the administrative expectation to do so, most teachers reported that they did not plan collaboratively and that contributed to their feelings of professional isolation in their classrooms (Munroe, 2015).

Professional Development

A third obstacle to delivering quality IME at the middle-school level was the lack of professional development (PD). All the participants had very little experience with or memory of undergraduate-level arts integration requirements. Mary said, “I can't even remember that far back. But I really did not have any specific classes on integrating. And perhaps something may have been mentioned in a methods class, but I really do not remember.” This is an important area for improvement to benefit pre-service teachers, as Eleanor recalled her college class requirements:

> When I was in college, of course, because I'm an elementary major, we worked with the integration of music into the curriculum but, you know...since I've been out of college, none. Unfortunately, it's not a focus in our school system.

The ELA and science teachers in our study expressed a lack of comfort with music and a lack of resources for IME. Incorporating hands-on IME experiences during pre-service teacher education courses for future elementary and secondary teachers would increase familiarity and confidence in this pedagogical approach. If IME preparation was a standard part of the undergraduate experience, teachers would feel more prepared to handle these learning opportunities. If colleges and universities model IME successfully for their students, they could promote this instructional approach among future educators.

Participants indicated that successful implementation of practical PD for veteran music and non-music teachers should include providing lesson plan ideas and sharing links to online resources. Facilitation of IME technology and ready-made lessons was a need that middle-school teachers expressed to teach these lessons. Sarah mentioned, "If someone were to walk up to me and be like, 'Hey, here's a lesson plan that incorporates music and how classical music affects the growth of plants,' I feel like, 'Yeah!' So, it's a lack of resources." Providing teachers with a set of curated IME plans would address teachers' perceived lack of time to find or create their own IME lessons. Mary explained her process for integration in her music classroom:

> I do a lot of my own research. And I have studied the standard courses of study in other subjects and try to make that connection and how I could help reinforce those standards or objectives in the music class. And then I speak with teachers of those different content areas and ask about resources that they use.

Offering targeted PD opportunities for teachers to earn renewal credit and enhance their understanding of IME through courses and workshops provides music and non-music teachers time to engage and plan with curriculum that might be outside of their regular purview while also enhancing collaboration (Bresler, 2002; Strand, 2006). Giving

teachers such safe spaces to grow their self-efficacy and to familiarize themselves with additional learning standards allows them to become more comfortable with IME pedagogy (Munroe, 2015). Eleanor echoed this idea of common collaboration, stating that "just everybody getting on the same page, would be the best thing."

Administrative Support

The final obstacle to IME was the lack of support. Having school administrators' support for IME was seen as a crucial step for increasing learning opportunities for students. Advocating for IME would aid non-music teachers who report teaching an isolated subject or teaching to standardized tests. Sarah described her experiences by saying:

> There's nothing. We have no common planning with our colleagues at our school. No one's really willing to stay after school for anything, ever. There's not really a big push for integration at all, or anything. Like, every classroom is its own little island, and what you do in your room is what you do.

Eleanor agreed by stating:

> We do not have a common planning with the music teacher. We have common plannings [*sic*] with our grade level. And so, when I do not have children, it's when they are with the music teacher... we'd have to struggle to plan. We'd have to plan after school, not during school hours. So I would say there's not really a lot of, I don't know that our district won't recognize that it can be done, but it's not convenient for us to plan.

Participants expressed the need for PD support, at both the school and district levels. Mary expressed her views about her administration's and school district's lack of support by adding:

> We often hear from administrators and central offices, "The arts are important.

> Music is important. The arts are important." But many times, in my opinion, it sounds more like lip service. Instead of making schedules that are beneficial to music teachers and other arts teachers. ...It [IME] is just not seen as important as math and English. Yes. Even though we hear the sound bites, "The arts are important." Yeah, actions sometimes are different from words.

In addition, standardized testing expectations were a noticeable and often-cited deterrent against the use of IME instruction. Sarah questioned her priorities by asking, "Do I have the time to take three weeks on this integrated unit? …[Science] is being tested, so I have to hit all the science content." Sarah's comment highlighted the heightened level of focus on standardized test scores expected of non-music teachers.

Taken together, these four obstacles to IME are consistent with the research literature characterizing IME as being limited and of low quality (e.g., NCES, 2012). They also confirm observation-based findings in previous studies, indicating that the majority of arts integration activities align with subservient level, while co-equal are least common (Bresler, 2002; O'Keefe et al., 2016; Wiggins, 2001).

Supports for IME

Two supports for IME emerged as targeted PD and teacher communication. While participants indicated that they needed PD to support IME, they also reported that they actually practiced effective communication with their colleagues to support IME. Depending on the specific interactions, teacher communication sometimes supported and other times impeded IME. Our discussion here focuses on examples of teacher communication that encouraged IME practices.

Mary articulated the need for targeted PD to support IME by commenting on the

interdisciplinary teaching skills and confidence levels of her colleagues. She said, “They [the non-music teachers] just don't feel comfortable in their knowledge of music, and the other arts, in order to have effective integration.” Mary offered more detail by referencing an example of subservient integration from her own research:

> Many times we arts educators...are asked, “Oh we are studying frogs, can you sing a song about frogs?” The results of my study found that a lot of teachers...don't understand music enough to feel confident with integrating music into their lessons.

Taking a more assertive tone, Mary advocated for the benefits of PD to reach students, administrators, and other teachers. She said:

> We have to educate ourselves, through our own PD and professional development, so that we can educate our students and educate our colleagues. I have kind of gotten my principal to the point that he does not say that music is not core.

Teacher communication was the other major support for IME instruction. All three participants reported that IME pedagogy benefitted from professional collaborations and, even on a basic level, increased their professional interactions. For example, when asked about preparing and delivering IME lessons, Sarah said, “Co-teaching time with the music teacher” would be the most helpful. Eleanor described collaboration as a teacher bond to support IME by saying, “I think that's where she [Mary] and I agree and why we have a bond because we can see that that can happen.” From the music teaching perspective, Mary described collaborating with Eleanor in terms of professional conversations and sharing resources. Even when limited to a superficial level, those communications were effective. Mary reported that:

> I did communicate with the English language arts teacher [Eleanor]...just to ask her what they were doing...she sent me a few quotes, she sent me the summary. And I shared with her the idea that I had. Outside of that, there wasn't any other discussion. I don't know if I consider that true collaboration or not. It could be on a small level. Just the fact that I guess, she was sharing some of those resources.

Summary

The emergent themes and observation ratings addressed our two research questions: (a) what were participants' perceptions of IME; and (b) how did participants' observed instructional practices demonstrate IME quality (i.e. disciplinary and interdisciplinary instruction)? Our findings described the variety of ways participants defined IME in both procedural and practical terms, aligning with all four levels that Bresler previously established (1995). We also found themes that framed participant understanding of and engagement with IME in terms of its benefits, related obstacles, and needed supports. These findings are consistent with our earlier research at the elementary level (Johnson et al., 2021) and extend this line of research on IME perceptions and practices.

In addressing the first research question, we noted how participants included examples of all four IME levels when defining this type of pedagogy: subservient, affective, social, and co-equal (Bresler, 1995). Most of the interview data emphasized lower-level IME, consistent with the related literature (Abril & Gault, 2006). When describing the benefits of IME, participants described either curricular or instructional benefits: advantages that focused on either learning in specific subjects or applied broadly to multiple disciplines. The theme of obstacles to IME also factored into the first research question, with four distinct deficits of teacher efficacy, time, PD, and administrative support. PD and communication emerged as obstacles to IME when they were

missing, but as IME supports when they were present, i.e., when targeted PD was provided and when teacher communication was effective. These two aspects of the interview data indicated the value of intentional planning and collaboration, and that high-quality IME requires a focus on both.

In addressing the second research question, we found several inconsistencies between teachers' perceptions and practices of IME. For example, while some interview responses described deep interdisciplinary connections, our observations of those teachers' actual lessons did not match their defined IME level. Similarly, we noticed how participants' actual practice of realizing instructional benefits by using IME was not as effective as their aspirations, which is consistent with related literature (Giles & Frego, 2004; O'Keefe et al., 2016). These findings also reinforce the assertion that actual IME practice is less robust than the founding pedagogical ideals (Hallmark, 2012).

Implications

This study has numerous implications for a broad audience of music and non-music teachers, at the pre-service and in-service levels, along with teacher-educators and other PD leaders. Those implications include the need for a clear and consistent definition of IME with curricular connections to music and non-music disciplines. By clarifying what IME is and its best practices from the research data, teachers and teacher-educators can better advance this cross-curricular pedagogy. They can also explain and advocate for IME with administrators and other teachers.

For music teachers, implications of this study include promoting more balanced responsibilities with their non-music teacher colleagues and practicing IME more often at the co-equal level. Although lower levels of IME contribute to student learning in some meaningful

ways (Giles & Frego, 2004; Hallmark, 2012), increasing the rigor of IME pedagogy will enhance its reputation and recognition among other teachers and administrators. Elevating IME practices will also highlight the Connecting strand as one of the four NCAS process standards (National Coalition for Core Arts Standards, 2015). Along with Creating, Performing, and Responding, music teachers can justify and extend the relationship of their music curricula to other subjects for more meaningful and engaging instruction (Shuler et al., 2014). Especially given the notable increase in student engagement shown in this study, implications for middle-school learners in terms of attitude and future academic success may have a particularly important impact (Mark et al., 2021).

For non-music teachers, implications include finding ways to make music and lead music-related activities with their students. Communicating and cooperating with their music-teacher colleagues are important first steps, along with seeking targeted PD opportunities and related resources to increase confidence levels with group singing, writing parody songs, and making simple instruments. By doing so, they will shift music's place in their classrooms from an unrelated "special" subject to an integrated activity with meaningful and clearly defined connections. Incorporating such IME design has resulted in greater student engagement (Burton et al., 2000; Moss et al., 2018), along with increased academic test scores and other less quantitative measures (Johnson & Howell, 2009; Noblit et al., 2000; Noblit et al., 2009). For both music and non-music teachers, results of this study may provide motivation for more frequent and more substantive teacher collaborations. Through focused and collegial conversations, all teachers could address professional isolation and demonstrate more effective, engaging instruction (Bresler, 2002; Della Pietra, 2010; Munroe, 2015; O'Keefe et al., 2016; Strand, 2006). Related outcomes could include advocacy for enhanced support from

administrators who recognize and value this type of pedagogy. Their support could directly address the obstacles to IME (e.g., lack of time and PD), as articulated in this study and our previous research (Johnson et al., 2021).

One overarching implication is bridging the gap between theory and practice, specifically regarding IME. Simply put, applying IME in effective, co-equal instruction is a challenge and requires a particular skill set. Implementing high-quality IME also necessitates relevant, practical, and repeated IME experiences to realize substantial and sustained gains in student academic achievement. Implications for PD leaders are addressing this gap with targeted activities and cooperative lesson planning. Implications for teacher-educators include transforming introductory arts education classes from passive survey courses to active, practical experiences that demonstrate the potential of IME to pre-service students (Battersby & Cave, 2014). By beginning with pre-service teachers, teacher-educators could foster an inclusive attitude toward the curriculum and promote a more holistic sense of education in general.

In future research, investigators could explore the efficacy and prevalence of integrated arts education courses at the collegiate level. Understanding more about this factor in teacher preparation could allow researchers to address obstacles and promote the advantages of IME pedagogy. From that viewpoint, PD leaders and teacher-educators may effectively address the obstacles to facilitate more integrated learning experiences. Although not a simple or quick pedagogical shift, adopting IME as a teaching approach offers a range of curricular and instructional advantages for the benefit of both music and non-music teachers, as well as their students.

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Table 1

Participant Profiles

Participant	Teaching Area	Teaching Experience	Degrees and Certifications	Interdisciplinary Preparation
Mary	6th-8th grade Music	27 years	BME, MEd, PhD Music Education, Orff Level III Certification, World Music Drumming Certification, Board Certified Music Therapist	PD[a] sessions, Graduate courses
Eleanor	6th grade English Language Arts (ELA)	28 years	BS in Early Childhood, ELA Certification (6th-8th grade)	Undergraduate course
Sarah	8th grade Science	2 years	BA in Middle Grade Education, concentration in Science and Social Studies	PD sessions

[a] Professional Development (PD)

Table 2

Findings

Themes	Sub-themes	
Defining IME	Inexact terminology usage	
	A range of integration	
Benefits of IME	Curricular	Instructional
	Cross-curricular learning	Student engagement
		Critical thinking
Obstacles to IME	Teacher efficacy	
	Time	
	Professional development	
	Administrative support	
Supports for IME	Targeted professional development	
	Teacher communication	

Table 3

Observation Ratings

	Mary 6th grade Music	Mary 8th grade Music	Eleanor 6th grade ELA	Sarah 8th grade Science
Interdisciplinary Instruction				
Disciplinary standards	D	P	D	Em
Authentic relationships	D	D	P	Em
Balance of emphasis	Em	Em	P	Em
Disciplinary Instruction				
Disciplinary standards	P	Ex	P	P
Discipline-specific knowledge	P	Ex	P	P
Student engagement	P	P	D	D
Critical thinking/collaboration	P	Ex	Ex	D
Classroom Climate/Culture				
Teacher/student relationship	P	Ex	P	P
Teacher communication	P	Ex	Ex	P
Diversity advocacy	P	P	P	D
Facilitating Learning				
Variety of demonstrations	P	P	P	P
Quality of assessment	D	P	N/A	P
Alignment	N/A	D	D	D

Note. Em = *emerging*; D = *developing*; P = *proficient*; Ex = *exemplary*.

Appendix A

Interview Questions

Demographics/Education/Background:

1. Name, position, grade(s)
2. School, district
3. How long have you been teaching in your current position? Overall?
4. What degrees/certifications do you hold?
5. What do you consider to be the definition of music integration?
6. How long have you been integrating music?
7. How often do you integrate music?
8. What percentage of your teaching involves music integration?
9. What training have you received related to music integration? Undergraduate courses? Professional development? Other?
10. Rate your own comfort/ability/knowledge regarding music integration lessons.

Lesson/Observation:

1. Talk me through your lesson plan.
2. Was this lesson an extension of the previous lesson?
3. What prior knowledge did students have before today's lesson?
4. How well do you think it went?
5. How would you describe the way/s you integrated music (or other content area) in this lesson?
6. What changes would you make to today's lesson if you were going to teach it again?
7. Did the students meet your goals/objectives? How do you know?
8. Describe any collaborative preparation for this lesson you had with a teacher/colleague.
9. Are you addressing music and classroom standards or just your specific discipline? Why? How?

   Classroom teacher—

   10a. How comfortable are you teaching music skills/concepts in your classroom?

   10b. Do you feel responsible for meeting music objectives in your classroom?

   10c. Should music teachers integrate content from other subjects with music? How often?

   Music teacher—

   10d. How comfortable are you teaching skills/concepts of other disciplines in your classroom?

   10e. Do you feel responsible for meeting objective in other disciplines in your classroom?

   10f. Should classroom teachers integrate music content with other subjects? How often?

Teacher Perceptions:

1. What structures does your district or school have in place to support music integration?
2. What factors impact your decisions to integrate music with other subjects?
3. What factors impact your ability to integrate music with other subjects?
4. What would be most helpful to you in <u>preparing</u> music integration lessons?
5. What would be most helpful to you in <u>delivering</u> music integration lessons?

Appendix B

Observation Protocol

Domains	Dimensions	Evidence Observed or Collected (open-ended response)
Emerging (not demonstrated)	CLASSROOM CLIMATE/CULTURE 1. Students do not have a positive relationship with the teacher. 2. The teachers does not communicate effectively. 3. The teacher does not embrace diversity in the class or school community. DISCIPLINARY INSTRUCTION 1. The teacher usually does not align discipline-specific instruction to meet grade-level standards. 2. The teacher does not demonstrate their discipline-specific knowledge to support their instruction. 3. The teacher does not make instruction relevant to students. 4. The teacher does not assist students in developing skills in teamwork, critical-thinking, or other higher-order thinking. INTERDISCIPLINARY INSTRUCTION 1. The teacher's instruction does not lead students to show evidence that they meet standards in either discipline. 2. The teacher does not demonstrate the use of authentic relationships between disciplines (lack of valid connection). 3. The teacher does not demonstrate a balance of emphasis between the disciplines in the lesson (understandings in music and another discipline are not equally valued and recognized. FACILITATING LEARNING 1. The teacher usually does not use a variety of methods or collect evidence of student learning in different formats. 2. The teacher usually does not analyze student learning.	

	3. The teacher does not use appropriate objectives or assessments for the lesson.	
Developing (somewhat demonstrated)	CLASSROOM CLIMATE/CULTURE 1. Students generally have a positive and nurturing relationship with the teacher. 2. The teacher sometimes communicates effectively. 3. The teacher somewhat embraces diversity in the class and/or school community. DISCIPLINARY INSTRUCTION 1. The teacher somewhat aligns discipline-specific instruction to meet grade-level standards. 2. The teacher somewhat demonstrates their discipline-specific knowledge to support their instruction. 3. The teacher somewhat makes instruction relevant to students. 4. The teacher somewhat assists students in developing skills in collaborative teamwork, critical-thinking, and/or other higher-order thinking. INTERDISCIPLINARY INSTRUCTION 1. The teacher's instruction leads students to show evidence that they meet standards in only one discipline. 2. The teacher marginally demonstrates the use of authentic relationships between disciplines (minimally valid connection). 3. The teacher somewhat demonstrates a balance of emphasis between disciplines in the lesson (understandings in music and another discipline and somewhat equally valued and recognized). FACILITATING LEARNING 1. The teacher sometimes uses a variety of methods or collects evidence in different formats to assess students learning. 2. The teacher sometimes analyzes students learning. 3. The teacher uses somewhat appropriately aligned objectives and assessments for the lesson.	
Proficient (effectively demonstrated)	CLASSROOM CLIMATE/CULTURE 1. Each student has a positive and nurturing relationship with the teacher. 2. The teacher communicates effectively, 3. The teacher regularly embraces diversity in the class and school community.	

	DISCIPLINARY INSTRUCTION 1. The teacher regularly aligns discipline-specific instruction to meet grade-level standards. 2. The teacher regularly demonstrates their discipline-specific knowledge to support their instruction. 3. The teacher regularly makes instruction relevant to students. 4. The teacher regularly assists students in developing skills in collaborative teamwork, critical-thinking, and other higher-order thinking. INTERDISCIPLINARY INSTRUCTION 1. The teachers' instruction leads students to show evidence that they meet standards in each integrated discipline. 2. The teacher demonstrates the use of authentic relationships between disciplines (valid connection). 3. The teacher effectively demonstrates a balance of emphasis between the disciplines in the lesson (understandings in music and another discipline are equally valued and recognized). FACILITATING LEARNING 1. The teacher uses a variety of methods or collects evidence in different formats to assess student learning 2. The teacher analyzes student learning. 3. The teacher uses appropriately aligned objectives and assessments for the lesson.	
Exemplary (meritoriously demonstrated)	CLASSROOM CLIMATE/CULTURE 1. Each student has a positive and nurturing relationship with the teacher as an adult who cares. 2. The teacher consistently communicates effectively. 3. The teacher consistently embraces diversity in the class, school community, and the world. DISCIPLINARY INSTRUCTION 1. The teacher effectively aligns all discipline-specific instruction to meet grade-level standards. 2. The teacher effectively demonstrates their discipline-specific knowledge to support their instruction. 3. The teacher effectively makes all instruction relevant to students. 4. The teacher effectively assists students in developing skills in collaborative teamwork, critical-thinking, and other higher-order thinking	

	INTERDISCIPLINARY INSTRUCTION 1. The teacher's instruction leads students to show evidence that they meet standards in each integrated discipline equally. 2. The teacher highlights authentic relationships between disciplines (exceptional connection). 3. The teacher meritoriously demonstrates a balance of emphasis between the disciplines in the lesson (understandings in music and another discipline are highlighted and promoted). FACILITATING LEARNING 1. The teacher effectively uses a variety of methods and collects evidence in different formats to assess student learning. 2. The teacher effectively analyzes student learning. 3. The teacher effectively uses appropriately aligned objectives and assessments for the lesson.	

Perceptions of Music Teachers Regarding Support, Professional Learning Communities, and Maintaining Musicianship in Rural Locales

Crystal Sieger[10]

Abstract

Developing professional learning communities in remote areas can be difficult but is often more necessary as music teachers in these areas tend to feel alone in their endeavors. The purpose of this study was to examine the perspectives of rural school music teachers in a remote western US region as they share their perceptions of professional and community support, and report on positive and negative experiences regarding involvement in communities of practice as music teachers. Data were collected through a qualitative, multiple case study approach. Incorporating purposeful, criterion-based sampling, participants were located within the bounded system of K-12 school districts in locations within a Rocky Mountain State identified as having 1500 or fewer residents. Findings centered upon participant relationships and interactions with others, their feelings of support from administration and community, their primary needs and hopes for improving their professional development, and their opportunities to stay musical and maintain practice.

Keywords: rural music education, music teacher identity, music teacher education, professional learning communities, music making

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Introduction

Researchers have drawn attention to the development of professional identities as music teachers in recent years. As individuals transition from music students to music teachers, they must work to balance their musical and teacher selves. As they then progress into the teaching environment, the teacher identity takes a prominent role and thus the educator must actively engage in activities that sustain the musical self. Supportive music teacher colleagues and opportunities to perform in community ensembles may aid this endeavor.

Of particular interest to researchers in the United States is the development and maintenance of a sense of musical self in music teachers who work in rural locations, as 97% of the country is considered rural, and 19.3% of the US population resides within rural boundaries (Ratcliffe, Bird, Holder, & Fields, 2016). For music teachers working in these areas, feelings of self-worth may be affected by the amount of support they receive and by the isolation they may experience (Bates, 2011; Burkett, 2011; Isbell, 2005). These teachers may also find it difficult to maintain their personal musicianship while creating musical experiences that they, and their students, consider meaningful.

According to the United Stated Census Bureau, "'rural' encompasses all population, housing, and territory not included within an urban area" (United States Census Bureau, n.d.). The Bureau further defines "urban" in two ways, "areas" of 50,000 or more people, or "clusters" of at least 2,500 but fewer than 50,000 people. While this presents an operational definition of "rural," researchers have also suggested definitions with respect to theoretical perspectives, including social-constructivist and place-based theories. Koziol et al. (2015) described the theoretical perspectives of rural as place-based—typically demographic or spatial, but also political-economic or socio-cultural—or social-constructivist, which they described as "non-

tangible" or as relating to identity construction (p. 3). Brook (2013) emphasized the relationship between individuals and their physical environment—place—and the importance of music education to enhance that relationship while also allowing opportunities for students to see their place in juxtaposition to others. Spring (2013) also described the influence of "place" and considered the multiple interpretations as "geographical, demographical, social, cultural, historical, or emotional construct[s]" (p. 79).

The purpose of this study was to investigate the support and resources available to rural music teachers and uncover strategies they employ to maintain their musical selves, while developing their music teacher identity. My initial intent when approaching this research was rooted in the isolation members of these communities' experience, which aligns more immediately to place-based characteristics. However, as participants revealed their means for communicating and interacting with students, colleagues, and community members, social influences did surface.

Review of Literature

Support Within the Rural Environment

Researchers have recently focused on several poignant topics relevant to rural education and specifically to music education. First, the presence of the arts in rural communities can have a positive impact on both local inhabitants and non-local visitors. Off (2017) outlined the benefits of a musical presence as she examined the role of music in rural environments and its ability to strengthen the community. She noted that artists who visit such communities could learn and grow from the rural experience as they simultaneously express their unique musical perspective. Off additionally presented suggestions for building music programs that align with the goals of the community.

Music teachers may also seek support within their content and with each other through development of communities of music practice. Pellegrino (2014) examined the music making experiences of four string teachers to reveal influences of past music making, to uncover the relationships between their present outside-of-school music making and their teaching practices, and to share the satisfaction such experiences bring to their working lives. The researcher found that past music making influenced their desires to teach, methods for teaching, and their hopes for similar positive experiences for the students. Participants' present music making supported professional growth and enthusiasm for teaching, enhanced classroom modeling and problem-solving skills, and allowed them to remain connected to students' music making experiences. These important points are reflected in the current study.

Professional Development and Professional Learning Communities

Researchers have routinely explored professional development concepts, both in metropolitan and rural settings, and within and outside of music. Due to logistical concerns such as distance and other travel constraints, the rural environment poses a particular obstacle to those seeking support and resources through professional development opportunities. Stanley, Snell, and Edgar (2014) outlined professional development characteristics specifically important for music teachers, suggesting that such opportunities be music-specific, sustained over time, reflective in nature, and include mentoring and collaboration. Regarding rural music professional development, researchers have emphasized the need for professional development to include building networks of supportive colleagues and relationships with university and community music organizations (Burkett, 2011; Maltas, 2004).

Professional learning communities (PLCs) provide an opportunity for specialized forms of collaborative professional development. In their review of research Vescio, Ross, and Adams

(2008) outlined the effects of PLCs on teaching practices, school culture, and student achievement, finding that teaching becomes more student-centered, and students benefit from their teachers' collaborative interactions. In music education, Battersby and Verdi (2015) found similar benefits for music teachers participating in PLCs, adding that online opportunities help to solve some of the inherent problems of music teacher collaboration across sites. Regarding PLCs in rural contexts, researchers have also used technology-based resources to enhance collaborative actions (Bernard, Weiss, & Abeles, 2018; McLean, Dixon, and Verenikina, 2014), and in developing professional identities (Mentis et al., 2016).

The incorporation of PLCs into music programs can serve as a means for teachers to share perceptions of teaching practices and allow for opportunities to express emotions of both enthusiasm and frustration. Sindberg (2016) examined the use of PLCs with music teachers who had adopted the Comprehensive Musicianship through Performance (CMP) model, which encourages students to think beyond the music they perform to include more in-depth understandings. While participants reported positive collaborative interactions and enjoyed sharing with their PLC members, they also experienced negative expressions of anxiety and guilt regarding the implementation of the model and its tendency to divert attention from performance components. The researcher focused primarily on the incorporation of the CMP model, with the PLC work serving as the catalyst for uncovering shared perceptions.

Development of Musical Self

The way rural music teachers develop a sense of musical self is influenced by several factors unique to the environment. Often, rural music teachers must adapt to nontraditional situations and take on multiple, varied roles, including teaching outside their area of expertise (Bates, 2011; Goodnough & Mulcahy, 2011; Isbell, 2005). Furthermore, they may also suffer

from unfair comparisons to larger school music programs, which can affect their self-efficacy (Bates, 2011). The marginalized populations often residing in rural locales and the isolation rural music teachers experience may also affect their identity development, while also impacting the schools' ability to recruit adequately prepared teachers (Azano & Stewart, 2015; Miller, 2012).

The effect of the developing musical identity on one's teaching philosophy is also worthy of consideration. Rural teachers may also find it a challenge to develop a teaching philosophy that aligns with both their desired intentions and their place. Prest (2013) suggested that rural music teachers might find it difficult to adopt aesthetic teaching philosophies based on their environment and available resources. Furthermore, the ideals presented in traditional music teacher preparation programs might be substituted with more pragmatic approaches to music teaching that better align with the circumstances found in each unique rural setting. Brook (2013) noted the importance of relationship building in rural settings, both with the place and the people. This social component can additionally impact the music teacher's views toward teaching in ways that are relevant to school and community stakeholders.

Developing communities of practice in remote areas can be difficult, but the need is more apparent as music teachers in these areas tend to feel alone in their endeavors. While researchers have placed increased attention on the distinct issues surrounding rural education (e. g. Bates, 2011; Isbell, 2005; Prest, 2013), only recently have they begun to investigate and provide insight into music education in rural regions. The purpose of this study was to examine the perspectives of rural school music teachers in a remote western US region as they shared their perceptions of professional, community, and personal support and reported on positive and negative experiences regarding involvement in communities of practice as music teachers. I specifically hoped to see how rural music teachers were affected by the isolation they regularly experience,

and to see how they can maintain a musical self while simultaneously adjusting to their rural teaching environment. Research questions were: (a) How do music teachers in rural locations perceive the interaction they have with other music teachers? (b) How do music teachers in rural locations perceive the support they receive from other members of their community, including school administrators? (c) How do rural music teachers stay "musical," and how do they see this as affecting their professional identity?

Methodology

This study was subjected to IRB approval and qualified for exempt review, approved as one that would not involve more than minimal risk to participants.

Data Collection

Data were collected through a qualitative survey study design. Qualitative surveys allow participants to provide their unique perspective in their own words, while presenting a fixed set of questions for all (Terry & Braun, 2017). Incorporating purposeful, criterion-based sampling, participants were located within the bounded system of K-12 school districts in locations within a Rocky Mountain State identified as having less than 1,500 residents (Merriam & Tisdell, 2016). While the operational definition of "rural" is considered fewer than 2,500 residents, I chose to examine smaller communities because in this region, the schools in communities with more than 1,500 residents tend not to be considered "rural schools." Because they are larger, school districts in these communities usually provide more amenities for their teachers and students, and have full teaching faculty, including multiple music teachers within a building or immediate area. My hope was to identify music teachers who were isolated in the truest sense of the word, and thus chose the smaller population as a boundary.

Participants

Potential participants were identified by first determining the eligible communities across the state. This was achieved through examination of online sources, in conjunction with the state's music educator website. Once identified, potential participants were contacted via an online survey program, where, if they chose to participate, they were led to a survey including demographic information and a series of open-ended questions (see Appendix A). The survey was sent to 51 teachers from towns identified as having 1,500 or fewer residents, and 16 chose to initially participate. One participant chose to not to complete the full survey, leaving 15 participants—a 29% return rate. Those who completed the survey were then sent additional follow-up questions to provide further clarification (see Appendices B and C).

The participants ranged in experience from four to 28 years, with an average of 16.2 years of experience. There were seven participants with more than 20 years of experience. Community populations ranged from 181 to 1,503, with an average of 567.5 residents. Two teachers (participants 3and 9) worked in the same community, while another teacher (participant 11) worked in two separate rural locations as an itinerant music teacher. Participants represented eleven separate school districts; three sets of teachers worked in the same district (participants 1 and 7; participants 2, 8, and 12; and participants 3 and 9).

Researcher Lens

I grew up on a farm in the rural Midwest. I lived in what is known as Amish Country, named after the extensive Amish population in the area, members of a strict Mennonite sect that established major settlements in Pennsylvania, Ohio, and elsewhere in North America in the mid-1700s that still exist in contemporary society. The Amish culture permeates this region; Amish buggies are a common sight, as are hitching posts at businesses and farming traditions such as binding wheat and other grains into sheaves. My hometown was about the same size as

some of those described in this study, but larger metropolitan areas were located within an easily driven distance. That detail outlines a compelling difference between my former and newly acquired rural perspectives.

When I arrived in my new home state, I encountered a very different kind of "rural." Tiny towns separated by vastly open high plains for many miles became the new rural for me. The largest metropolitan community in the entire state is home to approximately 63,000 residents, a vast contrast to the region in which I had grown up, where several hundred thousand residents could be found within a 25-miles radius. Thus, I have been redefining my conceptualization of rural, and in doing so simultaneously recognize my subjectivity as a researcher, as suggested by Peshkin (1988).

Analysis

I utilized open and axial coding, and inductive and comparative analysis strategies to identify emergent themes (Merriam & Tisdell, 2016). Additionally, I provided two sets of follow-up questions to each participant to clarify points from their original responses. Trustworthiness measures included respondent validation, reflexivity, and peer review/examination (Merriam & Tisdell, 2016). The participants themselves and colleagues familiar with research were asked to provide feedback related to the initial findings to help ensure internal validity, along with the researcher lens.

Discussion of Emergent Themes

A descriptive overview of findings related to the research questions illustrates most participants reported having opportunities to communicate with other music teachers at least monthly. However, only a few responded that they could meet in person with other teachers more frequently than monthly. Those who reported accordingly were located within districts

employing more than one music teacher. Two-thirds of participants regarded their support from administrators as positive, and similarly, two-thirds reported positive support from other community members. However, it should be noted that only two participants reported negative support from both administration and community. Regarding the third research question, most participants did have opportunities to express themselves musically outside of their classroom environment.

After completing within- and cross-case analyses, the following themes were identified: Professional Development, Support, Desires, and Music Making. Participants shared perspectives primarily centered upon their relationships and interactions with others, their feelings of support from administration and community, their primary needs and hopes for improving their professional development, and their opportunities to stay musical and maintain practice.

Professional Development

All participants explained their degree of interaction with other music teachers and outlined the topics of discussion that arose when they found opportunities to communicate, either electronically, via phone, or in person, as forms of unstructured professional development (PD). Naturally, the most common form of communication with teachers from any distance was through email. As Participant 15 stated, “I often network with other teachers across the state, mostly via email” (initial survey response). While most participants described curriculum and instruction as primary topics for discussion, Participant 16 explained, “We discuss solutions to challenging parent/community situations, student achievement, social/emotional issues with students, and creative process frameworks for programming music within non-traditional ensembles” (initial survey response).

Musical PD was primarily limited to attendance at the state music educators conference, which most agreed they made significant efforts to attend yearly if possible. Some participants reported attending other larger-scale conferences such as those sponsored by the American Choral Directors Association (ACDA) or the American String Teachers Association (ASTA), and a few mentioned attending workshops specific to their area of expertise. Attendance was not universal among participants, and often financial shortfalls proved a deterrent. Participant 7 explained that her ability to attend was hampered by the local, non-music-related PD when asked how often she communicated with teachers outside her location: “Hardly ever, because I am required to attend PD for the core subjects I teach. If I want to attend PD for music, such as All State or All Northwest, I have to take personal time and pay for it myself” (initial survey response). Indeed, several participants described local PD as irrelevant to music content, including Participant 14, who stated, “School building PD is regular but rarely has anything to do with music” (follow-up #1 survey response).

Some participants did recognize their interactions with other music teachers as a means for improving upon their own teaching practice. Participant 16 shared the following about her PD experiences:

> "Professional Development" in a school setting tends to involve worksheets and esoteric/meandering conversations about student learning which don't stir anything in my soul or brain. I grow the most as a teacher when I observe others teach (for better or worse) and assimilate their material. On the flip side, having someone watch my teaching can lead to some of the best and most progressive learning. (Follow-up #1 survey response)

Likewise, Participant 9 explained how seeking help from other serves to bring life into her teaching, stating:

> I might be looking for a certain song or wondering how to teach a certain skill. Sometimes I feel like I need to refresh how I am teaching so I might ask for a different way to teach something or just ask some ideas of things they might do in their classrooms so that I might be inspired to teach it in mine. (Initial survey response)

Support

In general, a majority of participants felt supported by their administration, which included school principals, superintendents, coordinators and others working in a capacity considered "official." Some participants, however, felt that perhaps their administrators were being insincere or less understanding of the workings of the music program. Participant 4 labeled administrative support as "great 'lip service,'" (initial survey response) while Participant 11 replied regarding his perception of support, "Fine. They show up to everything, buy me what I need, and stay out of my classroom. None have a musical background [and] are reluctant to step into my realm" (initial survey response). Participant 6 reported no support from her principal: "We don't go there. I guess she leaves it up to me to figure out" (initial survey response).

Most participants also described community support as positive. As Participant 15 explained, "Our very small community is very supportive, both with time and with finances" (initial survey response). However, several participants described needing to stand up for their position as a viable program at the school, as students in rural schools tend to be involved in many different clubs and activities, including sports. "In the country, music is seen as a luxury rather than an integral part of education," revealed Participant 14 (initial survey response). Similarly, Participant 9 complained:

> The community is willing to support if, again, it doesn't interfere with sports. We can't fund raise or anything like that because sports is given first shot and the community is so small they feel like they are getting asked to donate all the time. Music is definitely at the end of the food chain. (Initial survey response)

Participant 3 agreed:

> I know parents and community members are appreciative of what I do, but I'm not sure too many of them care. In my community, sport is the predominant activity that parents support most. I have difficulty getting parents to participate in our activities or helping chaperone trips. (Initial survey response)

Participant 16 pointed out that the reasons for support can vary but it remains important for administrators to remember why music is necessary for students, and for them to communicate that to the surrounding community:

> In my experiences, most administrators offer what I call "passive support." Often, he/she will offer a quip about the benefits of music toward mathematical learning or the improvement of test scores. Real, true support happens when an administrator trusts the soundness of the creative process in such a way as to demonstrate to parents, community, and staff, the importance of musicianship. (Initial survey response)

An additional form of support may be acquired prior to music teachers' entering the rural environment. Several participants explained they had very little or no formal introduction to rural music teaching during their music teacher preparation programs, even though some had attended universities in rural locations. Participant 8 suggested more frequent practical opportunities for preservice teachers within rural settings, while Participant 1 complained:

> In my college training, the rural school was never discussed… What I have done is take my college classes and watered them down so the students are learning music history, some theory, listening and a little bit of piano, guitar or ukulele [*sic*] training. (Follow-up #1 survey response)

Most participants expressed an eagerness to engage with the nearest universities and community colleges in professional development and to establish relationships that could broaden the profession to include more rural foci.

Desires

Several key desires surfaced as participants described their programs and outlined the benefits and challenges of teaching in a rural location. As they reflected on their needs, most participants referred to the desire for stronger, more frequent collaborations with teachers outside of their location. Participant 6 explained, "Collaboration would be nice. Sharing different ways to teach the concepts, performance ideas, etc. It would be really nice to talk to other teachers who have to give performances in a gym (extremely challenging!!!)" (follow-up #1 survey response). The ability to work with and learn from other teachers was also seen as a means of enhancing PD:

> Our district has adopted Professional Learning Communities as a school improvement initiative, which I was excited about until I had to work on science standards. So we have reached out to other small schools and hopefully I can collaborate with other small school music teachers as far as curriculum, and professional development are concerned. (Follow-up #1 survey response)

Like Participant 14, several other teachers expressed involvement in some form of school- or district-wide PLC system; expansion of PLCs to include rural teachers with those in more populated areas may prove beneficial.

A second trending desire was that of "TIME, TIME, TIME!!" (Participant 7, follow-up #1 survey response). For Participant 4, this meant more contact time with elementary music students to boost skills, as he was currently teaching middle school students with lower performance skills than those from larger areas. Additionally, several teachers expressed that their rural teacher status required them to exhibit a sometimes-extreme versatility not seen in larger schools, which also impacted their time. Participant 11 expressed the concern this way:

> I sometimes feel bi-polar in my instruction. I spend a part of my day working with K-5 students, then work on middle school skills with an elementary schedule. Then work on HS singing with an elementary schedule… Preparing for 11 different classes each week, 31 class periods, completely engrosses my time. (Follow-up #2 email response)

Likewise, Participant 2 explained:

> My time is split by such different classes and that I often feel overwhelmed with tasks that would normally be split by 2-3 people. In a perfect world, I would desire another staff member that would team teach with me or split content areas so that I can focus my energy on gaining ground in my focused area of teaching. (Follow-up #1 survey response)

These teaching expectations can be burdensome and stress inducing, an important factor in teaching rurally.

Finally, Participants were quite interested in bringing more musical experiences into their schools for their students to be exposed to quality musical performance. Participant 7 shared this desire:

> In the rural areas many kids don't get the chance to see or hear quality music being performed. I would like to see college groups come perform in our school more often. I know they go to high school to recruit students, but rarely do they come to the lower grade schools to perform. (Follow-up #1 survey response)

Others suggested master classes or clinics where university students or visiting professionals could "get out into the classroom" (Participant 8, follow-up #1 survey response) or provide "feedback on contest music… [and] offer enrichment opportunities" (Participant 12, follow-up #1 survey response) as an additional support for rural music students and teachers. Participant 6 suggested visits from professional musical groups:

> [A school in a larger town] just had an Irish band perform. The band went to the high school to visit with the kids, show them their instruments, etc. We NEVER get these opportunities... It would be nice if the college would either visit the schools once in a while to share things like multi-cultural music or invite us there to have a mini-workshop. We are very sheltered when it comes to being exposed to the outside world. (Follow-up #1 survey response)

Here, this participant provides an insightful image of what musical life is like in a remote rural community, as her frustration over the isolation appears to seep through.

Music Making

It was encouraging to learn that most participants were able to find outlets for developing and maintaining their musical selves. This came as a surprise when considering the remote

nature of their work environment. Many of those reporting such opportunities stated they were found in church, either singing, playing, or accompanying. Other opportunities were located within what they considered a reasonable distance to a larger community or to a community college, where they could participate in larger ensemble experiences.

For those who did not actively perform, time and distance were the predominant reasons for not doing so. Participant 13 reported, "I would have to travel about an hour to play in groups" (initial survey response), while Participant 12 explained, "the nearest opportunity would be to drive 50 miles" (initial survey response). Participant 11 stated, "When I finally get down time, I want to spend it doing things that are not music, to avoid burnout" (follow-up #2 email response), emphasizing that his overloaded schedule influences his ability to maintain a musical self outside of work.

Participants who did maintain their musicianship found that it positively affected their professional identity. Participant 3 expressed that her community band experiences served several purposes in this regard:

> Being in the trenches is very important for my teaching and musicianship. It gives me an opportunity to hone my skills as a musician. I believe if you are going to teach music, you need to be actively engaged in it as well, some way or another… By participating in various musical groups, it shows my students, administration, [and] community I am invested in my profession and I take it seriously. I "practice what I preach," so to speak. By being musically active, I'm showing my students, administration, and community that there is music to be performed outside the school day. There is musical life outside the band/choir room. (Follow-up #2 email response)

Like Participant 3, others suggested that involvement in a musical community outside of school improved teaching practice. Participant 2 explained that it also was something she did for her own well-being, while benefitting her students:

> I sing with the [near-to-home community college] choir and take voice lessons with [a university professor]. This is a very positive experience because it gives me more tools in my 'teaching toolbox' and allows me to feel like I'm creating something unique and beautiful. Not only do I steal awesome ideas for my own classroom, I share these experiences with my students when applicable so they realize that I'm still doing, learning, and growing as a musician and that that's a future option for them as well. I NEEEEEEED this connection with other bright and talented musicians and adults. I was missing this connection my first two years and have found that meeting my intellectual and musical needs makes it a little easier to meet my students' needs. (Follow-up #2 email response)

It is important to recognize that teachers who are isolated from typical musical experiences found in larger areas may feel its loss and may need to seek unconventional means for filling the void. Unless they can explore innovations in music making—and in some cases this might include sharing such innovations with their students—rural music teachers may find it more difficult to balance their teacher and musician identities.

Participants also described the need for increased exposure to and practice with non-traditional music making and expressed this as a topic they shared with others. They described the need to arrange musical selections to fit the needs of their small, often-unbalanced ensembles, but also reported including nontraditional musical experiences—such as guitar classes, drumming circles, or songwriting—to engage students in ways not requiring a traditional

band, orchestra, or choir. For participant 16, communication with others included "creative process frameworks for programming music within nontraditional ensembles" (initial survey response), while Participant 3 suggested including a focus on nontraditional music in PD with clever titles such as, "electric bass for dummies, drum-set for dummies, help! I've never taught jazz band! Help! I've never taught guitar!" (follow-up #1 survey response). Such experiences could prove invaluable to rural teachers, particularly those new to the profession.

Conclusions and Implications

We can draw several conclusions from the insight provided by these participants and the experiences and perceptions they chose to share, as guided by the topics derived from the research questions: interactions with other music teachers, perceived support from others, and sense of musical selves. First, participants stressed the importance of professional development and collaborative interactions that were relevant to music teaching and learning, similar to the findings of Stanley et al. (2014). Participants described frustrations with attending PD designed for schools or districts to increase standardized test scores in content areas outside of the arts. This may be because they focused the definition of PD as improving themselves rather than on student learning (Wong & Bautista, 2018). Although several participants reported opportunities to meet monthly with other music teachers, the desire for more interaction, and specifically in-person collaboration, permeated the conversations. Such collaboration, while most beneficial between rural music teachers, should not exclude that which occurs between rural and metropolitan teachers. Participants noted the possible disconnect between themselves and their metropolitan colleagues but explained that they may still glean from them valuable, adaptable strategies.

Sometimes the opportunities for professional development are nontraditional in nature. Researchers have suggested alternative forms of PD (Bell-Robertson, 2015). Movements toward online PLCs and regular communications via social media outlets have been positive sources of support for these participants and other rural educators (Bernard, Weiss, & Abeles, 2018). Some participants suggested that affordable PD sessions specific to teaching in remote, under-populated locations be developed and shared at state conferences, or during summer or weekend outreach opportunities so that teachers have time and money to attend. Universities and community colleges may help to develop such sessions to strengthen the rural programs in their region while also serving as a recruiting tool. Such institutions should recognize the need for visits to remote communities as a means for exposing their diverse and talented musicians and for promoting the unique capabilities and their program that may appeal to possible rural student recruits.

Additionally, some participants expressed the need to include nontraditional music making experiences for their students. Providing innovative outlets for students to make music such as modern band ensembles may allow for more student agency and process-centered while encouraging contemporary skill development (Byo, 2018; Vasil, Weiss, & Powell, 2019). Including alternative and nontraditional music into their programs might influence rural teachers to expand beyond their formal training to include acquisition of relative musical skills. They may also find that their students bring to the rural music classroom those very skills they hope to acquire, allowing the students to feel more involved in the music learning process, rather than simply the product.

Some of the most powerful insight participants shared centered upon their own musical experiences, or lack thereof. Teachers' means for maintaining their musicianship will ultimately

shape their professional identity. As Pellegrino (2014) explained, music teachers who are active music makers can ultimately use those honed skills to become more effective teachers. Participants in this described similar realizations. But they also explained that maintain their musicianship was also important to their own livelihood, a part of who they are. Preservice music teachers with highly developed music performance skills must work to balance that musicianship with a growing teacher self (Author, 2016). These participants have illuminated the need for the balance and blending of teacher and musician selves throughout their career.

Finally, some participants pointed out that they received very little or no preparation for teaching rural music education in their undergraduate programs. Researchers have explored the need to expand focus in music teacher preparation programs to address the unique needs of rural music education including online simulations and distance-learning initiatives (Hefferman, Fogarty, & Sharplin, 2016; Knapczyk, Chapman, Rodes, & Chung, 2001). Music teacher educators can partner with rural school music teachers to develop ways to educate administrators and community members on the vast benefits of music education in rural locations. However, music teacher educators must also attend to preserving the ethical and moral values found within the rural communities within which their graduates may work (Sileo, Sileo, & Pierce, 2008). Utilizing the knowledge and experiences of rural preservice music teachers may help preparation programs to develop better understanding of those communities.

The findings have presented several implications for future research. A quantitative approach to rural music teachers' perceptions may help to support the contributions of these participants, while also helping to increase attention to the rural for preservice teachers within their preparation programs. An analysis of such music teacher preparation programs will help to shed light on practices that are currently addressed, while illuminating gaps to be filled. Research

questions may focus upon increased experiences in rural environments for preservice music teachers, identification of appropriate insertions of rural music education study and topics within the program and tapping into the lived experiences of rurally-familiar preservice teachers as a resource for improving rural music teacher preparation.

Every stakeholder should identify with the value music education can bring to a community. Providing teachers with opportunities to connect in meaningful ways will benefit both rural and non-rural educators as they learn from each other and share ideas. Creating innovative and perhaps non-traditional means for music making may help to ameliorate feelings of isolation and provide a sense of community identity for student and adults alike. The manner in which rural music teachers are able to maintain their personal musicianship and use it to benefit students may help to build relationships between students, teachers, and communities.

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Appendix A

Survey Questions

Basic Details about you and your location – this will remain confidential and you will be identified by pseudonym in any reporting of this data):

- Your Name (your identity will be known only to the primary investigator)
- Your email (for possible follow-up questions from the primary investigator):
- Describe your school (school name, how many students, number of faculty):
- How long have you been teaching?
- What is your teaching assignment (grade levels, types of music taught)?
- How many students do you have (total, class average)?
- Are you the only music teacher in your location?
- How close is the nearest music teacher other than those in your location?

Questions about your interactions with other music teachers:

- How often do you communicate with music teachers outside of your location?
- What do you discuss with teachers outside your location?
- Do you have opportunities to meet with teachers outside of your location, and if so, how frequently?
- Who do you go to for help when you need it, for musical reasons?
- Do you have opportunities to be musical outside of your classroom (playing in community musical organizations, informally with friends/colleagues, etc.)?

Questions about your interactions with those outside of music:

- How do you see the support you receive from administrators?
- How do you see the support you receive from parents and community members?
- Who do you go to for help when you need it, for nonmusical reasons (administrative, management, etc.)?

Appendix B

Follow-up #1 Survey Questions

- What does professional development look like for you? (Music PD, School building PD, conference attendance, etc.)?

- If you could see more support in any area of your teaching experience, what would you ask for (what are your needs)?

- How would you like to see the University music department help with regard to PD? (What can we do to help?)

Appendix C

Follow-up #2 Questions via email prompt

- Is the rural environment where you teach the same or different than where you grew up or have lived before? (Did you grow up in a rural location as well, or was it more metropolitan?)

- Whether it's the same or not, how do you think this similarity or difference in setting affects your teaching practice?

- You responded that you do have some opportunities to be musical outside of your classroom - is this in the same location/town as where you teach? If so, how do you think it impacts your teaching practice (being musically active in the same community)?

- How do you think those opportunities to be musical affect your professional identity as a rural music teacher?