

PERSPECTIVES OF CULTURALLY RESPONSIVE PEDAGOGY: AN EXAMINATION OF
PRESERVICE MUSIC EDUCATORS' VALUES AND CONGRUENCY

by

KRISTEN KUDER LYNCH

(Under the Direction of Brian C. Wesolowski)

ABSTRACT

Music education preparation programs have the responsibility of preparing future music educators to be effective in culturally and racially diverse educational settings, including developing knowledge, dispositions, and skills that will impact the students in their future classrooms. The purpose of the first study (see Chapter 2) was to examine preservice music educators' value around culturally responsive pedagogy through the development and validation of a culturally responsive pedagogy practices evaluation scale. The *Culturally Responsive Pedagogy Perspectives of Preservice Music Educators Scale* is based on a four-point Likert-type scale including 67 criteria assigned to three culturally responsive pedagogy domains.

Implications for preservice music educator preparation, preparation programming, and the validity, reliability and fairness of measures are discussed.

The purpose of the second study (see Chapter 3) was to examine the congruency of value for culturally responsive practices between preservice music educators and music area experts. The *Culturally Responsive Pedagogy Perspectives of Preservice Music Educators Scale* was used to evaluate the areas of congruency between music area experts in culturally responsive pedagogy and preservice music educators, discovering areas in which preservice music educators

might need more experience and training. Areas of high congruency could also be evaluated, giving an idea of where music area (Gay, 2018; Kelly-McHale & Abril, 2015; Kindall-Smith, 2006; Ladson-Billings, 1995a, 1995b, 2009; Lind & McKoy, 2016) experts and preservice music educators are congruent in their value of culturally responsive practices. Implications for diagnostic use for individual preservice music educators as well as for music education preparation programs are discussed.

The purpose of Chapter 4 was to provide a critical framework that can be used to evaluate music curricula. The framework offers critical questions music educators can ask to create musical experiences that are more personally meaningful while also affirming and validating the cultural practices of all students. Along with critical questions, this chapter provides a curriculum evaluation cycle that can be used to continually reflect upon the instructional approaches, materials, assessments, objectives, and standards included in a music curriculum.

INDEX WORDS: Congruency, Culturally Responsive Pedagogy, Curriculum Development, Preservice Music Education, Music Educator Preparation, Rasch, Rating Scale

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DEDICATION

*To my parents
Thank you for unwavering support and love.*

*To Parker and Zachary
Thank you for being so patient and caring.*

*To Michael
Thank you for always believing in me.
I love you.*

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CHAPTER 1

Introduction

Music educator preparation programs are tasked with the important job of preparing future educators to successfully enter music classrooms. This preparation includes development of appropriate dispositions, effective instructional strategies, musical content knowledge, an understanding of pedagogy in teaching and learning, classroom activities and lessons, effective communication with colleagues and school communities while also continually reflecting upon their own practice in order to consistently improve their teaching skills (Allen et al., 2017; Darling-Hammond, 2010; Lind & McKoy, 2016). More specifically, today's music educators must be prepared with a multitude of skills and dispositions in order to meet the needs of student populations growing in diversity (Gay, 2018; Irvine, 2003; Ladson-Billings, 2009; Lind & McKoy, 2016; McKoy, Butler & Lind, 2010; Villegas & Lucas, 2002). Statistics on demographics of student enrollment show increased numbers of Black, Indigenous and People of Color (BIPOC) enrolling in public schools (Meckler & Rabinowitz, 2019; National Center for Education Statics, 2021; Rabinowitz, Emamdjomech & Meckler, 2019). With 86% of music educators identifying as White and 14% identifying as BIPOC, many music educators need training in cross cultural practices in order to effectively teach the students in their classrooms (Allen et al., 2017; Elpus, 2015; Matthews & Koner, 2017; Lind & McKoy, 2016).

Critical components to developing cross-cultural dispositions as well as knowledge of cultural competency in the music classroom are part of culturally responsive pedagogy (CRP). CRP can be defined as an educational approach that uses students' cultural knowledge,

experiences, and frames of reference in teaching concepts, developing thinking processes, and academic skills (Gay, 2018; Lind & McCoy, 2016). Prominent among these elements of CRP is the ability to examine one's own cultural experiences and relating how those experiences impact their beliefs, attitudes, and values about the world around them. For preservice music educators (PMEs) this calls for an examination of their beliefs concerning deficit-based assumptions regarding specific cultural groups (McKoy, 2020). Deficit-based assumptions occur when an educator focuses on the weaknesses of an individual or group, believing those weaknesses are due to character traits of the individual or group. In examining their own beliefs, PMEs can begin to develop their sociocultural consciousness which may help them to see the varied and unique cultural backgrounds, values, and experiences of their students as well as gain understanding that our own experiences impact our views of culture, gender, race, and socioeconomic standing (Darling-Hammond & Bransford, 2005; Lind & McKoy, 2016; McKoy, 2020; Villegas & Lucas, 2002). These views then influence interactions with students as well as curricular, instructional and program decisions PMEs will make (Darling-Hammond & Bransford, 2005; McKoy, 2020). Therefore, it is imperative that PMEs have opportunities to explore and better understand how the decisions they make will affect student learning and achievement in their future classrooms (Darling-Hammond & Bransford, 2005; Gay, 2018; Ladson-Billings, 2009; Lind & McKoy, 2016).

The need for this understanding can create challenges for music educator preparation programs. One problem encountered in music education preparation programs is the limited availability of diversity classes offered (Allen et al., 2017; Gist et al., 2019; McKoy, Butler, & Lind, 2010). This leaves important concepts such as understanding culturally different learners and cultural competence to a few classes out of the many a PME will take throughout their

preparation (King & Butler, 2015; Legette, 2003). To effectively prepare PME's to teach in multicultural settings, music education preparation programs must be prepared to work with a variety of musical canons while also learning about, interacting with, and experiencing music in diverse ways (Allen et al., 2017; Darling-Hammond, 2010; McKoy, Butler, & Lind, 2010). Leaving the cultivation of cultural knowledge, understandings, and practices for the teacher as well as the student to a limited number of classes prohibits the number of opportunities PME's might have to interact with necessary information and experiences needed to create a successful learning environment in their future classrooms.

The lack of class offerings that directly address diversity also impacts PME's' abilities to integrate culturally responsive practices throughout their preparation program. While many music education preparation programs provide statements of the importance of diversity education, experiences and activities focused on developing cultural responsiveness are rarely integrated throughout the preparation program (Banks et al., 2005; Gist et al., 2019; Hourigan & Hammel, 2020; Irvine, 2003; McKoy et al., 2010). For example, observing in a classroom in an urban school is different than working with the students in class, especially if the educational environment is different than what the PME has previously experienced (Allen et al., 2017; McKoy, 2020; McKoy et al., 2010; Villegas & Lucas, 2002). The lack of repeated theoretical application in their practice leaves PME's unprepared to successfully teach in a multitude of settings, especially urban settings (Abril, 2006b; Allen et al., 2017; Banks et al., 2005; Conway, 2012; Emmanuel, 2006; Hourigan & Hammel, 2020).

One way music education preparation programs may begin to address these problems is to examine what knowledge, beliefs, and values PME's possess throughout the program. Diagnostic assessments provide the educator with information concerning where the students'

knowledge bases start so that instruction can be tailored to meet the needs of each student. This same process can be applied to PME as they work to develop the culturally responsive skills and dispositions that will allow them to be successful in a multitude of educational settings. This dissertation proposes a valid, reliable assessment tool that can be used by music education preparation programs for several purposes, from obtaining a baseline assessment of values of CRP to examining PME growth in their understandings, beliefs, and values from year to year or across their time spent in the music education preparation program.

Chapter Two focuses on the psychometric considerations of a rating scale designed to assess the values PME hold concerning culturally responsive practices and dispositions. Cultivated from CRP literature in both general education and music education, the rating scale consists of 67 culturally responsive-focused statements concerning practices, dispositions, and philosophy. PME were asked to evaluate the statements using levels of agreement or importance as indicated by the anchor set. The anchor set responses were then interpreted as a value judgment of each statement and corresponding domain in which the statement was situated. The data were then analyzed using the Partial Credit version of the Rasch model (PCM) (Masters, 1988).

In order for the rating scale to provide empirical evidence that can be used by music education preparation programs, it must be constructed in a way that indicates validity, reliability, and fairness with the content of the survey and the ordering of the respondents. Chapter Two examines the importance of the psychometric process in relation to the rating scale, focusing on the properties of invariant measurement underlying the Rasch measurement models (Engelhard, 2013) in order to determine the objectivity and reproducibility as a tool of assessment. In this study, the *Culturally Responsive Pedagogies Perspectives of Preservice*

Music Educators Scale was found to be a valid and reliable tool in providing valuable information for values and understandings of CRP.

In Chapter Three, the scale developed in Chapter Two is used to examine preservice music educators' values related to CRP compared to content-area experts' interpretations and values. The purpose of this comparison is to examine the congruency between preservice music educators and content experts in the field who have implemented CRP in their own teachings and written about CRP in their research publications. Higher levels of congruence indicate areas which content-area experts and PME's hold the same level of value for the disposition or practice and lower levels of congruence would indicate a discrepancy in values between the two sets of respondents. An examination of congruency may provide music education preparation programs diagnostic analytics for areas in need of development, allowing the programs to differentiate their instruction and experiences on identified areas in need for development. The same information can be valuable to the individual PME, giving them the opportunity to become familiar with CRP disposition and practices as well as being able to keep track of their growth throughout their preparation.

Chapter 4 focuses on bringing the theory (values, understandings, dispositions, and practices) into practice by offering a theoretical framework for CRP implementation in in-service music educators' classrooms. When examining early in-service music educators' perceptions about their undergraduate preparation, many note that there is a disconnect between what they thought they were going to do as PME's and what the job actually requires of them as in-service music educators (Darling-Hammond, 2000; Legette & McCord, 2014). Early in-service educators also indicate that they have difficulty transitioning theory they have learned in their undergraduate preparation into practice in their music classrooms (Conway, 2012; Legette &

McCord, 2014). This indicates a need for PME's to engage in practical application of CRP ideas throughout their preparation period. Just as music educators provide their students multiple opportunities to engage with a concept through several different modalities in order for learning to take place, music education preparation programs must provide those same hands-on opportunities to their enrolled PME's so they are prepared to implement CRP skills upon entering the profession. The chapter highlights the use of critical examination of curricular structures and activities so music educators may create musical experiences that support students' identity development, affirm and validate student cultural practices, and make music learning more personally meaningful. In order for music educators to connect classroom learning to the real lives of students, then they need to be equipped with the critical skills to help transform the traditional music curriculum that may be in place (Abril & Kelly-McHale, 2016; Campbell et al., 2005; Lind & McCoy, 2016). By developing and using a diagnostic tool that can help music preparation programs use valuable information concerning PME values of CRP practices and dispositions, programs may be able to better implement practices that help their students develop skills that will help them be successful in any classroom environment they may encounter throughout their teaching profession.

CHAPTER 2

THE DEVELOPMENT AND VALIDATION OF A SCALE TO ASSESS PRESERVICE
MUSIC EDUCATORS' VALUES RELATED TO CULTURALLY RESPONSIVE
PEDAGOGY¹

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Abstract

The purpose of this study was to evaluate the psychometric quality (i.e., validity and reliability) of a rating scale to assess preservice music educator understandings and values of culturally responsive pedagogy. The research questions that guided this study included: (1) What are the psychometric qualities of the *Culturally Responsive Pedagogy Perspectives of Preservice Music Educators Scale*?; (2) How do the domains and rating scale criteria fit the model and how do they vary in respondents' overall value?; and (3) How does the structure of the response categories vary across rating scale criteria? Using multiple culturally responsive theoretical frameworks, preservice music educators evaluated statements concerning culturally responsive practices and philosophy using a 4-point Likert-type rating scale (e.g., strongly agree, agree, disagree, strongly disagree) in three different domains: (a) student learning and achievement, (b) cultural competence, and (c) critical examination. Preservice music educators ($N = 202$) answered 67 culturally responsive-focused questions, which were then analyzed using the Rasch measurement partial credit model. Results suggest items ($Rel = .98$) and respondents ($Rel = .93$) are a good fit to the scale and the scale works as it is expected. Implications for preservice music educator preparation, preparation programming, and the validity, reliability and fairness of measures are discussed.

Keywords: culturally responsive pedagogy, preservice music educators, rating scale, Rasch model, validity

Introduction

Public school classrooms in the United States are encountering a growth in the diversity of student populations, creating a need for educators who are trained in and implement culturally responsive practices (Gay, 2018; Ladson-Billings, 2009; Lind & McKoy, 2016; Meckler & Rabinowitz, 2019; National Center for Education Statistics, 2021; Rabinowitz, Emamdjomeh & Meckler, 2019). For example, the total Black, Indigenous, and People of Color (BIPOC) student population grew from 39% to 52% while the total White student population decreased from 61% to 48% between Fall of 2000 and Fall of 2018 (National Center for Education Statistics, 2021). The majority of this growth was in the Hispanic/Latino population (from 22% to 27%) and those identifying as two or more races (from 1% to 4%). Furthermore, the U.S. Department of Education projects a minimum of a 5% continued increase in BIPOC populations through the Fall of 2029 (National Center for Education Statistics, 2021). This increasing diversity in classrooms across the United States suggests a need for improved instructional pedagogies representative of a variety of learners from increasingly diverse racial, ethnic, and cultural backgrounds (Banks & McGee Banks, 2013; Frierson-Campbell, 2006; Irvine, 2003).

In the field of music education, music educators' racial and ethnic backgrounds are becoming less representative of their student bodies (Bradley, 2015; Butler et al., 2007; Kelly-McHale & Abril, 2015; Lind & McKoy, 2016; Robinson, 2006). As one example, 86.02% of music educator licensure candidates from Praxis II tests between 2007 and 2012 identified as White and 13.98% identified as BIPOC (Elpus, 2015). As another example, in a national survey of elementary and secondary music educators' professional backgrounds, teaching responsibilities, and job satisfaction during the 2015-2016 school year, 90.9% of respondents identified as White and 7.8% identified as BIPOC (Matthews & Koner, 2017). These data

suggest that in today's educational environment, an increasing culture and lived experience gap may exist between music educators and their students. A common unintended consequence of this gap is a disconnect between students' musical experiences at school and in their home communities (Bennett, 2021; DeVries, 2010; Isbell & Stanley, 2018; Jones & Eyrych, Jr., 2006; Kratus, 2007; Kruse, 2016; Lamont et al., 2003; Robinson, 2006; Tobias, 2013). In particular, music educators' reliance on Western European-centered pedagogy and course-related content may exacerbate this disconnect, (DeVries, 2010; Green, 2002; Kelly-McHale, 2011; Temmerman, 2005; Thibeault, 2009) resulting in instances of lower participation and retention rates (Carter, 2020; Kelly-McHale & Abril, 2015; Kratus, 2007). Therefore, a targeted effort is needed to better prepare preservice music educators to be more responsive to varied cultural representation in their future classrooms in order to anticipate and overcome these unintended consequences. These considerations signal a growing need for the development of culturally responsive planning and instructional skills within music educator preparation programs to better prepare preservice music educators in providing a more inclusive music education.

Racial, ethnic, and cultural dissimilarities between music educators and students may affect important elements of student achievement stemming from student-educator relationships (Gay, 2018; Irvine, 2003; Kindall-Smith, 2006; Lee, 2012), feelings of inclusion (Ladson-Billings, 2009; San Pedro, 2018), and building of self-esteem through student motivation, student-centered engagement, and self-direction (Gay, 2018; Kindall-Smith, 2006; Ladson-Billings, 2009; Wiggins, 2001). Furthermore, educator perceptions about student characteristics as related to achievement also effect student participation and success in the classroom (Gay, 2018; Howard, 2006; Ladson-Billings, 1995a, 1995b, 2009). Holding negative perceptions concerning student learning by specific populations of students (i.e. cultures other than the

teacher's own) can lead to students' reduced desire to participate in school music (Lee, 2012; Love & Kruger, 2005; McAnally, 2006). As a result, there is an increased need to incorporate culturally responsive pedagogy (CRP) into music educator preparation programs. An important prerequisite to training preservice music educators in CRP is to measure their related values of teacher knowledge, practices, and dispositions of CRP as related to student achievement. The purpose of this study is to develop and validate a scale to assess preservice music educators' values of culturally responsive pedagogy.

Culturally Responsive Teaching and Pedagogy

Culture can be defined as “knowledge, concepts, and values shared by group members through systems of communication” consisting of “the shared beliefs, symbols and interpretations within a human group” (Banks, 2013, p. 6). Culture encompasses complex, socially-constructed practices that constitute a way of life and provide basic assumptions of what is valued in one's society (Abril & Kelly-McHale, 2016; Gay, 2018; Robinson, 2006). Culture also provides guidance for behavior, artistic practices, technology, and learned patterns of emotional application (Erickson, 2004; McKoy, 2020). Samovar and Porter (1991) suggest that culture influences “what we talk about; how we talk about it; what we see, attend to, or ignore; how we think; and what we think about” (p. 21). With these considerations in mind, when an educator is culturally responsive they acknowledge and incorporate their students' cultural backgrounds and lived experiences in everyday classroom instruction, activities, resources, materials, and assessments (Gay, 2018; Ladson-Billings, 2009).

Traditionally, music plays an integral role in cultural practices (Gregory, 1997, Hodges, 2020). Through its use in ceremonies, festivals, games, dances, communication, and personal enjoyment, music is influential in creating a sense of belonging to a specific group or subculture

(Gregory, 1997; Hodges, 2020; Russell, 1997; Zillmann & Gan, 1997). Both adults and adolescents use music to organize into social groups that share the same values, allowing them to socially share meanings through which individuals identify with the others within the group (Davidson, Howe, & Sloboda, 1997; Russell, 1997; Zillmann & Gan, 1997). Since school music is commonly a group activity, culturally responsive pedagogical tools based upon students' cultural strengths and lived experiences may provide improved support for student learning and achievement in the music classroom (Campbell, 2018; Hess, 2019; Kelly-McHale & Abril, 2015; Marsh, 2015).

In the field of education, broadly, culturally relevant teaching and pedagogy literature is growing, highlighting the positive affects of these values, dispositions, and practices on student achievement (for example, Gay, 2000/2018, 2002; Hammond, 2015; Ladson-Billings, 1995a, 1995b, 2009, 2017, 2021; Paris & Alim, 2017; Villegas & Lucas, 2002). The *Culturally Responsive Pedagogy for Preservice Music Educators Scale* developed in this study was cultivated from two prominent frameworks from this area of literature: (a) culturally relevant pedagogy (Ladson-Billings, 2009); and (b) culturally responsive teaching (Gay, 2000, 2018). While these two frameworks both focus on academic achievement among students from diverse cultures and backgrounds, differences exist in the nuances of approach. Culturally relevant pedagogy focuses on the collective empowerment of marginalized populations while culturally responsive teaching focuses on leveraging individual students' cultural backgrounds, lived experiences, and perspectives as tools for effective instruction. In this study, we merge these two frameworks and define culturally responsive pedagogy as a student-centered framework that uses students' cultures and lived experiences in all aspects of the educational process to facilitate higher levels of learning as well as cultivating positive self-image, critical thinking skills, and

academic achievement in the music classroom (Abril, 2013; Abril & Kelly-McHale, 2016; Gay, 2002, 2018; Kelly-McHale & Abril, 2015; Kindall-Smith, 2006; Kinloch, 2017; Ladson-Billings, 2009; McAnally, 2006).

In order to prepare preservice music educators to teach a multicultural body of students based upon students' lived experiences, backgrounds, and perspectives, music preparation programs must actively examine preservice music educators' values of and perceptions toward the impact of culture on the learning process (Bond & Russell, 2019; Elliott, 1990; Gay, 2002, 2018; Hammond, 2015; Ladson-Billings, 2011; Lind & McKoy, 2016; McKoy, 2020). The implementation of the rating scale proposed in this study in music educator preparation programs may provide a framework to meaningfully measure and track the development and growth of preservice music educators' values of CRP while also helping tailor program and course content in more meaningful and authentic ways. While the items developed for this rating scale do not capture every practice or disposition that is culturally responsive, the proposed perceptions are drawn from the general education, music education and sociology literature addressing teacher dispositions and practices that have been found to be effective in educating students from multiple cultures.

Foundations for Content Validity: Culturally Relevant Pedagogy and Culturally Responsive Teaching

The content for the domains and items in the proposed rating scale were developed from culturally relevant pedagogy and culturally responsive teaching research in the field of education, broadly, and the field of music education, specifically. For this study, we define CRP as a student-centered framework that utilizes students' cultures and lived experiences in all aspects of the educational process to facilitate higher levels of learning as well as cultivating

positive self-image, critical thinking skills, and academic achievement in the music classroom (Abril, 2013; Abril & Kelly-McHale, 2016; Gay, 2002, 2018; Kelly-McHale & Abril, 2015; Kindall-Smith, 2006; Kinloch, 2017; Ladson-Billings, 2009; McAnally, 2006).

Culturally Relevant Pedagogy. Ladson-Billings (2009) outlines a fundamental theoretical model for culturally relevant pedagogy and instruction. Culturally relevant pedagogy (CRLP) encourages educators to value the individual qualities of each student, particularly if those qualities differ from the educational ‘norm’ (Ladson-Billings, 2009). Ladson-Billings (2017) suggests that, “Culturally relevant educators are interested in difference[s] in students’ reasoning ability, problem-solving skills, and moral development—things that are not so easily measured by standardized tests” (p. 143). CRLP also emphasizes the importance of developing student learning through students’ cultures and lived experiences. By implementing cultural practices familiar to students, educators help create a bridge between the content being taught and the lived experiences of the students, thereby creating a foundation that sets students up for academic success (Ladson-Billings, 2009). The three pillars supporting the theory of CRLP include: (a) academic/student achievement, (b) cultural competence, and (c) critical consciousness (Ladson-Billings, 1995, 2009; 2017, 2021a).

Academic/Student Success. The pillar of academic/student success suggests that students are empowered and encouraged to “choose academic excellence” in the classroom (Ladson-Billings, 1995a, p. 160). Student success begins with educators believing that all students are capable of academic achievement in the classroom and able to master rigorous standards outlined by the discipline. Furthermore, student success is predicated on educators’ perceptions of the educator’s role in the classroom. Educators who implement CRLP practices view their successes through the lens of classroom-based achievement, mindful of the skills each student brings to the

classroom and connecting them to their “local, national, racial, cultural, and global identities” (Ladson-Billings, 2009, p. 28). CRLP educators view their students as an equitable partner in both the classroom community and learning process and value the skills and lived experiences each student brings with them to the classroom (Ladson-Billings, 2009). This pillar suggests that academic achievement is measured more by student growth rather than norm- or criterion-referenced achievement. For example, a student may not meet expected grade-level scores or target levels of mastery but may have demonstrated considerable marked growth in achievement. This warrants an acknowledgment of student learning on the parts of both the student and educator (Ladson-Billings, 2017, 2021a, 2021b).

Cultural Competence. The pillar of cultural competence is centered on students’ affirmation of their cultural origin while fostering understandings of other cultures (Ladson-Billings, 2017, 2021a). Educators must be aware of the cultures represented in their classrooms in order to understand what role cultural practices play in the learning process. Understanding cultural practices allows educators to develop a trusting relationship with students in the classroom. By carefully crafting interactions and conversations based on what is learned or known about students’ cultural practices, the educator helps build student confidence and academic success (Ladson-Billings, 1995b, 2017, 2021a). Under the cultural competence pillar, classroom content must go beyond superficial diversification of classroom materials and include a critical component that examines underlying inequities and injustice. Educators implementing CRLP practices in this way support students’ development of critical thinking skills through interpretation of curriculum and materials based upon their own experiences (Ladson-Billings, 2021b).

Critical Consciousness. The pillar of critical consciousness, sometimes referred to as socio-political consciousness (Ladson-Billings, 2017, 2021b), aims to use a problem-centered approach to learning to foster students' value of the skills they are developing. Critical consciousness encourages students to use their personal learning strengths to examine problems that are important to them (Ladson-Billings, 1995b, 2017, 2021a). Ladson-Billings (2017) notes that developing students' critical consciousness provides students with the opportunity to "pose powerful questions about social, cultural, economic, political, and other problems of living in a democracy that attempts to serve a diverse populace" (Ladson-Billings, 2017, p. 146). Students' self-examination of activities and materials used in the classroom allows students to see the purpose and value of their learning while fostering trust and belonging in the classroom (Ladson-Billings, 1995b; 2017).

Culturally Responsive Teaching. Gay (2018) defines culturally responsive teaching (CRT) as "using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them" (p. 36). A broader approach than CRLP, CRT leverages students' strengths in the learning process as a pathway to learning outcomes. The foundation of CRT includes developing a cultural diversity knowledge base, designing culturally relevant curricula, demonstrating cultural caring and building a learning community, cross-cultural communications, and cultural congruity in classroom instruction (Gay, 2002).

Similar to CRLP's cultural competence pillar, the CRT framework suggests that educators gain explicit knowledge of their students' cultures, going beyond acknowledgment and respect for cultural difference and building their cultural diversity knowledge base through three strategies: (a) identifying the cultures represented in the classroom, (b) gaining familiarity with

the cultural practices of represented groups, and (c) researching important individuals from those cultures. First, educators should comprehend the characteristics and practices specific to each culture represented in their classrooms, including “ethnic groups’ cultural values, traditions, communication, learning styles, contribution, and relational patterns” (Gay, 2002, p. 107). Second, educators should seek out factual, detailed information about cultural practices in order to better understand student interests outside of the classroom. Third, educators should develop their knowledge base of ethnically and racially diverse individuals who have contributed to the area of instruction. This knowledge should not be superficial, but rather, should provide in-depth information of the impact of certain individuals in the content area (Gay, 2002, 2018).

Culturally Responsive Pedagogy and Music Education. Music education research demonstrates a growing interest in CRP through an increasing body of research literature over the past three decades. The origins of culturally grounded pedagogical practice were first introduced through the framework of multicultural music education (Campbell, 1992, 1998, 2002; Elliot, 1989; Mark, 1998; Volk, 1993, 2004), including topics related to multicultural planning, implementation, and instruction (Abril, 2005, 2006a, 2009, 2013; Abril & Gault, 2016; Anderson & Campbell, 2010; Frierson-Campbell, 2006; Howard & Kelley, 2018).

In the context of pre-service music educators, Lind and McKoy (2016) offer a theory-to-application approach that addresses culturally responsive teaching in the music classroom. Abril and Kelly-McHale (2016) extend this research by investigating the misalignment of secondary music ensemble expectations and accessibility with the values of Latino students. Both Bond (2014) and Shaw (2012) examine the components needed to successfully implement CRP practices and instruction within the choral classroom. Shaw (2015) also surveys the perceptions choral students hold of their educator’s ability to teach with cultural responsiveness. Boon (2014)

interviewed 4th and 5th grade African American students who were part of their school's string program. She sought to understand the students' beliefs pertaining to their cultural experiences with playing the violin and how those affected their cultural identities. Fitzpatrick (2011) specifically examined instrumental music educators in urban settings. This included educator beliefs about their students, school and community, noting what educators viewed as rewards and challenges in this situation. Robinson (2006) also examined the impact of implementing CRP practices, as well as cross-cultural teaching, in an urban elementary music classroom. Kelly-McHale (2013) researched the intersection of music instruction, musical identity, and CRP.

In the context of in-service music educators, Bond and Russell (2019) examine perceptions of in-service music educators' engagement with culturally responsive education. Additionally, Bond and Russell (2021) offer a helpful conceptual framework to develop culturally responsive mindsets in preservice music educators. However, little research has focused on preservice music educators' values of CRP throughout their preparation programs. The ability to assess preservice music educators' learning and understanding of culturally responsive practices and dispositions throughout their program of study may help build a stronger foundation in the development and refinement of culturally responsive practice. The rating scale prescribed in this study may offer insight to the values students currently hold, allowing preservice music educator preparation programs to better tailor and adjust the teaching of CRP through the use of direct assessment and student growth considerations. The purpose of this study was to develop and validate a rating scale to assess pre-service music educator's values of culturally responsive pedagogy. The research questions that guided this study include:

1. What are the psychometric qualities (i.e., validity and reliability) of the *Culturally Responsive Pedagogy for Preservice Music Educators Scale*?
2. How well do the domains and rating scale criteria fit the model and how do they vary in respondents' overall value?
3. How does the structure of the response categories vary across rating scale criteria?

Method

Participants

Pre-service music educators ($N = 202$) from 25 four-year, degree granting colleges or universities in the eastern portion of the United States were recruited to respond to the *Culturally Responsive Pedagogies Perspectives of Preservice Music Educators Scale*. Colleges or universities included both public and private institutions as well as historically black colleges and universities (HBCUs) and liberal arts institutions. Participants ranged from freshman to seniors (male, $n = 68$; female, $n = 115$; non-binary, $n = 19$). A recruitment letter was sent to the coordinator of the music education program at each respective college or university, asking that a short description of the study and link to the survey be forwarded to their pre-service music educators. Participants then chose to complete the survey at their own discretion. Only fully completed surveys were used in the data analysis.

Rating Scale Criteria, Domains, and Response Categories

Rating scale criteria and domain content were gleaned from Ladson-Billings' (1995a, 1995b, 2009, 2017, 2021a, 2021b) culturally relevant pedagogy and Gay's (2000/2018) culturally responsive teaching frameworks in addition to related multicultural and social justice music education literature, including Abril (2013), Bond (2017), Campbell (2018), Kelly-McHale (2011, 2018, 2019), and McKoy (2013). The crafting of criteria statements and anchors

was based upon Wilson's (2004) topic guide approach to creating rating scale criteria. The rating scale structure was based on a four-point Likert-type scale (see Figure 2 in Appendix B). Likert-type scale response anchors included the use of two anchor sets: (a) agreeability (*strongly disagree, disagree, agree, strongly agree*) or (b) importance (*not important, slightly important, important, very important*). The rating scale was operationally defined by 67 items embedded within three content domains: (a) student learning and achievement ($n = 22$); (b) cultural competency ($n = 23$); and (c) critical examination ($n = 22$). For the purposes of this study, the anchor sets of agreeability and importance were interpreted as a value judgment of each item and domain.

Student Learning and Achievement

Student learning and achievement is influenced by variables including demographics (e.g., ethnicity, culture, age, sex-type), relationships with classmates and educators (Gay, 2018; Hammond, 2013; Reyes, et al., 2012), and personal experiences. Pillars of CRP posit that students who are viewed as competent learners with valuable knowledge and experiences are more likely to succeed in the classroom (Gay, 2018; Ladson-Billings, 2009). Educator expectations and beliefs about students have a profound impact on student achievement, from substantial influence on the quality of instruction received to assumptions attached to demographics and intellectual capacity (Gay, 2018; Ladson-Billings, 2009). The items in this section domain serve to both define and evaluate preservice music educators' values of dispositions, beliefs, and practices CRP literature has determined to have an impact on student achievement and success.

Cultural Competence

Culture influences how we receive, process, analyze and organize knowledge (Gay, 2018; Ladson-Billings, 2017; Robinson, 2006). Abril (2013) notes that, “Culturally responsive teaching helps move the attention from the *things* we teach to the *children* we teach and the social learning environment where music experiences occur” (p. 8). This suggests that music educators must examine their own beliefs and practices grounded in their culture in order to effectively reach students from other cultures (Villegas & Lucas, 2002). Without such examination, institutional inequalities perpetuated by the traditional structures of school may continue regardless of personal beliefs concerning equality (Kelly-McHale & Abril, 2015). The items found in this section look to understand preservice music educators’ values of those practices that have been determined by the literature to be effective in helping students develop cultural competency.

Critical Examination

Critical examination promotes the development of critical thinking around concepts being taught in the classroom as well as the structure of school music from a broader sociopolitical context (Gay, 2018; Kelly-McHale, 2016; Ladson-Billings, 1995, 2021a; Lind & McKoy, 2016). Through the use of critical questioning, students become more aware of their personal knowledge, beliefs, patterns of thinking, and actions, providing them insight to the role music plays in their lives as well as what role they play within their music classes or ensembles (Gay, 2018; Hess, 2019; Kelly-McHale, 2016). The development of critical examination skills allows students to extend their critical thinking to the structures of school music (e.g. the dominance of Western Art Music practices) (Gay, 2018; Hess, 2019; Kelly-McHale, 2016; Lind & McKoy, 2016). Through examination and questioning of school structure, students are empowered to rethink what school music could look like in their school as well as their community. Following

the previous two sections, these items seek to understand the values preservice music educators' hold concerning dispositions and practices deemed to be effective by the CRP literature in both general education, broadly, and music education, specifically.

Music-Area Experts

Three content experts with expertise in CRP and related music education teaching, research, and service were recruited to engage with the proposed rating scale and provide suggestions in order to improve the face and content validity of the scale. The content-area experts had a total of 42 years of teaching experience in higher education ($M = 14$, $SD = 6.48$) with a combined 77 peer-reviewed research manuscripts and three published books. The panel consisted of one male and two females with the ethnic makeup being one Hispanic and two Caucasians. The content and syntax of the criteria and rating scale anchors were edited based upon their feedback related to content and syntax. The content-area experts provided an additional layer of face and content validity of the criterion stems drawn from the CRP literature, verifying that the dispositions, beliefs, and practices within the survey items are held and practiced by culturally responsive music educators.

Psychometric Considerations

Rasch measurement models (Rasch, 1960/1980) are a part of the Item Response Theory (IRT) family of mathematical models which are useful in measuring latent constructs in behavioral, psychological, and social sciences (Bond, Yan & Heene, 2021; Crocker & Algina, 1986; Engelhard, 2013; Engelhard & Wang, 2021; Engelhard & Wind, 2018). Rasch Measurement models, specifically, are based upon five requirements of invariant measurement. In the context of this survey, the requirements include: (a) criteria-invariant measure of respondents (i.e., respondent measures are independent from the rating scale criteria measures);

(b) respondents with more overall value of the criteria must always demonstrate higher value on a criterion than those respondents with less value; (c) respondent-invariant measure of criteria (i.e., amount of value for the criteria is independent of respondents); (d) any respondent must have higher value on higher valued criteria than on less valued criteria; and (e) criteria and respondents must be simultaneously located on a single underlying latent variable (i.e., variable map) (Engelhard, 2013). Adequate fit of the model is observed when the requirements of invariance are achieved. Adequate model-to-data fit provides strong evidence of construct and predictive validity of the scale (Linacre, 2004).

In survey research, the ability to examine patterns of responses, as opposed to raw summed scores, is important to draw more meaningful inferences based upon the collected data. Rasch measurement allows for the simultaneous mapping of respondent measures and criteria measures based upon patterns of responses for all criteria (e.g., construct validity; Linacre, 2004) and respondents (e.g., predictive validity; Linacre, 2004). Analysis of estimated fit statistics and related standard error measurements provide insight to the pattern of responses that fall within the acceptable range of fit. Fit indices that fall within the range of 0.60-1.40 suggest strong construct validity for related criteria and strong predictive validity for related respondents (Wright & Linacre, 1994). Criteria and respondent fit indices outside of this range are not productive for measurement purposes and, therefore, are not acceptable to draw inferences.

The data in this study were analyzed using the Partial Credit version of the Rasch model (PCM) (Masters, 1988). The PCM version of the model allows for the analysis of response structures for each respondent and criterion, allowing for more precise measurement, resulting in more detailed information about the data to be obtained (Masters, 1988). The analysis for this study was performed using the FACETS computer program (Linacre, 2014).

Results

Wright Map

The Wright map is a visual representation of the operational definition of the latent variable under investigation (see Figure 2.1). The first column contains the logit scale which serves as the common measurement unit for both the respondents and criteria. The logit scale is an equally distanced, interval-level measurement, allowing for direct comparisons to be made between measures across the two facets (Bond, Yan, & Heene, 2021). The second column provides a histogram of the respondents from most valued at the top of the column to the least valued at the bottom of the column. Each individual respondent is represented with an asterisk. Respondent measures ranged from 4.04 logits (highest value) to -0.47 logits (lowest value) ($M = 1.64$, $SD = 0.90$, $N = 202$). The third column provides a histogram of the criteria from highest valued criteria at the top of the column to the lowest valued criteria at the bottom of the column. Criteria measures ranged from 3.70 logits (most valued) to -1.59 logits (least valued) ($M = 0.00$, $SD = 1.08$, $N = 39$).

Summary Statistics (Research Question 1)

Summary statistics for respondents and criteria are provided in Table 2.1. The chi-square of significance indicates a statistically significant difference between preservice music educators ($\chi^2 = 2835.8$, $p < 0.01$) and survey criteria, ($\chi^2 = 4469.3$, $p < 0.01$), providing evidence for the ability of the measurement instrument to separate criteria/respondents (i.e., elements) within a particular facet as well as the ability to reproduce the logit locations. The reliability of separation (*Rel*) statistics for preservice music educators ($Rel = .93$) and criteria ($Rel = .98$) can be

interpreted similar to Cronbach's Alpha, indicating strong evidence of enough separation to establish construct and predictive validity of the measurement instrument. Mean square error (*MSE*) indicates consistency in interpretation of patterns of responses. Acceptable fit in *MSE*

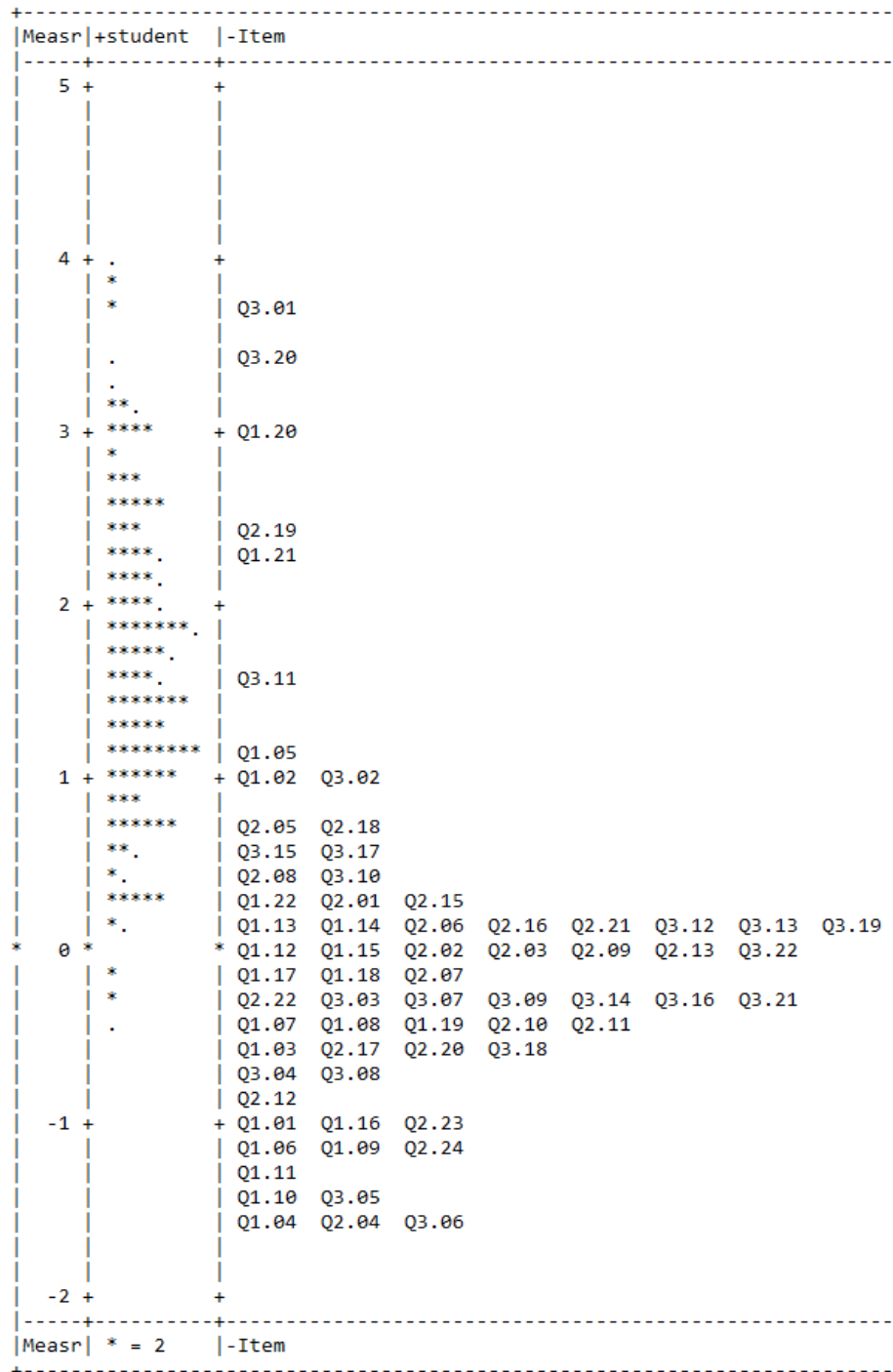


Figure 2.1 – Wright Map

scores range between 0.60 and 1.40 (Wright & Linacre, 1994) for both respondent and criteria, suggesting overall strong construct and predictive validity of any inferences made from the results (See Table 2.1).

Table 2.1

Summary Statistics from the Partial Credit Rasch Model

	Pre-service Music Educators (θ)	Criteria (δ)
Logit-Scale Location		
<i>M</i>	1.64	0.00
<i>SD</i>	0.90	1.08
<i>N</i>	202	67
Infit MSE		
<i>M</i>	1.03	0.99
<i>SD</i>	0.35	0.24
Std. Infit		
<i>M</i>	0.00	-0.20
<i>SD</i>	1.60	2.00
Outfit MSE		
<i>M</i>	1.00	1.00
<i>SD</i>	0.44	0.36
Std. Outfit		
<i>M</i>	-0.10	-0.20
<i>SD</i>	1.60	2.60
Separation Statistics		
<i>Reliability of Separation</i>	0.93	0.98
<i>Chi-Square</i>	2835.8*	4469.3*
<i>Degrees of Freedom</i>	201	66

Note. * $p < .01$

Calibration of Domains and Criteria (Research Question 2)

The logit scores (i.e., measures) for criteria and domains indicate their overall level of value. All domains demonstrated acceptable data-to-model fit. The domain demonstrating the most value was Student Learning and Achievement (-0.13 logits), which focused on holding high standards for all students, creating a community of learners, and utilizing diverse student experiences in classroom instruction and curriculum. The domain demonstrating the least value

was Critical Examination (0.22 logits), which focused on developing students' critical thinking skills around school structure and social issues impacting the music classroom as well as developing respect and empathy across cultural groups through classroom practices.

The criterion demonstrating the least value was Q2.19 (2.36 logits, *How important is it to use a curriculum based on Western Art music approaches?*) and the criterion demonstrating the most value was Q2.04 (-1.59 logits, *How important is it to create meaningful, caring relationships with students in the classroom?*). There were six criteria that demonstrated overfit (Q3.01, Q3.20, Q1.20, Q1.21, Q3.11, Q1.05, see Table 2.3 in Appendix A). These criteria were removed from any interpretations of the overall scale as they did not provide meaningful information for evaluation. For future validation purposes, it is suggested that these criteria be removed or edited and tested (see Table 2.2).

Table 2.2

Calibration of Domain and Criteria Facets

	Observed Average Rating	Measure	SE	Infit MSE	Std. Infit MSE	Outfit MSE	Std. Outfit MSE
Domain							
Critical Examination	3.25	0.22	0.14	1.03	0.20	1.07	0.50
Cultural Competence	3.40	-0.08	0.13	0.87	-1.30	0.82	-1.60
Student Learning and Achievement	3.40	-0.13	0.15	1.08	0.70	1.11	0.70
Criteria							
Q3.01	1.44	3.70	0.13	1.77	5.10	2.34	7.80
Q3.20	1.51	3.37	0.13	1.70	4.50	2.04	7.00
Q1.20	1.63	3.01	0.11	1.60	4.40	1.93	6.10
Q2.19	2.05	2.36	0.11	1.40	3.40	1.45	3.70
Q1.21	2.29	2.22	0.10	1.58	5.50	1.64	5.90

Q3.11	2.64	1.56	0.12	1.45	3.90	1.57	4.50
Q1.05	2.85	1.16	0.12	1.51	3.90	1.57	4.50
Q3.02	2.80	1.01	0.10	1.20	2.00	1.21	2.20
Q1.02	3.21	0.95	0.13	1.34	3.30	1.34	3.30
Q2.05	2.97	0.74	0.10	0.90	-1.10	0.88	-1.30
Q2.18	3.35	0.72	0.12	0.70	-3.80	0.65	-4.10
Q3.17	3.05	0.63	0.11	1.11	1.00	1.13	1.30
Q3.15	3.11	0.51	0.11	1.01	0.10	1.12	1.10
Q2.08	3.41	0.49	0.12	0.78	-2.50	0.73	-3.00
Q3.10	3.75	0.37	0.17	0.79	-2.60	0.68	-2.60
Q2.15	3.41	0.35	0.13	0.93	-0.80	0.91	-1.00
Q2.01	3.48	0.27	0.13	0.81	-2.10	0.76	-2.40
Q1.22	3.32	0.26	0.41	0.95	-0.50	0.94	-0.60
Q3.19	3.18	0.20	0.11	1.04	0.40	1.09	0.90
Q1.14	3.53	0.15	0.13	0.98	-0.10	0.92	-0.60
Q2.21	3.22	0.12	0.11	0.93	-0.70	0.91	-0.90
Q1.13	3.18	0.12	0.13	0.95	-0.40	0.95	-0.40
Q3.13	3.26	0.12	0.11	0.99	-0.10	1.00	0.00
Q2.16	3.50	0.11	0.13	0.85	-1.60	0.79	-2.10
Q2.06	3.52	0.90	0.11	0.81	-1.50	1.16	0.90
Q3.12	3.42	0.08	0.14	1.03	0.30	1.01	0.10
Q3.22	3.45	0.04	0.14	0.97	-0.30	0.96	-0.4
Q2.03	3.19	0.02	0.11	0.94	-0.60	0.90	-1.00
Q2.09	3.20	-0.01	0.10	0.93	-0.70	0.89	-1.00
Q1.15	3.81	-0.02	0.19	0.96	-0.30	0.86	-0.70
Q1.12	3.15	-0.03	0.14	1.29	2.30	1.28	2.20
Q2.02	3.28	-0.06	0.11	0.85	-1.50	0.84	-1.60
Q2.13	3.68	-0.06	0.13	0.94	-0.40	0.74	-1.40
Q1.18	3.57	-0.10	0.14	0.88	-1.20	0.84	-1.40
Q2.07	3.34	-0.12	0.11	0.76	-2.50	0.72	-2.90
Q1.17	3.53	-0.18	0.12	0.85	-1.10	0.80	-1.50
Q3.14	3.58	-0.24	0.14	0.93	-0.70	0.85	-1.30
Q2.22	3.60	-0.25	0.12	0.71	-2.20	0.59	-2.90
Q3.03	3.72	-0.28	0.13	0.80	-1.10	1.47	1.80
Q3.16	3.41	-0.31	0.15	0.82	-2.40	0.79	-2.60
Q3.09	3.32	-0.31	0.12	1.20	1.90	1.28	2.60
Q3.07	3.55	-0.33	0.13	0.93	-0.50	0.93	-0.50
Q3.21	3.44	-0.35	0.15	0.79	-2.90	0.76	-3.00
Q2.11	3.36	-0.36	0.12	0.80	-2.20	0.75	-2.60
Q2.10	3.46	-0.47	0.12	0.76	-2.50	0.67	-3.20
Q1.07	3.60	-0.47	0.15	0.93	-0.80	0.89	-0.90
Q1.08	3.69	-0.48	0.13	1.26	1.60	1.55	2.10
Q1.19	3.49	-0.49	0.13	0.98	-0.10	1.02	0.20
Q3.18	3.52	-0.53	0.13	0.91	-0.70	0.86	-1.10
Q2.17	3.54	-0.56	0.13	0.76	-2.30	0.67	-2.80
Q2.20	3.54	-0.56	0.12	0.90	-0.80	0.83	-1.20

Q1.03	3.60	-0.61	0.14	1.09	0.70	1.19	1.50
Q3.08	3.70	-0.72	0.15	0.68	-2.40	0.52	-3.40
Q3.04	3.89	-0.75	0.23	0.91	-0.50	0.69	-1.10
Q2.12	3.82	-0.91	0.18	0.83	-1.00	0.55	-2.20
Q1.16	3.70	-0.95	0.16	0.84	-1.70	0.74	-2.00
Q1.01	3.72	-0.97	0.16	1.06	0.50	1.10	0.70
Q2.23	3.73	-0.99	0.16	0.93	-0.60	0.83	-1.10
Q1.09	3.80	-1.08	0.18	0.89	-0.80	0.80	-1.00
Q2.24	3.61	-1.17	0.15	0.91	-1.20	0.90	-1.00
Q1.06	3.63	-1.19	0.15	1.02	0.20	0.99	0.00
Q1.11	3.68	-1.26	0.16	0.99	0.00	0.92	-0.60
Q1.10	3.81	-1.44	0.18	0.91	-0.60	0.74	-1.30
Q3.05	3.82	-1.46	0.19	0.85	-1.0	0.71	-1.50
Q1.04	3.95	-1.55	0.32	0.97	0.00	1.29	0.70
Q3.06	3.89	-1.55	0.22	0.87	-0.50	0.59	-1.50
Q2.04	3.92	-1.59	0.25	0.92	-0.20	.70	-0.70

Note. The criteria are arranged from high to low (e.g., most difficult to least difficult).

Rating Scale Response Structures (Research Question 3)

The third research question addressed the variation of rating scale response structures across each individual criterion of the rating scale. In this model, each criterion has its own overall estimated level of value. Additionally, each rating scale category has its own individual level of estimated value. (Bond, Yan & Heene, 2021; Masters, 1982). More precise, informative, and useful measures can be gleaned from the rating scale by controlling for individual value estimations across each rating scale category structure. In this survey, we used four response categories across two possible anchor sets most appropriate for each criterion of the survey, including (a) level of agreement (*Strongly Disagree/Disagree/Agree/Strongly Agree*), and (b) level of importance (*Not Important/Slightly Important/Important/Very Important*), to be interpreted as levels of value for items and domains. The Partial Credit version of the Rasch Measurement Model provides helps better determine the overall utility of the rating scale.

Linacre (2002) outlines guidelines for optimizing response category utility and measurement effectiveness (i.e., criterion validity). First, each category should contain at least

10% of the total observations. If 10% usage cannot be obtained, combining or collapsing categories may be appropriate to obtain more robust and informative responses (Linacre, 2002). (See Table 3 in Appendix A). The data collected in this study indicate less than 10% usage in category 1 (*Strongly Disagree/Not Important*) for 61 out of the 67 survey questions. This suggests the collapse of categories 1 and 2. However, data also indicates that the usage of category 2 responses (*Disagree/Slightly Important*) are consistently under a 10% response rate. These results point to a need to consider a restructuring of the category choices. Overall, through examination of response patterns, evidence suggests that most of these criteria are of value to the respondents.

Average measures allow for a quick examination for appropriate monotonic ordering across rating scale categories (Bond, Yan & Heene, 2021). These measures should always increase across the response categories, indicating those with higher levels of value for CRP endorse progressively higher categories (see requirements of invariant measurement described earlier). The data collected for this study indicate no violation of monotonicity, suggesting that the response categories across each of the criteria are properly ordered. The mean square error (*MSE*) provides evidence of a reasonably uniform level of randomness in the responses. Linacre (2002) suggests that rating scale categories with *MSE* values may not support useful measurement. For the data collected, the following categories displayed *MSE* values ≥ 2.0 : Q1.03 category 1, Q1.05 category 1, Q1.08 category 1, Q1.20 category 3, Q3.01 category 3 and 4, Q3.03 category 1, Q3.11 category 1, Q3.20 category 3 and 4. For future reiterations, it is recommended these categories be collapsed or carefully reexamined to better fit the substantive purpose of the scale.

Conclusion and Discussion

The purpose of this study was to develop and validate a reliable assessment tool to measure preservice music educators' values and beliefs of culturally responsive pedagogy. Results of the first research question (*What are the psychometric qualities (i.e., validity and reliability) of the Culturally Responsive Pedagogies Perspectives of Pre-Service Music Educators Scale?*) suggest a clear, consistent separation and ordering of respondents and criteria. Empirical support for validity, reliability, and precision in the measurement of the *Culturally Responsive Pedagogy Perspectives of Preservice Music Educators Scale* is demonstrated through appropriate spread of the logit scale measures, data-to-model fit indices, and separation statistics.

Results of the second research question (*How do the items fit the model and vary in difficulty?*) suggest a clear ordering of criteria-level and domain level value. *Critical Examination* (Q3 criteria) was the most valued domain. *Cultural Competency* (Q2 criteria) followed while *Student Learning and Achievement* (Q1 criteria) was the least valued domain. This indicates that preservice music educators are more aware of and tend to value practices and dispositions under the umbrella of 'Critical Examination' more than the practices and dispositions outlined in 'Student Learning and Achievement.' Understanding the ordering of criteria difficulty provides pedagogical insight into the areas of CRP in which preservice music educators may need more awareness, instruction, and practice.

Results of the third research question (*How does the structure of the scale vary across items and domains?*) suggest that each criterion varied in levels of value with appropriate monotonic categorical behavior across their respective rating scale categories. Additionally, data suggested overall good logit separation and no idiosyncrasies in model diagnostics. Based upon frequency use and *MSE* values, considerations may be warranted for collapsing some rating scale

categories in future use of the scale in order to obtain more precise measures. Overall, the results from this study signal that the *Culturally Responsive Pedagogy Perspectives of Preservice Music Educators Scale* is valid and can be used as a valuable diagnostic tool for preservice music educator programs to better understand preservice music educators' values of CRP.

The *Culturally Responsive Pedagogy Perspectives of Preservice Music Educators Scale* offers a sample of what CRP can look like in practice. Through the domains and items, participants are provided insight as to what type of mindset and observable actions define culturally responsive practices. For those with less CRP experience, the domains and items present research-supported practices and perceptions that are discernible when responding to the survey, possibly providing exposure to practices and beliefs they have not encountered before. Alternately, some preservice music teachers could have prior experiences with CRP that manifest themselves with different dispositions, practices, and beliefs. As noted previously, this survey does not include every culturally responsive disposition, practice, and belief. However, it does include many research-supported culturally responsive practices and beliefs. This is an important topic that should be considered for future iterations of this scale.

Responses yield information that can be utilized by both faculty and students in their music educator preparation. By outlining the three broad domains (student learning and achievement, cultural competency, and critical examination) with the specific items, those who utilize this survey have a guide for what types of activities and experiences could be offered in a music education preparatory program. Through examination of preservice music educator responses to the rating scale criteria, music education preparatory programs can better understand what CRP values their students have when entering their programs. This same

information can offer insight to areas of CRP which indicate possible deficiencies, allowing programs to focus on those areas of need.

Culturally responsive pedagogy can be defined as recognizing and utilizing students' cultural background and lived experiences in everyday classroom instruction, activities, resources, materials and assessments in order to cultivate higher levels of learning, nurture positive self-image, and develop critical thinking skills (Abril, 2013; Abril & Kelly-McHale, 2016; Gay, 2002, 2018; Kelly-McHale & Abril, 2015; Kindall-Smith, 2006; Kinloch, 2017; Ladson-Billings, 2009; McAnally, 2006). This scale allows for the measurement of the three broad concepts that are essential to being a culturally responsive educator as determined by the literature: (a) student learning and achievement; (b) cultural competency; and (c) critical examination. The items in this scale provide a guide as to what types of dispositions and practices are observable behaviors that make up the three broad areas that constitute CRP. Through the examination of participant responses, music education preparatory programs gain insight to the level of knowledge and awareness preservice music educators hold concerning the three domains of CRP practices. Using this diagnostic tool, programs can use the information to adapt their curriculum to address any areas of deficiency indicated by student responses. For instance, if results indicate students have low perceptions concerning cultural competence, programs can adapt their curriculum to address that area of need.

The design of this scale allows for two areas of evaluation. First includes the information that can be used to tailor the curriculum to cultivate culturally responsive skills and practices. This scale can be used as a pre/posttest to evaluate the growth of preservice music educators' CRP values. This can be from when students enter the program to when they exit the program, offering evidence of a program's ability to address the practices of CRP. The scale could also be

utilized to assess strengths and weaknesses, as well as growth, from year to year. Music education preparatory programs can also use the information to evaluate their curriculum and its ability to address the practices of CRP. Using the results of the rating scale, programs may adjust their instruction or provide additional experiences with CRP practices in order to better meet the needs of their students. Second, this scale can be used as a self-assessment tool on the part of the preservice music educator. The scale defines the three broad areas of CRP with specific examples of observable practices within each area, helping to focus student perceptions on areas they feel need more development and understanding. Self-awareness can assist students in the development of future considerations concerning their students, instruction and curricula as in-service educators. Through the use of this scale, future music educators can be supported in their endeavors to reach a diverse set of learners in their own classrooms.

While literature addressing development of CRP instructional strategies and practices for in-service and preservice music educators is robust, there is a gap in addressing the values, perceptions, and understandings preservice music educators hold throughout their preparation program. Understanding the prior and current knowledge levels of preservice music educators allows programs to focus the preservice music educator preparation on areas indicating a deficit of understanding or awareness prior to students entering the field. Future research considerations could include examining the congruence between preservice music educator perceptions and content-area experts. This would help highlight areas in need of more development within preservice music educator preparatory programs. Another future research consideration is investigating growth across a program, highlighting the impact of instruction on the development of CRP dispositions and practices. Studying the effectiveness of different university preparatory programs that fully integrate CRP practices within their undergraduate programs compared to

universities that may not have a fully defined CRP integration plan could also be valuable future research. A third future research consideration would include gathering information as to participants race and ethnicity in order to show any similarities or differences in CRP values. This would also be interesting to administer as a pre/post assessment to see what changes may or may not have occurred due to program instruction. We hope the survey developed in this study will be used by preservice music educator programs to gain meaningful information about student perceptions of culturally responsive pedagogy components which can then be applied to the improvement of their programs.

CHAPTER THREE

BENCHMARKING VALUES OF CULTURALLY RELEVANT PEDAGOGY: EXAMINING CONGRUENCY BETWEEN PRESERVICE MUSIC EDUCATORS AND MUSIC CONTENT EXPERTS²

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Abstract

The purpose of this study was to examine preservice music educators' values of culturally responsive pedagogy (CRP) compared to music-area CRP experts' values of culturally responsive practices. The research questions guiding this study included: (1) Overall, how congruent were preservice music educators' values and interpretations of culturally responsive pedagogy (CRP) when compared to music-area CRP experts' values and interpretations?; (2) How congruent were preservice music educators' values of CRP across each item of the scale?; and (3) How congruent were preservice music educators' values and interpretations of CRP across each domain of the scale? Preservice music educators and music-area experts responded to a rating scale consisting of three domains that reflect principles of CRP: (a) student learning and achievement, (b) cultural competency, and (c) critical examination of inequities in society. Preservice music educators ($N = 314$) and music-area CRP experts ($N = 3$) answered 67 culturally-responsive focused questions on the *Culturally Responsive Pedagogies for Preservice Music Educators Scale*, which were then analyzed using the many-facet Rasch measurement model. Results indicate a high measure of separability between preservice music educators and music-area experts ($Rel = .72$) as well as separability of items ($Rel = .98$) suggesting congruent differences in values between music-area experts and preservice music educators. Implications for curriculum development, music teacher preparation, and activist practices will be discussed.

Keywords: culturally responsive pedagogy, curriculum development, music teacher preparation, congruency, Rasch

Introduction

Culturally responsive pedagogy (CRP) requires a dedication to student achievement and energetic instruction on the part of the educator (Gay, 2018; Ladson-Billings, 2009; Lind & McKoy, 2016). Calling for educators to move past a cursory acknowledgement of diversity, preservice education need a foundation for developing and infusing culturally responsive dispositions throughout their preservice education (Lind & McKoy, 2016; Villegas & Lucas, 2002, 2007). For successful implementation of culturally responsive practices, preservice music educators need practice and training throughout their preparation program. Providing authentic learning experiences with culturally responsive practices helps teachers to be aware of the different ways learning takes place in the context of development, personal interests, learning styles and cultural influences (Darling-Hammond & Bransford, 2017; Fajet et al., 2005).

Understanding preservice music educators' (PME) values and expectations for music teaching and learning is integral to the development of educator dispositions, including cultural responsiveness (Eilam & Poyas, 2009; Fajet, et al., 2005; Legette & McCord, 2014; Teachout, 1997; Villegas & Lucas, 2002a, 2002b). PME values are helpful to consider in order to provide authentic learning experiences with CRP where the development of culturally responsive practices can begin. Understanding the values and expectations of music teaching and learning held prior to entering a music education preparation program allows for better alignment of skills and knowledge to the needs of PMEs. (Clauhs, 2021; Fajet, et al., 2005; Legette & McCord, 2014; Villegas & Lucas, 2002a, 2002b). Tracking PME values throughout their training may also provide insight to adaptations that could be made within the program to support the continued development of culturally responsive dispositions.

Guidance for developing culturally responsive teaching behaviors can be provided by utilizing PME values and beliefs of CRP (Howard, 2006; Whitaker & Valtierra, 2019). Providing a set of CRP behavior benchmarks would give PMEs awareness of the types of skills and mindsets needed to be culturally responsive while also establishing a common baseline for culturally responsive behaviors. For example, in music performance settings standards are set to provide criterion by which judges evaluate performances (Wesolowski, et al., 2018). These agreed-upon criteria provide a basis of expectation for the performer(s) by noting areas of evaluation (i.e., tone production, rhythmic congruence). The same could be done for culturally responsive pedagogy in the music classroom.

Through examination of culturally responsive practices and research by content-area experts, ‘benchmarks’ for culturally responsive values can be cultivated. These benchmark values can then be placed onto a latent continuum, helping to define CRP through observable behaviors (Engelhard, 2013; Engelhard & Wang, 2021; Wesolowski et al., 2018). Using content-area experts to define values that are determined to be culturally responsive, PME values can be examined for congruence with the content-area experts’ values. This comparison of congruence can provide music education preparatory programs with insight of PME understanding of CRP practices.

Congruence can be defined as “the match between ratings obtained from operational raters and those obtained from an expert panel on a set of benchmark performances” (Engelhard, 1996, p. 57). With established benchmarks created by an expert panel (content-area experts), lack of congruence between PME responses and content-area expert benchmarks can provide diagnostic information. This information can be utilized by both PME and program instructors. PME can develop an awareness for areas in CRP work that are strengths and areas in need of

more development. Program instructors can use the congruence information as both a baseline tool as well as a tool to assess growth. Sharing this information between both PME and program instructors can open discussion concerning CRP practices, allowing all involved to be an integral part the process.

The examination of congruence concerning PMEs' values and interpretations of CRP practices can shed light on misalignment between content-area experts and PMEs. This survey makes it possible to provide the specific areas in which PMEs are excelling and areas in need of more education and support. Much like a pre-test given in public schools, this congruence data can be utilized to adapt the PME preparation curriculum to address the areas of need. Within the domains of scale, preservice preparation programs will have a clearer understanding of what types of experiences and learning are needed to build their students' skills. This process can also be used upon completion of the preservice preparation program as well. If given as a pre-/post-test, programs can assess their effectiveness in cultivating CRP skills and behaviors. It could also provide insight to what kinds of supports graduating students may need as they move forward into their teaching careers. These data could be used either by the preservice preparation program or school districts wishing to help their novice teachers be successful in the classroom.

The purpose of this study was to examine the congruence of culturally responsive pedagogy perspectives and interpretations between preservice music educators and content area experts using the *Culturally Responsive Pedagogies for Preservice Music Educators Scale*. The following research questions guided this study:

1. Overall, how congruent were preservice music educators' values and interpretations of culturally responsive pedagogy (CRP) when compared to content-area experts' values and interpretations?

2. How congruent were pre-service music educators' values of CRP across each item of the scale?
3. How congruent were preservice music educators' values and interpretations of CRP across each domain of the scale?

Methodology

Benchmark Setting

The process of setting benchmarks involves determining a cut score or standard on a specific educational or psychological instrument that establishes minimum level of mastery by the test taker (Cizek, 2012; Engelhard & Gordon, 2000; Engelhard & Wang, 2021). By establishing performance benchmarks, distinct locations across the CRP continuum are determined. This allows for the development of meaningful categories to guide PME preparation curriculum (Engelhard & Gordon, 2000; Engelhard & Wang, 2021). In the judgmental benchmark-setting process, Engelhard and Gordon (2000) note that the “essential components of judgmental standard setting processes consist of a group of expert judges interacting with a set of test items through the use of a particular standard-setting process” (p. 4). For this study, a group of experts in the field of music education (i.e. content-area experts) were asked to provide value judgments on a specific set of items for both measurement and evaluation purposes.

The benchmark-setting process involves both qualitative considerations (i.e. evaluation) followed by the support of quantitative measurement data (Engelhard & Gordon, 2000; Wesolowski, et al., 2018). For the *Culturally Responsive Pedagogies for Preservice Music Educators Scale* measurement and evaluation were determined through the following process. First, CRP literature in both education and music education were examined to create statement

items. Second, three content area experts were recruited to read each statement item for appropriate CRP wording and intention (i.e. qualitative evaluation). Lack of agreement among the experts' feedback was used to edit statement items to better convey CRP ideals. Once statement items were agreed upon, the content-area experts answered the survey questions. Agreeability among the experts was determined by congruency of answers on the survey questions, with the threshold being two out of the three experts providing the same answer. That particular answer then became the 'standard' for that particular statement item, indicating a criterion-referenced 'cut' score (Englehard & Wang, 2021; Wesolowski, et al., 2018).

In this assessment context, the survey items were developed based on the CRP literature from the fields of education and music education to represent a range of values and interpretations found in CRP practices that would be encountered in the classroom. Three content-area experts, with experience in CRP, educator preparation and published research in the area, were recruited to assign benchmark ratings to the survey items individually. The assigned ratings were then statistically summarized through finding the mode among the three expert raters (Engelhard, 1996). If there was no consensus among the experts in the benchmark ranking of a survey item, then that item was taken off the survey. Once established, the benchmarks can then be used to determine the congruence between PME's values and interpretations of CRP. Congruence is indicated by the match between the operational rater (PMEs) and the benchmark ratings. The closer the match between the PME's and the expert-established benchmarks, the higher the level of congruence. It should be noted that Engelhard (1996) used the term 'accuracy' but this process is viewed more effectively as congruence within the context of this study.

Psychometric Considerations

Rasch measurement models (Rasch 1960/1980) fall under the umbrella of Item Response Theory (IRT). These measurement models provide a process of locating both persons and items on a continuum that defines a latent (i.e. unobservable) construct for purposes of comparison (Bond, Yan & Henne, 2021; Engelhard, 2013; Engelhard & Wind, 2018; Wesolowski, 2019). To be able to use the data for comparison, the scale must follow five requirements of invariant measurement: (a) criteria-invariant measure of respondents (i.e., respondent measures are independent from the rating scale criteria measures); (b) respondents with more latent agreeableness/importance must always demonstrate higher agreeableness/importance on a criterion than those respondents with less agreeableness/importance; (c) respondent-invariant measure of criteria (i.e., amount of criteria agreeableness/importance is independent of respondents); (d) any respondent must have higher agreeableness/importance on higher agreeable/important criteria than on less agreeable/important criteria; and (e) criteria and respondents must be simultaneously located on a single underlying latent variable (i.e., variable map) (Engelhard, 2013).

For this study, the many-facet Rasch measurement model (MFRM) was used to analyze the data (Linacre, 2009). The MFRM model is an extension of the basic Rasch measurement model (Engelhard, 1996; Linacre, 2009). The objective of this measurement model is to estimate the location of operational raters (PMEs) on a congruence scale defined by a set of established benchmarks (set by content-area experts) (Engelhard, 1996). One basic assumption of this model is that both persons and items can be ordered across the latent construct continuum, indicating differing ability (for persons) and difficulty (item) levels (Engelhard, 1996). For (this study,

congruence is measured dichotomously (0 = incongruent, 1 = congruent) using pre-established benchmarks using the following equation:

$$\ln \left[\frac{P_{ni1}}{P_{ni0}} \right] = \beta_n - \delta_i$$

where P_{ni1} is the probability of rater n being congruent ($x = 1$) on CRP benchmark i , P_{ni0} is the probability of rater n being incongruent ($x = 0$) on CRP benchmark i , β_n is the congruence of rater n , and δ_i is the difficulty of being congruent on CRP benchmark i (Engelhard, 1996). This allows for the examination both raters and benchmarks (two facets). This mapping of the two facets onto one continuum allows for the creation of a Wright map, a visual representation of the comparative differences in locations among facets (see Figure 1) (Wesolowski, Wind, & Engelhard, 2018). Data was analyzed using Linacre's (2014) *FACETS* computer program.

Instrument

The instrument used in this study is the *Culturally Responsive Pedagogies for Preservice Music Educators Scale* (see Appendix B). Validation of the scale was completed using the Partial Credit (PC) version of the Rasch model in a previous study (Masters, 1988). Results indicated that scale items had a high reliability of separation ($Rel = .98$). Scale items and domains were developed through thoroughly examining the research literature addressing CRP practices in music education as well as the broader field of education. Items and domains were then read for clarity and consistency by the authors and three content-area experts working in the field of music teacher education. The structure of the scale was based on a four-point Likert-type scale (e.g., strongly disagree to strongly agree) with 67 items across three domains: (1) student learning and achievement ($n = 22$); (2) cultural competence ($n = 23$); and (3) critical examination ($n = 22$). Two sets of response anchors were utilized dependent on objective of the

question/statement stem: (a) agreeability (*strongly disagree, disagree, agree, strongly agree*) and (b) importance (*not important, slightly important, important, very important*).

The three domains of the scale are grounded in the tenets of CRP. The domain of student learning and achievement focuses on student success in the classroom as well as teacher beliefs concerning the possibility of students' success in the classroom. This domain also addresses the roles of both teacher and student in learning process, looking to see PME values on the importance of student-centered approaches. The domain of cultural competency asks respondents to consider the importance of students' personal experiences and backgrounds when considering curriculum and instruction. Several questions address the use of a variety of instructional approaches, variety of learning experiences and connecting those to the students' home music. The third domain of critical examination focuses on teacher beliefs about intelligence, equity, reflection, working with others and using music to critically examine social and institutional constructs.

Participants

Participants in this study consisted of two groups of raters: operational raters ($N = 314$) and expert raters ($N = 3$). Operational rater participants were preservice music educators from 42 colleges or universities from across the United States. Preservice music educators were undergraduate students enrolled in any year of their music preparation program up to, but not in their final semester of study. The three expert raters all work in higher education institutions as preservice music educator trainers. All three content-area experts conduct research and have published a total of 77 peer-reviewed research manuscripts and three books in the areas of culturally responsive pedagogy and music education preparation. The three content-area experts' (CAE) responses were utilized to establish benchmarks indicating cultural responsiveness

through the use of a consensus process (Engelhard, 1996). This process resulted in two survey items being eliminated due to lack of consensus between the content-area experts. The content-area experts were the same experts who were used in the validation of the rating scale.

Results

Summary Statistics

Summary statistics for the two facets examined in the MFRM model are provided in Table 1. To determine if there was significant statistical difference between PME responses and the CRP benchmarks, a chi-squared test of significance (χ^2) and reliability of separation (*Rel*) statistics were used. Results indicate a high measure of separability between PME responses and content-area expert benchmarks, ($\chi^2_{(313)} = 1054.6, p < .01, Rel = .72$), suggesting marked differences between PME values and interpretations of CRP and the benchmarks set by content-area experts. The item measurement report denotes a high measure of separability as well, ($\chi^2_{(66)} = 2695.3, p < .01, Rel = .98$), suggesting differences in congruence across criterion. The domains show some difference in PME congruence with the overall mean of the domains being .53 ($SD = .05$). Both PMEs and criteria demonstrated characteristic fit to the MFRM measurement model utilizing the parameter of 0.60-1.40 in Infit/Outfit categories as an indicator of model-to-data fit. Criteria and respondent fit indices outside of this range indicate these items or responses cannot be used when drawing inferences. Results indicate strong evidence for good construct and predictive validity (Linacre, 2002, 2009).

Wright Map

Figure 3.1 shows the variable map for the MFRM measurement model. This visually represents the unidimensionality of the latent construct of CRP, meeting the requirements of invariant measurement (Engelhard, 2013). The Wright map or variable map represents the

continuum of CRP benchmarks and the varying levels of congruence on the part of PMEs. The first column of the variable map is the log odds measure for the two facets. The second column is the spread of congruence achievement for PMEs. The scores in this column range from less accurate (e.g., lower log odds, bottom of the column) to more accurate (e.g., higher log odds, top of the column). Column three indicates the spread of difficulty of the criteria, following the same continuum of difficulty as the second column (e.g., lower difficulty at the bottom of the column; higher difficulty at the top of the column).

Table 3.1

Summary Statistics from the Many Facet Rasch Model

	Preservice Music Educators (θ)	Criteria (δ)
Logit-Scale Location		
<i>M</i>	0.19	0.00
<i>SD</i>	0.52	1.09
<i>N</i>	314	67
Infit MSE		
<i>M</i>	1.00	0.99
<i>SD</i>	0.17	0.16
Std. Infit		
<i>M</i>	-0.10	0.10
<i>SD</i>	1.50	4.40
Outfit MSE		
<i>M</i>	1.00	1.00
<i>SD</i>	0.34	0.25
Std. Outfit		
<i>M</i>	-0.10	1.00
<i>SD</i>	1.30	4.60
Separation Statistics		
<i>Reliability of Separation</i>	0.72	0.98
<i>Chi-Square</i>	1054.6*	2695.3*
<i>Degrees of Freedom</i>	313	66

Note. * $p < .01$

Preservice Music Educator Perception and Interpretation Congruence

The first research question sought to examine the overall congruence of PME's values and interpretations of CRP compared to music-area expert established benchmarks (*Overall, how*

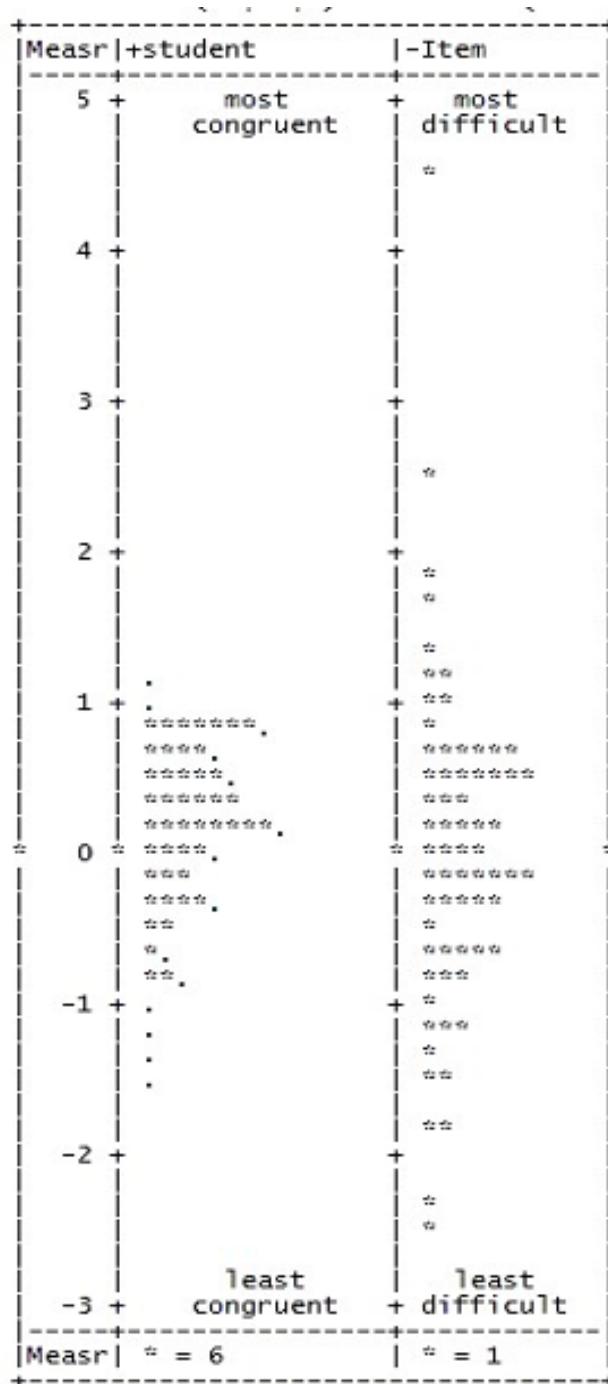


Figure 3.1 – Wright Map

accurate were preservice music educators' values and interpretations of culturally responsive pedagogy (CRP) when compared to music-area CRP experts' values and interpretations?). PME with higher mean logit ratings were more congruent in their values and interpretations of CRP, where as those PMEs with lower mean logit ratings indicated a lack of congruency in their CRP values and interpretations. The calibration of the student facet (preservice music educators) and logit-score locations for PME perception and interpretation congruence can be found in Table 3.2. Teacher 10 and teacher 270 (average congruence score = 0.70) with an overall rating of 1.17 logits ($SE = 0.30$) exhibited the most congruence with the content-area expert benchmarks. Looking at the five highest congruency scores, there were three sophomores, one junior and one senior. This indicates a spread of congruency across the different years of preservice preparation. Teacher 313 showed the least amount of congruency with the expert-set benchmarks (average congruence score = 0.20) with an overall rating of -1.49 logits ($SE = 0.32$). The five least congruent respondents included one freshman, one sophomore, one junior and two seniors. This may indicate that all levels of PMEs need consistent instruction in and practice with CRP. Results indicate that operational raters (PMEs) have good model-to-data fit for the MFR measurement model. See Figure 3.1 for a visual representation of the operations rater data in Table 3.2

Congruence Across Criteria

The second research question (*How accurate were pre-service music educators' values of CRP across each item of the scale?*) looked to examine which criteria were more or less likely for PMEs to answer congruently compared to the CRP benchmarks. These data can be seen in the third column of the variable map, showing more difficult criteria at the top of the column and less difficult criteria at the bottom. Criteria 1.03 (*Assessing students' academic and social*

limitations is important) was the least likely to be congruent, with a logit score of 4.43 ($SE = 0.45$) when compared to the benchmark set by content-area experts (average congruence score = 0.00). Criteria 1.04 (*Students' personal experiences affect their academic, emotional, and social behaviors in school*) showed the most congruence with a logit rating of -2.57 ($SE = 0.23$) in comparison to content-area expert benchmarks (average congruence score = 0.90).

Table 3.2

Calibration of Student Facet

Preservice Music Educator	Observed Average Rating	Measure	SE	Infit MSE	Std. Infit MSE	Outfit MSE	Std. Outfit MSE
10	0.70	1.17	0.30	0.91	-0.60	0.77	-0.90
270	0.70	1.17	0.30	0.84	-1.10	0.75	-1.00
24	0.70	1.09	0.30	0.91	-0.60	0.75	-1.00
25	0.70	1.09	0.30	0.97	-0.20	0.81	-0.70
253	0.70	1.09	0.30	0.83	-1.20	0.69	-1.30
2	0.70	1.00	0.29	0.92	-0.50	0.75	-1.00
40	0.70	1.00	0.29	0.95	-0.30	0.80	-0.70
226	0.70	1.00	0.29	0.94	-0.30	0.80	-0.80
276	0.70	1.00	0.29	0.87	-0.90	0.81	-0.70
5	0.70	0.92	0.29	0.84	-1.30	0.71	-1.30
21	0.70	0.92	0.29	0.83	-1.30	0.70	-1.40
35	0.70	0.92	0.29	0.92	-0.60	0.78	-1.00
58	0.70	0.92	0.29	0.90	-0.80	0.79	-0.90
104	0.70	0.92	0.29	0.93	-0.50	0.80	-0.90
130	0.70	0.92	0.29	0.89	-0.80	0.75	-1.10
133	0.70	0.92	0.29	0.88	-0.90	0.74	-1.20
147	0.70	0.92	0.29	0.91	-0.70	0.78	-0.90
179	0.70	0.92	0.29	0.95	-0.30	0.82	-0.70
190	0.70	0.92	0.29	0.92	-0.60	0.82	-0.70
201	0.70	0.92	0.29	0.83	-1.30	0.69	-1.50
217	0.70	0.92	0.29	0.92	-0.50	0.81	-0.80
224	0.70	0.92	0.29	0.99	0.00	0.91	-0.30
268	0.70	0.92	0.29	0.92	-0.60	0.79	-0.90
280	0.70	0.92	0.29	0.97	-0.10	0.85	-0.60
14	0.70	0.83	0.28	0.92	-0.60	0.79	-0.90
31	0.70	0.83	0.28	0.89	-0.80	0.75	-1.10
42	0.70	0.83	0.28	0.91	-0.70	0.80	-0.90
49	0.70	0.83	0.28	0.99	0.00	0.91	-0.30
53	0.70	0.83	0.28	0.85	-1.30	0.71	-1.40

55	0.70	0.83	0.28	0.98	-0.10	0.87	-0.50
119	0.70	0.83	0.28	0.88	-1.00	0.82	-0.80
137	0.70	0.83	0.28	1.00	0.00	0.90	-0.40
175	0.70	0.83	0.28	0.87	-1.00	0.76	-1.10
180	0.70	0.83	0.28	0.80	-1.70	0.66	-1.70
186	0.70	0.83	0.28	0.92	-0.60	0.78	-1.00
191	0.70	0.83	0.28	0.91	-0.70	0.80	-0.90
227	0.70	0.83	0.28	0.96	-0.20	0.84	-0.60
243	0.70	0.83	0.28	0.94	-0.40	0.79	-0.90
261	0.70	0.83	0.28	1.09	0.70	1.00	0.00
271	0.70	0.83	0.28	0.96	-0.20	0.84	-0.70
281	0.70	0.83	0.28	0.83	-1.40	0.71	-1.40
311	0.70	0.83	0.28	0.89	-0.90	0.79	-0.90
62	0.70	0.75	0.28	0.86	-1.20	0.76	-1.10
92	0.70	0.75	0.28	0.91	-0.70	0.78	-1.00
93	0.70	0.75	0.28	1.02	0.10	0.98	0.00
114	0.70	0.75	0.28	0.79	-1.90	0.69	-1.60
123	0.70	0.75	0.28	0.99	0.00	0.86	-0.60
160	0.70	0.75	0.28	0.88	-1.00	0.80	-0.90
170	0.70	0.75	0.28	1.00	0.00	0.90	-0.40
177	0.70	0.75	0.28	0.88	-1.00	0.75	-1.20
182	0.70	0.75	0.28	0.96	-0.30	0.87	-0.50
196	0.70	0.75	0.28	0.95	-0.40	0.81	-0.80
203	0.70	0.75	0.28	0.84	-1.40	0.72	-1.40
265	0.70	0.75	0.28	0.87	-1.10	0.75	-1.20
284	0.70	0.75	0.28	0.88	-1.00	0.75	-1.20
86	0.60	0.68	0.28	0.97	-0.20	0.89	-0.40
87	0.60	0.68	0.28	0.92	-0.70	0.81	-0.90
88	0.60	0.68	0.28	0.96	-0.30	0.85	-0.70
121	0.60	0.68	0.28	0.81	-1.80	0.70	-1.60
125	0.60	0.68	0.28	0.96	-0.30	1.15	0.70
134	0.60	0.68	0.28	1.00	0.00	0.91	-0.40
142	0.60	0.68	0.28	1.01	0.10	0.96	-0.10
164	0.60	0.68	0.28	0.91	-0.70	0.82	-0.80
267	0.60	0.68	0.28	0.90	-0.90	0.79	-1.00
273	0.60	0.68	0.28	0.90	-0.90	0.78	-1.00
274	0.60	0.68	0.28	0.97	-0.20	1.01	0.10
283	0.60	0.68	0.28	1.06	0.50	1.02	0.10
312	0.60	0.68	0.28	1.00	0.00	0.87	-0.60
26	0.60	0.60	0.28	0.85	-1.40	0.75	-1.30
30	0.60	0.60	0.28	0.86	-1.30	0.76	-1.20
33	0.60	0.60	0.28	0.87	-1.20	0.75	-1.30
38	0.60	0.60	0.28	0.78	-2.20	0.71	-1.60
51	0.60	0.60	0.28	0.83	-1.60	0.74	-1.40
106	0.60	0.60	0.28	0.92	-0.70	0.88	-0.50
129	0.60	0.60	0.28	0.76	-2.40	0.66	-1.90

171	0.60	0.60	0.28	0.92	-0.70	0.83	-0.80
199	0.60	0.60	0.28	0.78	-2.10	0.68	-1.80
269	0.60	0.60	0.28	0.77	-2.30	0.67	-1.80
279	0.60	0.60	0.28	1.12	1.00	1.25	1.20
288	0.60	0.60	0.28	0.86	-1.30	0.76	-1.20
299	0.60	0.60	0.28	0.87	-1.20	0.76	-1.20
44	0.60	0.52	0.27	0.88	-1.10	0.80	-1.00
46	0.60	0.52	0.27	0.80	-2.10	0.70	-1.70
112	0.60	0.52	0.27	0.85	-1.50	0.76	-1.30
124	0.60	0.52	0.27	0.93	-0.60	0.84	-0.80
127	0.60	0.52	0.27	0.84	-1.60	0.79	-1.10
131	0.60	0.52	0.27	0.85	-1.40	0.75	-1.30
138	0.60	0.52	0.27	0.89	-1.00	0.81	-1.00
143	0.60	0.52	0.27	1.02	0.20	0.98	0.00
144	0.60	0.52	0.27	0.75	-2.60	0.65	-2.00
240	0.60	0.52	0.27	0.86	-1.30	0.77	-1.20
241	0.60	0.52	0.27	0.99	0.00	0.96	-0.10
247	0.60	0.52	0.27	0.87	-1.30	0.79	-1.00
298	0.60	0.52	0.27	0.86	-1.40	0.80	-1.00
300	0.60	0.52	0.27	0.86	-1.30	0.76	-1.30
303	0.60	0.52	0.27	0.79	-2.20	-.71	-1.60
19	0.60	0.45	0.27	0.99	0.00	0.93	-0.30
28	0.60	0.45	0.27	0.86	-1.40	0.76	-1.30
34	0.60	0.45	0.27	1.07	0.70	1.02	0.10
43	0.60	0.45	0.27	0.76	-2.60	0.67	-1.90
47	0.60	0.45	0.27	0.88	-1.20	0.78	-1.10
60	0.60	0.45	0.27	0.87	-1.30	1.04	0.20
111	0.60	0.45	0.27	0.96	-0.30	0.97	-0.10
116	0.60	0.45	0.27	0.95	-0.40	0.93	-0.30
118	0.60	0.45	0.27	0.90	-1.00	0.82	-0.90
126	0.60	0.45	0.27	0.92	-0.70	0.82	-0.90
135	0.60	0.45	0.27	0.91	-0.90	1.54	2.50
139	0.60	0.45	0.27	0.75	-2.70	0.66	-1.90
174	0.60	0.45	0.27	0.90	-1.00	0.82	-0.90
200	0.60	0.45	0.27	0.89	-1.10	0.79	-1.10
206	0.60	0.45	0.27	0.94	-0.60	0.92	-0.40
272	0.60	0.45	0.27	0.97	-0.20	0.90	-0.40
3	0.60	0.38	0.27	1.07	0.70	1.17	0.90
8	0.60	0.38	0.27	0.82	-1.90	0.72	-1.50
56	0.60	0.38	0.27	0.86	-1.50	0.77	-1.20
59	0.60	0.38	0.27	0.94	-0.60	0.89	-0.50
64	0.60	0.38	0.27	1.03	0.30	1.00	0.00
69	0.60	0.38	0.27	0.90	-1.00	0.84	-0.80
109	0.60	0.38	0.27	1.07	0.70	1.21	1.10
128	0.60	0.38	0.27	1.14	1.30	1.19	1.00
132	0.60	0.38	0.27	1.00	0.00	1.16	0.80

141	0.60	0.38	0.27	0.82	-1.90	0.75	-1.40
152	0.60	0.38	0.27	1.03	0.20	1.22	1.10
155	0.60	0.38	0.27	0.82	-2.00	0.72	-1.60
166	0.60	0.38	0.27	0.91	-0.80	0.90	-0.50
169	0.60	0.38	0.27	0.79	-2.30	0.71	-1.60
235	0.60	0.38	0.27	0.98	-0.10	0.95	-0.20
278	0.60	0.38	0.27	0.80	-2.10	0.73	-1.50
282	0.60	0.38	0.27	1.04	0.40	0.96	-0.10
285	0.60	0.38	0.27	1.12	1.10	1.27	1.40
11	0.60	0.30	0.27	1.30	2.90	1.41	2.00
15	0.60	0.30	0.27	0.85	-1.60	0.77	-1.30
18	0.60	0.30	0.27	0.89	-1.20	0.81	-1.00
39	0.60	0.30	0.27	1.00	0.00	1.08	0.50
70	0.60	0.30	0.27	0.78	-2.50	0.69	-1.80
72	0.60	0.30	0.27	0.87	-1.30	0.81	-1.00
115	0.60	0.30	0.27	1.01	0.00	0.92	-0.30
149	0.60	0.30	0.27	0.99	0.00	0.92	-0.40
151	0.60	0.30	0.27	0.97	-0.20	0.90	-0.50
176	0.60	0.30	0.27	0.79	-2.30	0.71	-1.70
194	0.60	0.30	0.27	0.84	-1.70	0.78	-1.20
197	0.60	0.30	0.27	0.90	-1.00	0.82	-0.90
221	0.60	0.30	0.27	0.82	-1.90	0.73	-1.50
230	0.60	0.30	0.27	0.83	-1.80	0.96	-0.10
231	0.60	0.30	0.27	1.05	0.50	1.00	0.00
250	0.60	0.30	0.27	0.89	-1.10	0.80	-1.00
254	0.60	0.30	0.27	0.90	-1.00	0.83	-0.90
259	0.60	0.30	0.27	0.91	-0.90	0.83	-0.90
12	0.60	0.23	0.27	1.06	0.60	0.99	0.00
23	0.60	0.23	0.27	1.02	0.10	0.94	-0.20
45	0.60	0.23	0.27	0.94	-0.60	0.89	-0.50
66	0.60	0.23	0.27	0.82	-2.00	0.74	-1.40
71	0.60	0.23	0.27	0.85	-1.70	0.78	-1.20
85	0.60	0.23	0.27	0.79	-2.40	0.71	-1.60
90	0.60	0.23	0.27	0.85	-1.60	0.80	-1.00
91	0.60	0.23	0.27	0.95	-0.40	1.84	3.70
102	0.60	0.23	0.27	0.89	-1.20	0.83	-0.90
120	0.60	0.23	0.27	1.30	2.90	1.33	1.60
156	0.60	0.23	0.27	1.16	1.70	1.70	0.90
184	0.60	0.23	0.27	1.08	0.80	1.07	0.40
198	0.60	0.23	0.27	0.95	-0.40	0.90	-0.50
205	0.60	0.23	0.27	0.80	-2.30	0.72	-1.60
215	0.60	0.23	0.27	0.99	-0.10	0.89	-0.50
242	0.60	0.23	0.27	0.89	-1.10	0.84	-0.80
246	0.60	0.23	0.27	1.03	0.30	1.14	0.80
289	0.60	0.23	0.27	0.88	-1.20	0.81	-1.00
309	0.60	0.23	0.27	1.06	0.60	1.03	0.20

6	0.50	0.16	0.27	0.94	-0.60	0.86	-0.70
13	0.50	0.16	0.27	1.07	0.70	1.16	0.80
16	0.50	0.16	0.27	0.94	-0.60	1.01	0.10
67	0.50	0.16	0.27	0.94	-0.60	0.89	-0.50
75	0.50	0.16	0.27	0.81	-2.10	0.74	-1.50
78	0.50	0.16	0.27	0.93	-0.70	0.85	-0.80
83	0.50	0.16	0.27	0.79	-2.40	0.71	-1.60
84	0.50	0.16	0.27	0.87	-1.50	0.79	-1.10
95	0.50	0.16	0.27	0.90	-1.10	0.90	-0.50
140	0.50	0.16	0.27	0.87	-1.50	0.79	-1.10
159	0.50	0.16	0.27	0.97	-0.20	0.93	-0.30
211	0.50	0.16	0.27	0.86	-1.50	0.79	-1.10
213	0.50	0.16	0.27	0.96	-0.40	0.87	-0.60
218	0.50	0.16	0.27	0.98	-0.20	0.94	-0.20
225	0.50	0.16	0.27	1.04	0.40	1.04	0.20
233	0.50	0.16	0.27	1.07	0.80	1.12	0.60
236	0.50	0.16	0.27	1.02	0.20	0.93	-0.30
237	0.50	0.16	0.27	1.06	0.60	0.99	0.00
266	0.50	0.16	0.27	0.83	-1.90	0.86	-0.70
275	0.50	0.16	0.27	0.84	-1.80	0.78	-1.20
308	0.50	0.16	0.27	0.89	-1.20	0.87	-0.60
17	0.50	0.09	0.27	0.99	0.00	1.01	0.10
117	0.50	0.09	0.27	0.93	-0.70	0.84	-0.80
122	0.50	0.09	0.27	1.07	0.80	1.06	0.30
150	0.50	0.09	0.27	0.87	-1.50	0.78	-1.10
183	0.50	0.09	0.27	0.88	-1.30	0.81	-1.00
185	0.50	0.09	0.27	1.20	2.00	1.28	1.40
192	0.50	0.09	0.27	0.92	-0.80	0.95	-0.20
210	0.50	0.09	0.27	0.85	-1.70	0.78	-1.20
220	0.50	0.09	0.27	0.84	-1.80	0.77	-1.20
222	0.50	0.09	0.27	0.92	-0.90	0.85	-0.70
238	0.50	0.09	0.27	1.08	0.80	1.18	0.90
296	0.50	0.09	0.27	0.97	-0.20	1.01	0.00
310	0.50	0.09	0.27	1.00	0.00	0.95	-0.20
57	0.50	0.20	0.27	0.85	-1.60	0.78	-1.20
77	0.50	0.20	0.27	1.00	0.00	0.93	-0.30
99	0.50	0.20	0.27	0.92	-0.80	0.86	-0.70
113	0.50	0.20	0.27	1.06	0.70	1.16	0.80
162	0.50	0.20	0.27	0.94	-0.60	0.88	-0.50
163	0.50	0.20	0.27	1.06	0.60	1.00	0.00
204	0.50	0.20	0.27	1.19	2.00	1.27	1.40
208	0.50	0.20	0.27	1.33	3.30	1.38	1.80
212	0.50	0.20	0.27	0.96	-0.30	0.88	-0.60
232	0.50	0.20	0.27	0.96	-0.30	1.01	0.10
251	0.50	0.20	0.27	0.96	-0.40	0.88	-0.50
257	0.50	0.20	0.27	0.96	-0.40	0.93	-0.20

262	0.50	0.20	0.27	1.18	1.90	1.16	0.80
263	0.50	0.20	0.27	0.94	-0.60	0.95	-0.20
287	0.50	0.20	0.27	1.07	0.80	1.00	0.00
292	0.50	0.20	0.27	0.88	-1.30	0.91	-0.40
301	0.50	0.20	0.27	1.29	2.90	1.36	1.80
306	0.50	0.20	0.27	0.84	-1.70	0.77	-1.20
22	0.50	-0.05	0.27	0.90	-1.00	0.83	-0.80
61	0.50	-0.05	0.27	0.97	-0.30	1.00	0.00
89	0.50	-0.05	0.27	1.07	0.70	1.00	0.00
101	0.50	-0.05	0.27	1.22	2.20	1.24	1.20
108	0.50	-0.05	0.27	0.99	-0.10	0.94	-0.20
157	0.50	-0.05	0.27	1.10	1.10	1.03	0.20
181	0.50	-0.05	0.27	1.06	0.70	1.02	0.10
239	0.50	-0.05	0.27	0.91	-1.00	0.95	-0.10
258	0.50	-0.05	0.27	0.94	-0.60	0.95	-0.10
277	0.50	-0.05	0.27	0.92	-0.80	0.97	-0.10
27	0.50	-0.13	0.27	1.13	1.40	1.18	0.90
65	0.50	-0.13	0.27	1.28	2.80	1.44	2.00
76	0.50	-0.13	0.27	1.01	0.00	0.95	-0.20
105	0.50	-0.13	0.27	1.20	2.00	1.19	0.90
193	0.50	-0.13	0.27	1.04	0.50	0.97	0.00
294	0.50	-0.13	0.27	1.12	1.20	2.50	5.50
9	0.50	-0.20	0.27	0.93	-0.70	0.85	-0.70
50	0.50	-0.20	0.27	1.05	0.50	1.08	0.40
68	0.50	-0.20	0.27	1.23	2.20	1.42	1.90
79	0.50	-0.20	0.27	0.78	-2.40	0.71	-1.50
81	0.50	-0.20	0.27	1.28	2.80	1.32	1.50
107	0.50	-0.20	0.27	1.10	1.00	1.18	0.90
178	0.50	-0.20	0.27	1.13	1.30	1.09	0.40
187	0.50	-0.20	0.27	1.12	1.20	1.25	1.20
188	0.50	-0.20	0.27	1.27	2.60	1.33	1.50
189	0.50	-0.20	0.27	1.10	1.00	1.02	0.10
202	0.50	-0.20	0.27	0.96	-0.40	0.94	-0.20
302	0.50	-0.20	0.27	1.17	1.70	1.14	0.70
1	0.40	-0.27	0.27	1.15	1.50	1.13	0.60
103	0.40	-0.27	0.27	1.09	0.90	1.03	0.10
165	0.40	-0.27	0.27	0.90	-1.00	0.84	-0.70
244	0.40	-0.27	0.27	0.84	-1.70	0.83	-0.80
245	0.40	-0.27	0.27	1.11	1.10	1.08	0.40
249	0.40	-0.27	0.27	1.00	0.00	0.92	-0.30
286	0.40	-0.27	0.27	1.00	0.00	1.10	0.50
291	0.40	-0.27	0.27	1.14	1.40	1.13	0.60
4	0.40	-0.34	0.27	1.09	0.90	1.20	0.90
41	0.40	-0.34	0.27	1.31	2.90	1.32	1.40
48	0.40	-0.34	0.27	1.24	2.30	1.40	1.70
158	0.40	-0.34	0.27	0.94	-0.60	0.92	-0.30

161	0.40	-0.34	0.27	0.96	-0.40	0.90	-0.40
172	0.40	-0.34	0.27	1.05	0.50	0.98	0.00
207	0.40	-0.34	0.27	0.98	-0.20	0.97	0.00
234	0.40	-0.34	0.27	0.98	-0.10	0.90	-0.40
252	0.40	-0.34	0.27	1.14	1.40	1.13	0.60
256	0.40	-0.34	0.27	1.21	2.00	1.40	1.70
20	0.40	-0.41	0.27	1.25	2.30	1.25	1.10
36	0.40	-0.41	0.27	1.22	2.10	1.19	0.80
54	0.40	-0.41	0.27	1.18	1.70	1.39	1.60
73	0.40	-0.41	0.27	1.26	2.40	1.38	1.60
110	0.40	-0.41	0.27	0.97	-0.20	0.89	-0.40
223	0.40	-0.41	0.27	1.54	4.70	1.66	2.60
229	0.40	-0.41	0.27	1.03	0.30	1.04	0.20
305	0.40	-0.41	0.27	0.91	-0.80	0.86	-0.60
94	0.40	-0.49	0.27	1.20	1.80	1.37	1.50
96	0.40	-0.49	0.27	0.96	-0.30	0.95	-0.10
100	0.40	-0.49	0.27	0.97	-0.20	1.12	0.50
173	0.40	-0.49	0.27	1.19	1.70	1.21	0.90
255	0.40	-0.49	0.27	1.19	1.80	1.22	0.90
314	0.40	-0.49	0.27	1.24	2.20	1.28	1.20
82	0.40	-0.56	0.27	1.29	2.50	1.58	2.10
97	0.40	-0.56	0.27	1.17	1.50	3.24	6.20
136	0.40	-0.56	0.27	1.22	2.00	1.15	0.60
290	0.40	-0.56	0.27	1.06	0.50	1.01	0.10
293	0.40	-0.56	0.27	1.39	3.30	1.63	2.30
304	0.40	-0.56	0.27	1.15	1.30	3.29	6.30
7	0.40	-0.64	0.28	1.43	3.50	1.74	2.50
52	0.40	-0.64	0.28	1.22	1.80	1.18	0.70
154	0.40	-0.64	0.28	1.28	2.40	1.47	1.70
195	0.40	-0.64	0.28	1.29	2.40	1.55	2.00
264	0.40	-0.64	0.28	1.27	2.30	1.28	1.10
297	0.40	-0.64	0.28	1.27	2.30	1.25	1.00
145	0.40	-0.71	0.28	1.07	0.60	1.04	0.20
153	0.40	-0.71	0.28	0.95	-0.40	0.88	-0.30
168	0.40	-0.71	0.28	1.44	3.40	1.78	2.60
214	0.40	-0.71	0.28	1.08	0.60	1.29	1.10
219	0.40	-0.71	0.28	1.22	1.80	1.46	1.60
29	0.30	-0.79	0.28	1.37	2.80	1.52	1.80
32	0.30	-0.79	0.28	1.30	2.30	1.33	1.20
74	0.30	-0.79	0.28	1.18	1.50	1.18	0.70
80	0.30	-0.79	0.28	1.70	4.90	2.00	3.00
148	0.30	-0.79	0.28	1.31	2.40	1.56	1.90
209	0.30	-0.79	0.28	1.42	3.20	1.54	1.80
228	0.30	-0.79	0.28	1.21	1.60	1.25	0.90
248	0.30	-0.79	0.28	1.42	3.10	1.39	1.30
63	0.30	-0.87	0.28	1.51	3.60	1.60	1.90

216	0.30	-0.87	0.28	1.48	3.40	1.63	2.00
260	0.30	-0.87	0.28	1.14	1.10	1.21	0.70
295	0.30	-0.87	0.28	1.38	2.80	1.70	2.20
307	0.30	-0.87	0.28	1.37	2.70	1.45	1.50
146	0.30	-0.95	0.29	1.29	2.10	1.27	0.90
167	0.30	-1.04	0.29	1.02	0.20	1.02	0.10
98	0.30	-1.12	0.29	1.66	3.90	1.95	2.40
37	0.30	-1.30	0.30	1.57	3.20	2.22	2.70
313	0.20	-1.49	0.32	1.60	3.00	2.20	2.40
<i>Mean</i>	0.54	0.20	0.27	1.00	-0.04	1.00	-0.12
<i>SD</i>	0.11	0.52	0.01	0.17	1.49	0.35	1.25

Note. Preservice students are arranged from highest accuracy scores to lowest accuracy scores.

The five criteria PMEs were the least congruent with are focused around knowing the experiences your students bring to the classroom as well as being able to assess students' academic and social strengths and weaknesses. Statements like "The music teacher is the main disseminator of instruction in the music classroom" and "Assessing students' academic and social limitations is important" indicated high levels of incongruency with content-area expert benchmarks. The five criteria indicating the most congruency with expert benchmarks were focused on the educator's role in the classroom (i.e. knowing their students and being able to be reflective and flexible). Table 3.3 provides the calibration of criteria and logit locations for the 67 criteria on the scale. The third column of the variable map provides a visual representation of this data (see Figure 3.1).

Table 3.3

Calibration of Criteria

Criteria	Average Accuracy Score	Measure	SE	Infit MSE	Std. Infit MSE	Outfit MSE	Std. Outfit MSE
Q1.03	0.00	4.43	0.45	1.01	0.10	1.64	1.20
Q2.18	0.10	2.42	0.19	1.12	0.80	1.71	3.50
Q1.05	0.20	1.91	0.16	0.99	0.00	1.06	0.50

Q1.08	0.20	1.64	0.14	1.16	1.80	1.53	4.50
Q2.05	0.30	1.27	0.13	0.87	-2.30	0.78	-3.00
Q3.17	0.30	1.20	0.13	0.94	-1.00	0.92	-1.10
Q3.02	0.30	1.10	0.13	1.17	3.00	1.33	4.50
Q3.15	0.30	1.07	0.13	0.89	-2.10	0.84	-2.60
Q1.02	0.30	0.96	0.12	1.04	0.90	1.09	1.50
Q3.07	0.30	0.92	0.12	1.21	4.5	1.36	5.9
Q1.18	0.40	0.74	0.12	1.27	6.80	1.39	7.60
Q3.13	0.40	0.74	0.12	0.85	-4.10	0.82	-4.10
Q1.17	0.40	0.71	0.12	1.26	6.60	1.37	7.40
Q2.03	0.40	0.64	0.12	0.86	-4.20	0.85	-3.70
Q2.02	0.40	0.61	0.12	0.81	-6.20	0.78	-5.90
Q2.09	0.40	0.60	0.12	0.91	-2.90	0.91	-2.40
Q1.19	0.40	0.57	0.12	1.28	8.20	1.37	8.60
Q3.16	0.40	0.56	0.12	0.85	-4.90	0.83	-4.80
Q2.12	0.40	0.54	0.12	1.21	6.40	1.26	6.50
Q3.20	0.40	0.54	0.12	1.19	5.80	1.24	5.80
Q2.07	0.40	0.50	0.12	1.27	8.30	1.32	8.10
Q2.08	0.40	0.47	0.12	1.29	8.90	1.33	8.60
Q2.11	0.40	0.46	0.12	0.85	-5.40	0.84	-4.90
Q1.21	0.50	0.38	0.12	1.08	2.90	1.10	2.90
Q2.15	0.50	0.36	0.12	1.23	7.50	1.26	7.30
Q3.12	0.50	0.28	0.12	1.26	8.90	1.30	8.80
Q3.22	0.50	0.23	0.12	0.95	-1.90	0.94	-1.90
Q3.19	0.50	0.19	0.12	1.22	7.40	1.23	7.10
Q2.01	0.50	0.18	0.12	0.84	-6.00	0.83	-5.90
Q2.10	0.50	0.12	0.12	0.85	-5.80	0.84	-5.60
Q3.09	0.50	0.09	0.12	1.21	7.10	1.23	7.00
Q1.20	0.50	0.05	0.12	1.04	1.30	1.04	1.30
Q2.16	0.50	0.04	0.12	0.85	-5.40	0.84	-5.40
Q3.21	0.50	0.00	0.12	1.31	9.00	1.34	9.00
Q1.14	0.60	-0.07	0.12	0.86	-4.90	0.84	-4.80
Q2.19	0.60	-0.10	0.12	1.10	3.10	1.11	3.00
Q1.13	0.60	-0.17	0.12	1.16	4.70	1.19	4.80
Q2.17	0.60	-0.19	0.12	0.84	-4.80	0.83	-4.90
Q3.11	0.60	-0.21	0.12	1.14	3.90	1.16	4.00
Q1.22	0.60	-0.24	0.12	1.21	5.60	1.24	5.60
Q3.14	0.60	-0.24	0.12	0.91	-2.60	0.89	-2.80
Q3.18	0.60	-0.24	0.12	0.91	-2.70	0.89	-2.80
Q2.24	0.60	-0.28	0.12	0.87	-3.70	0.85	-3.80
Q3.01	0.60	-0.31	0.12	1.00	0.00	1.00	0.00
Q1.07	0.60	-0.32	0.12	0.90	-2.80	0.88	-2.80
Q2.20	0.60	-0.38	0.12	0.85	-3.80	0.83	-3.90
Q1.06	0.60	-0.39	0.12	0.90	-2.40	0.88	-2.60
Q1.11	0.70	-0.54	0.12	0.97	-0.60	0.96	-0.80
Q1.12	0.70	-0.59	0.12	1.08	1.50	1.09	1.60

Q2.06	0.70	-0.59	0.12	0.83	-3.60	0.79	-3.90
Q1.16	0.70	-0.62	0.12	0.85	-3.10	0.81	-3.40
Q2.22	0.70	-0.62	0.12	0.81	-4.10	0.76	-4.50
Q3.08	0.70	-0.70	0.13	0.81	-3.90	0.75	-4.30
Q1.01	0.70	-0.79	0.13	0.95	-0.90	0.94	-0.80
Q2.13	0.70	-0.81	0.13	0.88	-2.00	0.85	-2.30
Q3.10	0.70	-0.90	0.13	0.81	-3.10	0.74	-3.90
Q2.23	0.80	-1.00	0.13	0.89	-1.60	0.84	-2.00
Q3.03	0.80	-1.09	0.14	0.85	-2.00	0.78	-2.70
Q1.09	0.80	-1.13	0.14	0.86	-1.80	0.77	-2.80
Q1.15	0.80	-1.23	0.14	0.93	-0.80	0.87	-1.30
Q2.12	0.80	-1.34	0.15	0.85	-1.80	0.71	-3.00
Q1.10	0.80	-1.45	0.15	0.89	-1.10	0.76	-2.20
Q3.05	0.80	-1.49	0.15	0.85	-1.60	0.70	-2.80
Q3.06	0.90	-1.81	0.17	0.85	-1.30	0.65	-2.70
Q3.04	0.90	-1.87	0.17	0.87	-1.00	0.68	-2.30
Q2.04	0.90	-2.29	0.20	0.94	-0.30	0.76	-1.20
Q1.04	0.90	-2.57	0.23	0.94	-0.20	0.80	-0.80

Note. The criteria are arranged from high to low (e.g., most value to least value).

Congruence Across Domains

The third research question (*How accurate were preservice music educators' values and interpretations of CRP across each domain of the scale?*) examined the probability of congruence across domains in comparison to content-area expert benchmarks. Table 3.4 provides the calibration of domains and logit score location. The domain with the least amount of congruence was Domain 1 (*Student Learning and Achievement*) with a rating of 0.06 logits ($SE = 0.15$; average congruence score = 0.50). Domain 3 (*Critical Examination*) was the most likely to elicit congruent responses from PME's on content-area expert benchmarks with a rating of -0.09 logits ($SE = 0.13$; average congruence score = 0.60). Overall, congruence of responses was similar in all domains of the scale meaning CRP benchmarks for each domain were spread across the latent construct continuum.

Table 3.4*Calibration of Domain Facet*

	Average Accuracy Score	Measure	SE	Infit MSE	Std. Infit MSE	Outfit MSE	Std. Outfit MSE
Domain							
Student Learning and Achievement	0.50	0.06	0.15	1.03	1.00	1.07	1.10
Cultural Competence	0.50	0.03	0.13	0.95	-1.30	0.85	-1.30
Critical Examination	0.60	-0.09	0.13	1.00	0.80	0.98	0.60
<i>Mean</i>	0.53	0.00	0.14	0.99	0.17	0.97	0.13
<i>SD</i>	0.05	0.06	0.01	0.03	1.04	0.09	1.03

Conclusion and Discussion

The purpose of this study was to examine the congruence PME values and interpretations of CRP in comparison to content-area experts' values and interpretations using the *Culturally Responsive Pedagogies for Preservice Music Educators Scale*. The first research question examined the overall congruence of PME values and interpretations. Results indicated a range of congruence across the continuum, from 1.17 (SE = 0.30) to -1.49 (SE = 0.32) logits. The second research question analyzed PME congruence across the criteria of the scale, indicating a range of difficulty in criteria benchmarks (from 4.43 logits to -2.57 logits). The third research question scrutinized the congruence of PME values and interpretations across the three domains of the scale. Results indicated a small range, from 0.06 logits (SE = 0.15) to -0.09 logits (SE = 0.13)

between Domain 1 – *Student Learning and Achievement* (highest) and Domain 3 – *Critical Examination* (lowest).

These results indicate that PME's are strong in their understanding of what they should do as the music educator when it comes to their own personal practices. They perceive it is important for them to be constantly reflective on their practices as well as be open to feedback as part of their professional growth process. PME's agree with experts that developing caring relationships with students is an important part of the educational process. However, PME's are incongruent with content-area experts when it comes to considering the students' points-of-view when considering instructional practices and curricular materials. Overall, PME's are lacking in their values of importance of the experiences students bring with them to the music classroom. PME's, overall, also tend to see themselves as the 'main disseminators' of knowledge in the classroom, contradicting CRP components that emphasize the importance of creating a community of learners. In this context, students are placed at the center of the learning process where both students and educators learn from each other. This would indicate that preparation programs might need to better highlight the impact student experience, backgrounds and prior knowledge have on the learning that occurs in the classroom.

Examining preservice music educator values and interpretations can be beneficial for many reasons. First, it can provide valuable information to preparatory programs as they strive to best serve their students. With such information, programs can have a better idea of what types of educational experiences might best prepare their students for teaching music. Second, this information can provide programs with an idea of the effectiveness of CRP instruction and experiences. Programs can assess the growth in values and interpretations of CRP of students throughout the preparation program. Finally, a tool such as the *Culturally Responsive*

Pedagogies for Preservice Music Educators Scale provides a baseline for both PME and collegiate programs. For PMEs, participating in this survey would provide them with some ideas of what CRP practices require as far as mindset and behavior. For collegiate programs, this survey offers one source of research-based CRP benchmarks validated by content-area experts. This would allow for a basis of comparison across programs and schools.

The congruence of PME values and interpretations of CRP suggest that the *Culturally Responsive Pedagogies for Preservice Music Educators Scale* could be used as a valuable tool to assess foundational understandings of PMEs in reference to CRP practices. It could also be a valuable tool to facilitate professional growth across a PME's time in their preparation program. By utilizing the information that can be gathered from this tool, programs can be better equipped to prepare their PMEs for diverse classroom and school settings. PMEs can use the information to develop reflective practices that help better inform their CRP practices as they learn throughout their programs. Overall, by being able to pinpoint areas of need, PMEs can be better prepared to effectively educate and support every student who comes through their classroom doors.

CHAPTER FOUR

DEVELOPING A CULTURALLY RESPONSIVE MUSIC CLASSROOM:
A FRAMEWORK FOR IMPLEMENTATION³

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Abstract

Developing a culturally responsive music curriculum can be a challenge for practicing K-12 music educators. This chapter focuses on bringing the theory (values, understandings, dispositions, and practices) into practice by offering a theoretical framework for CRP implementation in in-service music educators' classrooms. Through critical examination of curricular structures, materials, lesson plans, and activities, a culturally responsive music curriculum could help create musical experiences that support students' identity development, affirm, and validate student cultural practices, and make music learning more personally meaningful.

Keywords: culture, culturally responsive pedagogy, music curriculum, inclusive music education, planning

Introduction

The idea of an all-inclusive music education has been around for many decades (Campbell et al., 2005; Lind & McKoy, 2016). Beginning with multicultural music education and moving through culturally responsive pedagogies, changing student demographics have helped to spur changes to school music curriculums (Lind & McKoy, 2016). But these changes have been gradual and are often challenging for practicing K-12 music educators to implement. This is not due to a lack of desire to provide opportunities to experience music from around the world or to provide instruction and materials that are culturally supportive (Howard, 2018). Even with these desires in place, the traditional music curriculum continues to focus on European musical practices.

In the scope of music education curriculum, culture, as it relates to music, is often thought of as world music or music that is outside the traditional European model (Abril & Kelly-McHale, 2016). However, culture plays a much larger role in student learning and achievement in the music classroom. As music educators, understanding how culture works as well as what role culture plays in learning is integral to student success in our classrooms. This understanding demands that music educators use more equitable approaches to the materials and instruction we provide our students (Lind & McKoy, 2016). If educators truly want to connect classroom learning to the real lives of students, then transformation of the traditional music curriculum needs to take place (Abril, 2009; Abril & Kelly-McHale, 2016; Campbell et al., 2005; Lind & McKoy, 2016). How can this transformation start in a way that empowers music educators to make culturally appropriate curricular decisions? In this article, I seek to describe culturally responsive pedagogy, contemplate music curriculum from a culturally responsive

point-of-view, and offer a curriculum assessment strategy based on Gholdy Muhammad's (2020) culturally and historically responsive literacy framework.

Background--Culturally Responsive Pedagogy

Culturally responsive practices call for music educators to center their students' cultural backgrounds and experiences in all aspects of learning (Abril, 2013). Utilizing students' culture and lived experiences helps make learning in the music classroom more personal, meaningful and effective (Abril, 2013; Delpit, 1995; Gay, 2018; Ladson-Billings, 2009). By understanding that students view their daily interactions, including learning, through their own cultural frames and experiences, educators can help students feel validated and important. In her writings about culturally relevant teaching, Gloria Ladson-Billings offers a theoretical model which focuses on bridging classroom learning to students' home lives and communities (Ladson-Billings, 2009).

There are three pillars to Ladson-Billings (1995a, 1995b, 2009) work in recognizing and utilizing culturally responsive practices in the classroom : a) student achievement and academic success; b) cultural competence; and c) critical consciousness (Ladson-Billings, 1995b) (See Sidebar 4.1). In student achievement and academic success, educators go beyond the belief that students can learn. Instead, culturally responsive educators hold their students to high standards that help continually extend student knowledge and understanding. Cultural competence involves helping students better understand the functioning of their own culture in their daily lives. This pillar also calls for students to develop an understanding of other cultures practices and appreciate the cultural experiences of others. Critical consciousness puts forth the idea of asking questions about how whole groups of people are excluded from certain systems, which in this case is music education (Ladson-Billings, 2021b). Holistically, the educators' decisions and beliefs concerning their students and their subject-area content should try to support students'

home cultures while also exposing them to mainstream ideas. Instead of the instruction focusing on the content, the focus shifts to using student learning strengths to thoroughly examine mainstream concepts taught in the curriculum.

Sidebar 4.1

Culturally Relevant Pedagogy

Gloria Ladson-Billings (1995a, 1995b, 2009)

Student Achievement	Belief in student capabilities, holding high standards, using student learning strengths
Cultural Competence	Understanding one's own culture, developing understanding and respect for other cultures
Critical Consciousness	The ability to recognize and analyze disparities within educational and social structures.

Geneva Gay (2018) provides insight to culturally responsive teaching practices that uphold these same ideas of bridging school life to home and community experiences (See Sidebar 4.2). In the effort to build cultural competence, Gay (2018) outlines five ways culturally responsive teaching affirms and validates students' lived experiences:

1. It acknowledges the legitimacy of cultural heritages of different ethnic groups, both as legacies that affect students' dispositions, attitudes, and approaches to learning and as worthy content to be taught in the formal curriculum.
2. It builds bridges of meaningfulness between home and school experiences as well as between academic abstractions and lived sociocultural realities.
3. It uses a wide variety of instructional strategies that are connected to different learning styles.
4. It teaches students to know and praise their own and one another's cultural heritages.

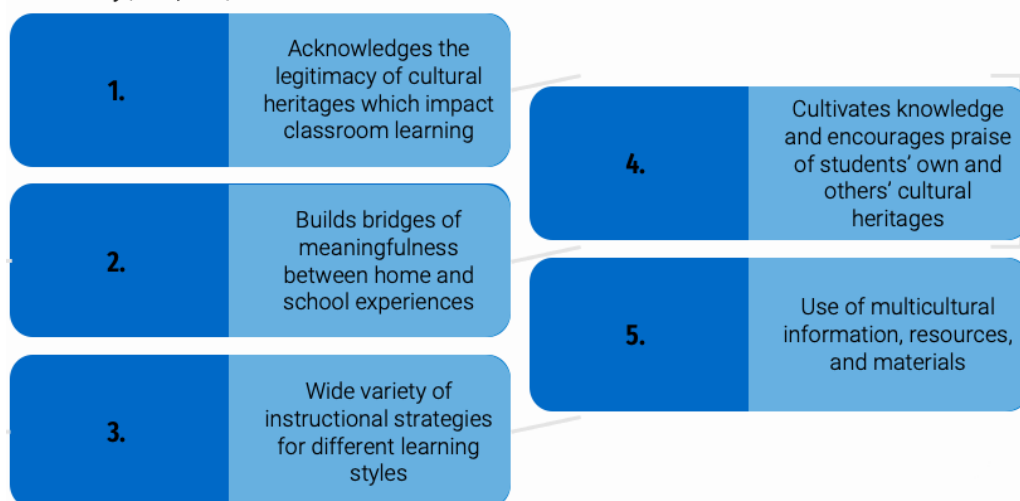
5. It incorporates multicultural information, resources, and materials in all the subjects and skills routinely taught in schools.

In order to create an environment where students feel valued in the classroom community, curricular choices must provide context to students' lived experiences and learning strengths. For a culturally responsive music educator, this means understanding your students and allowing the needs of the students to guide our curriculum choices (Abril & Kelly-McHale, 2016).

Sidebar 4.2

Culturally Responsive Teaching

Geneva Gay (2000, 2018)



School Music Curriculum

The Western art music perspective is the dominant focus in most school music curriculum (Abril & Kelly-McHale, 2016; Mellizo, 2020). Due to this narrow definition of what constitutes “good” practices in music (i.e. those based in Western art music), a message is sent that this genre of musical practices is preferential to all other musical practices (Bradley, 2007). Therefore, genres such popular, improvisatory, folk, indigenous, electronic and rap are ranked below the canon of European art music (Regelski, 2018). For students, this could create a disconnect between a desire to participate in school music and being able to interact with their preferred style of music. If students feel as though their musical tastes are viewed as less than,

they will self-select out of continued music participation. To begin breaking the traditional mold, music educators need to think critically about the instruction, lessons, and activities that make up their programs. Culturally responsive practices can help begin to decentralize the dominant style of music used in music classes and start broadening the scope of musical resources utilized in school music programs.

Curriculum Critique Framework

In *Cultivating Genius*, Gholdy Muhammad (2020) puts forth a framework for culturally and historically responsive literacy. Within this framework, one of Muhammad's goals is to "cultivate the genius" that is already within students and teachers. In line with the previously defined culturally responsive pedagogy, Muhammad offers 10 central lessons to defining responsive literacy. These lessons focus around having and maintaining high learning standards, a variety of different experiences with texts, tying literacy to joy, love, and aesthetic fulfillment, being responsive to people and the social events of the time, using peers as a learning resource, collaboration, experiencing many different genres and authors, and developing critical thinking skills through the learning that is taking place (Muhammad, 2020). These lessons could easily transfer over to the music classroom by simply replacing the word literacy with music. However, there is still work that needs to be done in order to ensure its relevance to the music curriculum.

In her culturally and historically responsive literacy framework, Muhammad also offers four areas of curriculum critique: a) identity, b) skills, c) intellect, and d) criticality.

Area 1—Identity

Culturally responsive pedagogy is focused on utilizing student strengths by connecting their school learning to their home lives. Pre-made music curricula often focus on the skills instead of on the student as a learner. Since such curricula are sold to schools throughout the

United States, there is little focus on identity develop, intellect, or critical thinking. In the examination of a music curriculum, ask how the component help to develop individual student identity? How do the curricular components help students better understand those with different backgrounds and experience than themselves?

Area 2—Skills

Culturally responsive pedagogy posits that all students come to class with valuable knowledge and experiences. It is an educator's job to tap into that knowledge and experience in order to help students build a comprehensive understanding of musical concepts (Abril & Kelly-McHale, 2016). Through the development of student-centered lessons, we provide students the opportunity to build technical musical skills but also understand those musical skills in relation to expression and culture (Abril, 2006c; Abril & Kelly-McHale, 2016). Choosing appropriate skill-building activities is an important component to student-centered lesson plans, especially if the activities are tied to students' culturally specific knowledge base (Lind & McKoy, 2016). In the examination of skills, question how the lessons, materials, and activities build students' musical understand and skills.

Area 3—Intellect

This area is closely related to the skills area just discussed. For the intellect area, music educators should be mindful of the various cultural frames for cognition, thinking processes, and knowledge construction (Lind & McKoy, 2016). Keeping these traits in mind, literature or repertoire can become a formidable tool. Offering students musical experiences that provide new ways of connecting to and understanding music will promote student engagement (Muhammad, 2020). Questions about intellect should focus on how the musical concepts are building on prior knowledge as well as developing students' higher order thinking skills.

Area 4—Criticality

This component addresses culturally responsive pedagogy's critical awareness aspect. When encouraging students to think critically about the materials and activities they are presented with, they become engaged as active learners (Gay, 2018; Muhammad, 2020). It is important to keep in mind that using music from a specific culture does not necessarily mean the instruction is culturally responsive. If a piece is selected for a specific pitch interval or rhythmic component but no cultural context is provided by the educator, then the lesson is not culturally responsive to the students. By allowing students the time to critically contemplate the interpretation of a piece both inside and out of the culture in which it originates, students are empowered to realize there is not a specific version of "good music" (Gay, 2018). In developing this criticality, we should ask if our music curriculum engages thinking that goes beyond the music classroom walls and into their larger social interactions.

While Muhammad's framework provides a guide to areas in need of critique in a music curriculum, it does not cover all of them. For this reason, I have added a fifth area, performance. Performance is an integral component to any music program. Therefore, it is important to be aware of the expectations we create around the performance opportunities the curriculum offers our students.

Area 5—Performance

Music educators must come to this area with a plan for the performance of literature selections. Was the literature selection for a fulfillment of an objective requirement or because it fit with the theme of the program? If so, what purpose does it fill in developing personal and cultural growth and understanding? If literature selections are chosen with cultural

responsiveness to students, what are the outcomes for student performance? There is not one specific answer to these questions. As music educators we must be thoughtful about the variety of performance practices from different cultures. To demonstrate cultural appreciation, it is important to engage with cultural musics in ways that demonstrate respect (Howard, 2020).

Table 4.1

Music Curriculum Evaluation (adapted from Muhammad, 2020)

Area of Examination	Critical Questions
Identity	• How does the music curriculum help students learn about themselves and/or others? • How are my students' backgrounds represented in the materials I choose for instruction? This would include methods, materials, and activities. • Do the materials selected connect to the concepts and to student identities? • Are there opportunities for students to explore themselves and the world around them?
Skills	• What are the most important skills for students to know to develop into independent musicians? • How does the curriculum respond to or build students' musical skills and standards? • Are the skills being learned, applied, and assessed through authentic application (i.e., not in isolation, but along with other skills?) • What different types of learning outcomes can be measured for meaningful assessment?
Intellect	• How does the music curriculum respond to or build upon students' knowledge and critical thinking about music? • What are they becoming smarter about? • How can the students apply their intellect to new situations? How does instruction help with the transfer of knowledge? • What kinds of creative educational experiences can be created to go beyond traditional instructional strategies for the music classroom? • What role does the history and meaning of music education play in the class and curriculum?
Criticality	• How does the music curriculum engage students' thinking about power structures and equity in the classroom and in their communities? • Do students have opportunities to question the information provided in class, along with the source? • Are there components of student autonomy provided throughout materials, lessons, and curriculum?

	• Does the curriculum provide for students to understand music education so they can offer their own perspectives and opinions? • How are students engaged in higher-order thinking skills throughout the course? • Are there opportunities to apply criticality to home experiences along with school experiences?
Performance	• How does the music curriculum support students' learning strengths in the performance of musical concepts and repertoire? • Are selections for performance or use in class from a varied repertoire of genres and composers/artists? • How do selections for performance help students learn about themselves and/or other cultures? • Do the pieces selected provide authentic application of skills, helping expand students' skills, intellect, and criticality? What are the learning purposes of the pieces selected? • Do students have the opportunity to participate in the selection of performance materials? • Are there opportunities for non-traditional performances within the curriculum?

Approaching a Culturally Responsive Music Curriculum

Many music educators are provided a curriculum when they come into the classroom. Often times we do not know who wrote the curriculum or why they chose the pieces and instructional strategies that they did. These curricula do not take into account the specific needs of the students in our classrooms. To build cultural responsiveness for our own student bodies we need to thoroughly examine the curriculum we have been offered. Music educators need to determine what instructional strategies, materials, literature, lesson plans and assessments are asking of our students (Muhammad, 2020). Through such an examination, we can better understand our program's strengths and weaknesses while also being able to rid our curriculum of outdated materials and practices. Using Muhammad's literacy framework as a guide can help provide music educators with an approach that may highlight strengths as well as areas of need within a music curriculum (see Table 4.1).

Where to Start?

Evaluation of a music curriculum should begin with the overall goals for the music program (i.e., What should be included in the curriculum? What kinds of musical experiences will be meaningful for the students?). Determining the musical experiences that culminate from classroom instruction should be the first step. Mellizo (2020), in her article on more equitable music practices, advocates for an experience-based approach by asking about what types of musical experiences and content will be the most meaningful and relevant for the students. Once that question has been considered, what types of musical learning will take place (Mellizo, 2020)? Another component that should occur alongside the examination of the overall program goals, is getting to know and understand the students in the class. This understanding may include students' cultural backgrounds and lived experiences as well as their learning strengths (i.e., visual, kinesthetic) and interests. Questions to consider may include: How is the curriculum helping my students learn more about themselves and others?; Do my students see themselves represented in the materials I am choosing to use throughout my classes?; Do my materials help my students to learn about identities (i.e. cultural) of those who are different than themselves?; and Do my materials and instruction foster a community of learners where all students feel a sense of belonging? This information is integral to the planning process when trying to develop a culturally responsive music program.

Knowing the students, or the demographics of the student body if in a new teaching experience, helps to avoid a monocultural approach (Abril & Kelly-McHale, 2016). Providing students with exposure to and practice with many different musical cultures is integral to the culturally responsive goal of becoming culturally competent. However, the experiences students

engage with may be most beneficial if musical cultures are presented in equal parts to facilitate connections or similarities between the different musical cultures (Abril & Kelly-McHale, 2016).

Skills and Standards Development

Once the overall goals for the program have been established, the focus of examination may move to the musical skills and standards that will be the most significant for the students. Here it is important to consider how these skills will help students develop into independent musicians, developing stronger connections between a student's school and home lives (Gay, 2018; Muhammad, 2020). This means skills should be taught and practiced in contexts that will be meaningful, helping to aid in the transfer of learning. Throughout this step, considering the areas of intellect and criticality can help to create those meaningful learning experiences.

Assessment Considerations

Assessment is another important part of the music curriculum that should be considered from a culturally responsive standpoint (Muhammad, 2020; Villegas & Lucas, 2002). There is no "one right" assessment for individual skills and standards being taught in the classroom (Gay, 2018; Wright, 2016). With this in mind, what are different ways students can demonstrate mastery of a skill or standard that allows them to use their learning strengths? In what ways can the assessment help extend the knowledge students already have concerning the specific skill or standard? How can the assessment demonstrate their critical thinking around the concepts being learned? In what ways can I assess learning in authentic ways? These questions call for a great deal of planning on the part of the educator, but can provide meaningful experiences for the students while also providing valuable data about student learning and achievement that educators can use in their future planning.

Building Evaluation Habits

The initial examination of the music curriculum could be a big undertaking, especially if the curriculum has not been examined for an extended period of time. However, once the process has been initiated, the process of examination can become cyclical (See Figure 4.1). By using a cyclical approach, educators can build on the culturally responsive objectives, standards, and skills they have built into their curriculum. This process allows the educator to be responsive to changes within their students' backgrounds and experiences. Engaging with this type of process on a regular basis can help educators to build culturally responsive dispositions and beliefs which may broaden our school music practices.

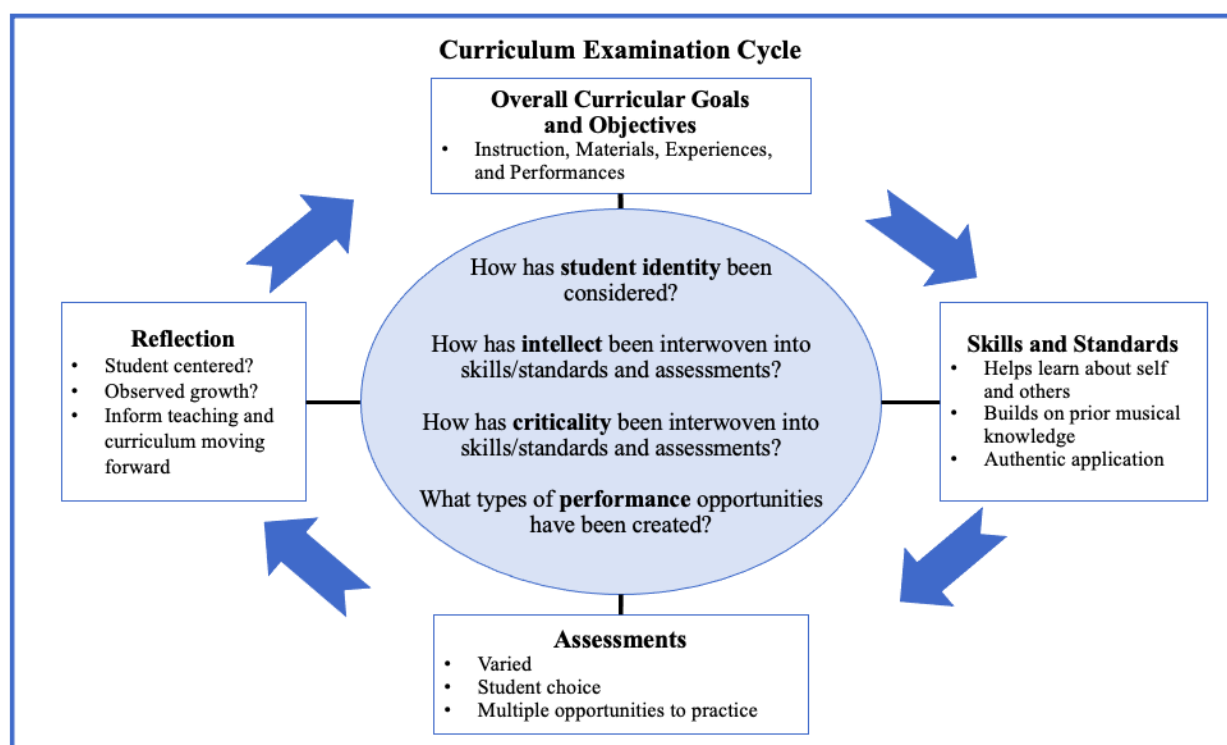


Figure 4.1 – Curriculum Evaluation Cycle

Utilizing this approach may provide a starting spot for developing a culturally responsive music curriculum that can be carried throughout the planning process. To not overwhelm the work being undertaken, start by taking small steps. Taking small steps can result in big changes.

By thoroughly examining the choices that outline classroom and performance practices, the narrow traditional music practices can begin to expand to include the music from many different cultures. These are practices needed for culturally responsive pedagogy to be actualized for all students.

CHAPTER 5

Conclusion

The purpose of the three studies in this dissertation was to examine the perceptions, values, and application of culturally responsive pedagogy (CRP) by preservice music educators (PMEs). The second chapter focused on the development and validation of a tool that evaluates the values PMEs hold concerning CRP practices, dispositions, and philosophy. The third chapter used the validated rating scale to compare the culturally responsive values PMEs hold compared to the values held by content-area experts. The fourth chapter used insight gained from the previous chapter to provide practical application of culturally responsive practices to music education curriculum.

The purpose of the second chapter was to develop and validate a tool that evaluates the values PMEs hold concerning CRP practices, dispositions, and philosophy. In this chapter, the scale provided empirical evidence for validity, reliability, and precision of measurement. This presents the opportunity for music education programs to use this scale as a possible diagnostic tool in which they can evaluate what their students know, believe, and have experienced in reference to CRP. A tool like this could provide multiple types of assessment information that may help music education programs bolster their integration of CRP practices and instruction.

In the field of music education, there is increasing diversity in school populations. This creates a need for PMEs to develop cross-cultural competency skills as research indicates that racial, ethnic, and cultural dissimilarities between educator and students may impact students' achievement, motivation and sense of belonging in the classroom (Gay, 2018; Howard, 2006; Kindall-Smith, 2006; Ladson-Billings, 1995a, 1995b, 2009; Lind & McKoy, 2016). One step

preparation programs could take to combat this disconnect in learning is to evaluate the knowledge, values, and beliefs PME's hold concerning CRP. Similar to assessing student knowledge when teaching in the classroom, the information gained from a pre-assessment of CRP knowledge, values, and beliefs could give preparation programs a baseline from which they build PME culturally responsive practices and dispositions. This is one of the purposes of developing and validating the *Culturally Responsive Pedagogies Perspectives of Preservice Music Educators Scale*.

In the process of development of this rating scale, the content was carefully drawn from CRP literature in both general and music education. The validated scale consists of 67 criteria across three domains. The study was guided by the following research questions: 1) What are the psychometric qualities (i.e., validity and reliability) of the *Culturally Responsive Pedagogy for Preservice Music Educators Scale*?, 2) How well do the domains and rating scale criteria fit the model and how do they vary in respondents' overall value?, and 3) How does the structure of the response categories vary across rating scale criteria? The data were analyzed using the Partial Credit version of the Rasch model, allowing closer examination of each respondent and criteria for more precise measurement (Engelhard, 2013; Masters, 1988). Respondents, criteria, and domains all showed a clear ordering based upon measures of difficulty. Results indicate the rating scale is a valid and reliable tool through demonstration of good data-to-model fit indices, spread of logit scale locations, and separation statistics. This signals that the *Culturally Responsive Pedagogy for Preservice Music Educators Scale* can be used to evaluate values and perceptions concerning CRP dispositions and practices.

The third chapter is an extension of the second chapter as the scale developed and validated was used to compare the culturally responsive values held by PME's and the values

held by content-area experts. Understanding PME's values and expectations for music teaching and learning is integral to the development of educator dispositions, including cultural responsiveness. PMEs need opportunities to become aware of and engage in culturally responsive practices in order to develop culturally responsive dispositions. Through the evaluation of PME values and beliefs, data can be provided that helps preparation programs create authentic and meaningful learning experiences.

The *Culturally Responsive Pedagogy for Preservice Music Educators Scale* can begin to bring an awareness of culturally responsive dispositions and practices. With established 'benchmarks' of culturally responsive values and behaviors, PMEs can begin to develop a baseline of effective practices and habits through practical examples. Along with developing awareness, comparing PMEs' value of culturally responsive practices and beliefs to those of content-area experts gives insight to areas of strength and need. For example, PMEs indicate they agree that good relationships with their students is integral to effective teaching which is a component of CRP. However, contrary to CRP practices, PMEs show a lack of understanding when it comes to using students' backgrounds and experiences when planning content for courses. Without this type of comparison, programs may lack specificity in developing their students' culturally responsive practices.

The questions that guided this study included: 1) Overall, how congruent were preservice music educators' values and interpretations of culturally responsive pedagogy (CRP) when compared to music-area CRP experts values and interpretations?, 2) How congruent were preservice music educators' values of CRP across each item of the scale?, and 3) How congruent were preservice music educators' values and interpretations of CRP across each domain of the scale? The results of this study signified that, overall, there is a gap between the values held by

content-area experts and PMEs. More specifically, PMEs are lacking in the understanding how to use their students' strengths with the planning of curriculum, instruction, and assessment. This is information that can be used by preparation programs in order to tailor curricula, classes, and experiences that create opportunities for PMEs to cultivate and grow their CRP beliefs, dispositions, and skills.

The fourth chapter shifted focus to practical application of culturally responsive skills and dispositions to music education curriculum. This chapter offered a framework for evaluation of one's music education curriculum. The approach, based on Gholdy Muhammad's (2020) equity framework for literacy, offered critical questions to ask about the materials, instructional practices, educational experiences, and assessments used throughout the curriculum. Along with the critical questions music educators can ask of their program, this chapter offered a curriculum evaluation cycle to emphasize the importance of continual reflection. This information is intended for use by preservice music educators as well as educators already in the field.

Current school music curricula tend to focus on the Western art music perspective for materials and instruction (Abril & Kelly-McHale, 2016; Mellizo, 2020). This narrow focus can cause students to feel as though their preferred musical styles are viewed as less than, creating a disconnect between the ways in which they engage with music both inside and outside the school setting (Bradley, 2007; Regelski, 2018). This could prompt students to self-select out of continued music participation. This indicates a need to broaden the definition of "good" music as well as examine the current content of school music curricula. Through the use of the proposed evaluation system in Chapter 4, music educators can begin to help decentralize the dominant style of music. Music educators can begin to break the mold of traditional school music through the critical examination of the standards, instruction, lessons, and activities that make up their

programs. As a result of this type of culturally responsive evaluation, new and engaging music-making opportunities may be offered which demonstrate equal value for many different styles of music.

The primary goal of this dissertation is to highlight the importance of preparing PME's to be culturally responsive music educators, preparing them to teach in a multitude of teaching environments. Providing students with experiences and opportunities to develop appropriate dispositions, effective instructional strategies, music content knowledge along with an understanding of pedagogy and developmentally appropriate learning is vital to the cultivation of effective culturally responsive teaching practices. When PME's understand how their own frames of reference and life experiences impact student learning and achievement, they can begin to create an environment where students' varied and unique cultural backgrounds, values, and experiences become tools in the learning process (Darling-Hammond & Bransford, 2005; Lind & McKoy, 2016; McKoy, 2020; Villegas & Lucas, 2002). With the use of a tool like the *Culturally Responsive Pedagogies Perspectives of Preservice Music Educators Scale*, programs may have access to information that can both guide the development and cultivation of culturally responsive practices within their program and provide feedback pertaining to the effectiveness of the CRP experiences the program offers.

Preparation programs are not the only ones to benefit from information drawn from the scale proposed in this dissertation. Using the *Culturally Responsive Pedagogies Perspectives of Preservice Music Educators Scale* may expose PME's to culturally responsive practices and beliefs they have not thought about or experienced before. Bringing awareness to culturally responsive examples that are practiced by music educators, PME's can begin to understand how their values and beliefs impact curricular, instructional, and program decisions they will make

when teaching (Darling-Hammond & Bransford, 2005; McKoy, 2020). As a result of their developing awareness, PME's need opportunities apply their theoretical knowledge in situations where they can begin to explore and understand how those choices will influence their future students' learning and achievement (Darling-Hammond & Bransford, 2005; Gay, 2018; Ladson-Billings, 2009; Lind & McKoy, 2016).

An extension of this research could include the examination of the culturally responsive perspectives of focus groups consisting of PME's. This information, along with information provided from the *Culturally Responsive Pedagogies Perspectives of Preservice Music Educators Scale*, could provide researchers with valuable insight to the perceptions and values of CRP they enter a program with, how those perceptions and values may evolve throughout their program, as well as how those perceptions and values are impacted during authentic application experiences such as student teaching. This type of information could help researchers, as well as practitioners, reduce the 'theory to practice' gap experience by many early music educators (Darling-Hammond & Bransford, 2005; McKoy, 2020). By assessing the areas in which PME's struggle with the application of culturally responsive practices, articles can be written with a focus on how you connect the CRP theoretical knowledge with practical application in the classroom. With knowledge of areas that need development, possible real-life examples can be provided. With this qualitative perspective, PME's may be better prepared to apply culturally responsive skills and dispositions in cross-cultural settings in order to meet the needs of all students in the classroom (Allen et al., 2017; Elpus, 2015; Lind & McKoy, 2016; Matthews & Koner, 2017).

The task of preparing preservice music educators to be effective educators is an important one for music educator preparation program. As the field of music education tries to expand the

ways in which we practice school music, it is crucial for PME's to be prepared to be more responsive to the varied cultural representation they may encounter in their future classrooms. By using strategies and tools, such as the ones offered in this dissertation, PME's can be prepared to engage in teaching and learning that is meaningful. When meaningful teaching and learning is practiced by those PME's entering the field, their students will experience more engaged and purposeful learning (Ladson-Billings, 2021). It is through this type of engagement that music education might be able to move beyond the traditional school-music model toward one that is broader and more inclusive of all cultural backgrounds and experiences.

REFERENCES

- Abril, C. (2005). Multicultural dimensions and their effect on children's responses to pop songs performed in various languages. *Bulletin of the Council for Research in Music Education*, 37-51. <https://www.jstor.org/stable/40319269>
- Abril, C. (2006a). Music that represents culture: Selecting music with integrity. *Music Educators Journal*, 93(1), 38-45. <https://doi.org/10.1177%2F002743210609300122>
- Abril, C. (2006b). Teaching music in urban landscapes: Three perspectives. In C. Frierson-Campbell (Ed *Teaching music in the urban classroom: A guide to leadership, teacher education, and reform, volume I* (pp. 75-95). Rowman & Littlefield Education.
- Abril, C. (2006c). Learning outcomes of two approaches to multicultural music education. *International Journal of Music Education*, 24, 31-42.
- Abril, C. (2009). Responding to culture in the instrumental music programme: A educator's journey. *Music Education Research*, 11(1), 77-91. <https://doi.org/10.1080/14613800802699176>
- Abril, C. (2013). Toward a more culturally responsive general music classroom. *General Music Today*, 27(3), 6-11. <https://doi.org/10.1177%2F1048371313478946>
- Abril, C. & Gault, B. (Eds.) (2016). *Teaching general music: Approaches, issues, and viewpoints*. Oxford University Press. doi:10.1093/acprof:oso/9780199328093.001.0001
- Abril, C. & Kelly-McHale, J. (2016). Thinking about and responding to culture in general music. In C. Abril & B. Gault (Eds.), *Teaching General Music: Approaches, Issues, and Viewpoints*, 241-263. Oxford University Press. doi:10.1093/acprof:oso/9780199328093.001.0001

- Allen, A., Hancock, S. D., Starker-Glass, T., & Lewis, C. W. (2017). Mapping culturally relevant pedagogy into teacher education programs: A critical framework. *Teachers College Record: The Voice of Scholarship in Education*, 119(1), 1–26.
<https://doi.org/10.1177/016146811711900107>
- Allsup, R. E. (2016). *Remixing the classroom: Toward an open philosophy of music education*. Indiana University Press.
- Anderson, W. & Campbell, P. (2010). Teaching music from a multicultural perspective. In W. Anderson & P. Campbell (Eds.) *Multicultural Perspectives in Music Education, Vol. 1* (pp. 1-6). Rowman & Littlefield.
- Ballantyne, J., Canham, N., & Barrett, M. (2016). Implications for social justice in music teacher education. In L. DeLorenzo (Ed.), *Giving voice to democracy in music education: Diversity and social justice*, pp. 235-251. Routledge.
- Banks, J. A. (2013). Multicultural education: Characteristics and goals. In J. A. Banks & C. A. McGee Banks (Eds.) *Multicultural education: Issues and perspectives* (pp. 3-23). Wiley.
- Banks, J. A. & McGee Banks, C. (Eds.) (2013). *Multicultural education: Issues and perspectives*. Wiley.
- Banks, J., Cochran-Smith, M., Moll, L. Richert, A., Zeichner, K., LePage, P., Darling-Hammond, L., Duffy, H., & McDonald, M. (2005). In L. Darling-Hammond & J. Bransford (Eds.) *Preparing teachers for a changing world* (pp. 232-274). Jossey-Bass.
- Benedict, C., Schmidt, P., Spruce, G., & Woodford, P. (Eds.). (2015). *The Oxford handbook of social justice in music education*. Oxford University Press.

- Bennett, C. (2021). Teaching culturally diverse choral music with intention and care: A review of literature. *Update: Applications of Research in Music Education*, pp. 1-11.
<https://doi.org/10.1177%2F87551233211051946>
- Bernard, R. (2009). Uncovering pre-service music teachers' assumptions of teaching, learning, and music. *Music Education Research*, 11(1), 111-124. doi: 10.1080/14613800802700974
- Bond, T., Yan, Z. & Heene, M. (2021). *Applying the Rasch model: Fundamental measurement in the human sciences*. (4th ed.). Routledge.
- Bond, V. (2014). Culturally responsive teaching in the choral classroom. *Choral Journal*, 55(2), 8-15. <https://www.proquest.com/scholarly-journals/culturally-responsive-teaching-choral-classroom/docview/1634995692/se-2?accountid=14537>.
- Bond, V. (2017). Culturally responsive education in music education: A literature review. *Contributions to Music Education*, 42, 153-180. <https://www.jstor.org/stable/26367441>
- Bond, V. & Russell, J. (2019). Music teacher educator perceptions of and engagement with culturally responsive education. *Bulletin of the Council for Research in Music Education*, 221, 7-28. <https://doi.org/10.5406/bulcouresmusedu.221.0007>
- Bond, V. & Russell, J. (2021). Culturally responsive pedagogical/andragogical context knowledge: A conceptual model for music education. *Journal of Music Teacher Education*, 30(3), 11-25. doi: 10.1177/1057083721993738
- Boon, E. T. (2014). Making string education culturally responsive: The musical lives of African American children. *International Journal of Music Education*, 32(2), 135-146.
<https://doi.org/10.1177%2F0255761413513662>

- Bradley, D. (2007). The sounds of silence: Talking race in music education. *Action, Criticism, and Theory for Music Education*, 6(4), 132–162.
- Bradley, D. (2015). Hidden in plain sight: Race and racism in music education. In C. Benedict, P. Schmidt, G. Spruce, & P. Woodford (Eds.) *The Oxford Handbook of Social Justice in Music Education* (pp. 190-203). Oxford University Press.
- Butler, A., Lind, V., & McKoy, C. (2007). Equity and access in music education: Conceptualizing culture as barriers to and supports for music learning. *Music Education Research*, 9, 241-253. <http://dx.doi.org/10.1080/14613800701384375>
- Campbell, P. (1992). Cultural consciousness in teaching general music. *Music Educators Journal*, 78(9), 30-36. doi:[10.2307/3398427](https://doi.org/10.2307/3398427)
- Campbell, P. (1998). The musical cultures of children. *Research Studies in Music Education*, 11(1), 42-51. doi:[10.1177/1321103X9801100105](https://doi.org/10.1177/1321103X9801100105)
- Campbell, P. (2002). Music education in a time of cultural transformation. *Music Educators Journal*, 89(1), 27-54. <https://doi.org/10.2307/2F3399881>
- Campbell, P. (2016). World music pedagogy: Where music meets culture in classroom practice. In C. Abril & B. Gault (Eds). *Teaching general music: Approaches, issues, and viewpoints* (pp. 89-111). Oxford University Press.
- Campbell, P. (2018). *Music, education, and diversity: Building cultures and communities*. Teachers College Press.
- Campbell, P., Drummond, J. & Dunbar-Hall, P. (2005). *Cultural diversity in music education: Directions and challenges for the 21st century*. Australian Academic Press.

- Carter, W. (2020). Response to Judith A. Jellison's "how can all people continue to be involved in meaningful music participation?" In C. Madsen (Ed.), *Vision 2020: The Housewright symposium on the future of music education* (pp. 129-142). Rowman and Littlefield.
- Cizek, G. (Ed.). (2012). *Setting performance standards: Foundations, methods and innovation* (2nd ed.). Routledge.
- Clauhs, M. (2021). White preservice music educators' perceptions of teaching predominately Black student populations in city schools. *Music Education Research*, 23(3), 335-347.
- Conway, C. (2012). Ten years later: Teachers reflect on "perceptions of beginning teachers, their mentors, and administrator regarding preservice music teacher preparation." *Journal of Research in Music Education*, 60(3), 324-338.
- Crocker, L, & Algina, J. (1986). *Introduction to classical and modern test theory*. Harcourt Brace Jovanovich College Publishers.
- Darling-Hammond, L. (2000). How teacher education matters. *Journal of Teacher Education*, 51(3), 166-173.
- Darling-Hammond, L. (2010). Constructing 21st century teacher education. In V. Hill-Jackson & C. W. Lewis (Eds.), *Transforming teacher education: What went wrong with teacher training and how we can fix it* (pp. 223-248). Stylus.
- Darling-Hammond, L., & Bransford, J. (2017). *Preparing Teachers for a Changing World: What Teachers Should Learn and Be Able to Do*. Wiley.
- Davidson, J. W., Howe, M. J. A., & Sloboda, J. A. (1997). Environmental factors in the development of musical performance skill over the life span. In D. Hargreaves & A. North (Eds.) *The social psychology of music* (pp. 188-208). Oxford University Press.

- De Vries, P. (2010). What we want: The music preferences of upper primary school students and the ways they engage with music. *Australian Journal of Music Education*, 1, 3-16.
- Delpit, L. (1995). *Other people's children: Cultural conflict in the classroom*. The New Press.
- Edwards, A., Edwards, K. & Wesolowski, B. (2019). The psychometric evaluation of a wind band performance rubric using the Multifaceted Rasch Partial Credit Measurement Model. *Research Studies in Music Education*, online first, doi: 10.1177/1321103X18773103.
- Eilam, B. & Poyas, Y. (2009). Learning to teach: Enhancing pre-service teachers' awareness of the complexity of teaching-learning process. *Teachers and Teaching: Theory and Practice*, 15(1), 87-107.
- Elpus, K. (2015). Music teacher licensure candidates in the United States: A demographic profile and analysis of licensure examination scores. *Journal of Research in Music Education*, 63(3), 314-335. <https://doi.org/10.1177%2F0022429411405207>
- Elliott, D. (1989). Key concepts in multicultural music education. *International Journal of Music Education*, 13, 11-18. <https://doi.org/10.1177%2F025576148901300102>
- Elliott, D. (1990). Music as culture: Toward a multicultural concept of arts education. *The Journal of Aesthetic Education*, 24(1), 147-166. <http://dx.doi.org/10.2307/3332862>
- Emmanuel, D. (2006). Cultural clashes: The complexity of identifying urban culture. In C. Frierson-Campbell (Ed.) *Teaching music in the urban classroom: A guide to leadership, teacher education, and reform, volume I* (pp. 15-24). Rowman & Littlefield Education.
- Engelhard, G. (1996). Evaluating Rater Congruence in Performance Assessments. *Journal of Educational Measurement*, 33(1), 56-70.

- Engelhard, Jr., G. (2013). *Invariant measurement: Using Rasch models in the social, behavioral, and health sciences*. Routledge.
- Engelhard, G. & Gordon, B. (2000). Setting and evaluating performance standards for high stakes writing assessments. In M. Wilson & G. Engelhard (Eds.), *Objective measurement: Theory into practice* (Vol. 5, pp. 3-15). Ablex.
- Engelhard, G. & Wang, J. (2021). *Rasch models for solving measurement problems: Invariant measurement in the social sciences*. (Vol. 187). Sage.
- Engelhard, G. & Wind, S. (2018). *Invariant measurement with raters and rating scales: Rasch models for rater-mediated assessments*. Routledge.
- Erickson, F. (2004). Culture in society and in educational practices. In J. Banks & C. A. M. Banks (Eds.), *Multicultural education: Issues and perspectives* (5th ed., pp. 31-60). Wiley.
- Fajet, W., Bello, M. Leftwich, S. Mesler, J., and Shaver, A. (2005). Pre-service teachers' perceptions in beginning education classes. *Teaching and Teacher Education*, 21 (2005, 717-727.
- Fitzpatrick, K. (2011). A mixed methods portrait of urban instrumental music teaching. *Journal of Research in Music Education*, 59(3), 229-256.
<https://doi.org/10.1177%2F0022429411414912>
- Frierson-Campbell, C. (Ed.). (2006). *Teaching music in the urban classroom, volume I: A guide to survival, success, and reform*. Rowman and Littlefield Education.
- Gay, G. (2002). Preparing for culturally responsive teaching. *Journal of Teacher Education*, 53(2), 106-116. <https://doi.org/10.1177%2F0022487102053002003>

- Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice* (3rd edition). Teachers College Press.
- Green, L. (2006). Popular music education in and for itself, and for ‘other’ music: Current research in the classroom. *International Journal of Music Education*, 24(2), 101-108.
<https://doi.org/10.1177%2F0255761406065471>
- Gregory, A. (1997). The roles of music in society: The ethnomusicological perspective. In D. Hargreaves and A. North (Eds.) *The social psychology of music* (pp. 123-140). Oxford University Press.
- Hammond, Z. (2015). *Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. Corwin.
- Hess, J. (2019). *Music education for social change: Constructing an activist music education*. Routledge.
- Hodges, D. (2020). *Music in the human experience: An introduction to music psychology*. Routledge.
- Howard, G. (2006). *We can’t teach what we don’t know: White teachers, multiracial schools*. Teachers College Press.
- Howard, K. (2018). The Emergence of Children’s Multicultural Sensitivity: An Elementary School Music Culture Project. *Journal of Research in Music Education*, 66(3), 261–277.
<https://doi.org/10.1177/0022429418784594>
- Howard, K. (2020). Equity in Music Education: Cultural Appropriation Versus Cultural Appreciation—Understanding the Difference. *Music Educators Journal*, 106(3), 68–70.
<https://doi.org/10.1177/0027432119892926>

- Howard, K. & Kelley, J. (2018). *World music pedagogy: Secondary school innovations*. Routledge.
- Irvine, J. J. (2003). *Educating teachers for diversity: Seeing with a cultural eye*. Teachers College Press.
- Isbell, D. & Stanley, A. (2018). Code-switching musicians: An exploratory study. *Music Education Research*, 20(2), 145-162. <http://dx.doi.org/10.1080/14613808.2016.1238061>
- Jones, P. & Eyrich, Jr., F. (2006). Real-world methods: Preparing future music teacher in today's classrooms. In C. Frierson-Campbell (Ed.), *Teaching music in the urban classroom: A guide to survival, success, and reform* (Vol. II, pp. 81-94). Rowman and Littlefield.
- Kelly-McHale, J. (2011). *The relationship between children's musical identities and music teacher beliefs and practices in an elementary general music classroom*. (Unpublished doctoral dissertation, Northwestern University, Evanston, IL).
- Kelly-McHale, J. (2013). The influence of music teacher beliefs and practices on the expression of musical identity in an elementary general music classroom. *Journal of Research in Music Education*, 61, 195-216. <https://doi.org/10.1177%2F0022429413485439>
- Kelly-McHale, J. (2016). Democracy, canon, and culturally responsive teaching: Blurring the edges in the music classroom. In L. DeLorenzo (Ed.) *Giving Voice to Democracy in Music Education: Diversity and Social Justice*, pp. 216-234. Routledge.
- Kelly-McHale, J. (2018). Equity in music education: Exclusionary practices in music education. *Music Educators Journal*, 104(3), 60-62. <https://doi.org/10.1177%2F0027432117744755>
- Kelly-McHale, J. (2019). Research-to-resource: Developing a culturally responsive mind-set in elementary general music. *Update: Applications of Research in Music Education*, 37(2), 11-14. <https://doi.org/10.1177%2F8755123318810111>

- Kelly-McHale, J. & Abril, C. (2015). The space between worlds: Music education and Latino children. In C. Benedict, P. Schmidt, G. Spruce, & P. Woodford (Eds.) *The Oxford Handbook of Social Justice in Music Education* (pp. 156-172). Oxford University Press.
- Kindall-Smith, M. (2006). I plant my feed on higher ground: Music teacher education for urban schools. In C. Frierson-Campbell (Ed.) *Teaching music in the urban classroom: A guide to leadership, teacher education, and reform, volume II* (pp. 47-66). Rowman & Littlefield Education.
- Kindall-Smith, M., McKoy, C., & Mills, S. (2011). Challenging exclusionary paradigms in the traditional musical canon: Implications for music education practice. *International Journal of Music Education*, 29(4), 374-386.
<https://doi.org/10.1177%2F0255761411421075>
- King, E. & Butler, B. (2015). Who cares about diversity? A preliminary investigation of diversity exposure in teacher preparation programs. *Multicultural Perspectives*, 17(1), 46-52.
- Kinloch, V. (2017). “You ain’t making me write”: Culturally Sustaining Pedagogies for Black youths’ performances of resistance. In D. Paris & H. S. Alim (Eds). *Culturally Sustaining Pedagogies: Teaching and Learning for Justice in a Changing World* (pp.25-40). Teachers College Press.
- Kratus, J. (2007). Music education at the tipping point. *Music Educators Journal*, 94(2), 42-48.
<https://doi.org/10.1177%2F002743210709400209>
- Kruse, A. (2015). They wasn’t makin’ my kinda music: A hip-hop musician’s perspective on school, schooling, and school music. *Music Education Research*, 18(3), 240-253.
<https://doi.org/10.1080/14613808.2015.1060954>

- Ladson-Billings, G. (1995a). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465-491.
<https://doi.org/10.3102%2F00028312032003465>
- Ladson-Billings, G. (1995b). But that's just good teaching! The case for culturally relevant pedagogy. *Theory into Practice*, 34(3), 159-165. <https://www.jstor.org/stable/147663>
- Ladson-Billings, G. (2009). *The dreamkeepers: Successful teachers of African American children*. Josey-Bass.
- Ladson-Billings, G. (2011). Asking the right questions: A research agenda for studying diversity in teacher education. In A. Ball & C. Tyson (Eds.), *Diversity in teacher education* (pp. 383-396) Rowman & Littlefield.
- Ladson-Billings, G. (2017). The (r)evolution will not be standardized: Teacher education, Hip Hop pedagogy, and culturally relevant pedagogy 2.0. In D. Paris & H. S. Alim (Eds.), *Culturally Sustaining Pedagogies: Teaching and Learning for Justice in a Changing World* (pp. 141-158). Teachers College Press.
- Ladson-Billings, G. (2021a). I'm here for the hard re-set: Post pandemic pedagogy to preserve our culture. *Equity and Excellence in Education*, 54(1), 68-78.
<https://doi.org/10.1080/10665684.2020.186388>
- Ladson-Billings, G. (2021b). *Culturally Relevant Pedagogy: Asking a Different Question*. Teachers College Press.
- Lamont, A., Hargreaves, D., Marshall, N., & Tarrant, M. (2003). Young people's music in and out of school. *British Journal of Music Education*, 20(3), 229-241.
doi:10.1017/S0265051703005412

- Lee, J. (2012). The effects of the teacher-student relationship and academic press on student engagement and academic performance. *International Journal of Educational Research*, 53, 330-340. <https://doi.org/10.1016/j.ijer.2012.04.006>
- Legette, R. (2003). Multicultural music education attitudes, values, and practices of public school music teachers. *Journal of Music Teacher Education*, Fall 2003, 51-59. <https://doi.org/10.1177%2F10570837030130010107>
- Legette, R. & McCord, D. (2014). Pre-service music teachers' perceptions of teaching and teacher training. *Contributions to Music Education*, 40(2014-2015), 163-176. <https://www.jstor.org/stable/24711077>
- Linacre, J. M. (2002). Optimizing rating scale category effectiveness. *Journal of Applied Measurement*, 3(1), 85-106.
- Linacre, J. M. (2004). Test validity and Rasch measurement: Construct, content, etc. *Rasch Measurement Transactions*, 18(1), 970-971.
- Linacre, J. M. (2009). Many-facet Rasch measurement.
- Linacre, J. M. (2014). *FACETS* (Version 3.71.4) [Computer software]. MESA Press.
- Lind, V. & McKoy, C. (2016). *Culturally responsive teaching in music education: From understanding to application*. Routledge.
- Love, A. & Kruger, A. C. (2005). Teacher beliefs and student achievement in urban schools serving African American students. *The Journal of Educational Research*, 99(2), 87-98. <https://doi.org/10.3200/JOER.99.2.87-98>
- Mark, M. (1998). Multicultural music education in the United States. *The Bulletin of Historical Research in Music Education*, 19(3), 177-186. <https://doi.org/10.1177%2F153660069801900302>

- Marsh, K. (2015). Music, social justice, and social inclusion: The role of collaborative music activities in supporting young refugees and newly arrived immigrants in Australia. In C. Benedict, P. Schmidt, G. Spruce, & P. Woodford (Eds.), *The Oxford handbook of social justice in music education* (pp. 173-189). Oxford University Press.
- Masters, G. (1982). A Rasch model for partial credit scoring. *Psychometrika*, 47(2), 149.
<https://doi.org/10.1007/BF02296272>
- Masters, G. (1988). The analysis of partial credit scoring. *Applied Measurement in Education*, 1(4), 279-297. https://doi.org/10.1207/s15324818ame0104_2
- Matthews, W. & Koner, K. (2017). A survey of elementary and secondary music educators' professional background, teaching responsibilities and job satisfaction in the United States. *Research and Issues in Music Education*, 13(1), 1-26.
<https://commons.lib.jmu.edu/rime/vol13/iss1/2>
- McAnally, E. A. (2006). Motivating urban music students. In C. Frierson-Campbell (Ed.) *Teaching music in the urban classroom: A guide to survival, success, and reform, volume I* (pp. 99-108). Rowman & Littlefield Education.
- McKoy, C. (2013). Effects of selected demographic variables on music student teachers' self-reported cross-cultural competence. *Journal of Research in Music Education*, 60(4), 375-394. <https://doi.org/10.1177/0022429412463398>
- McKoy, C. (2020). Race, ethnicity, and culturally relevant pedagogy. In C. Conway, K. Pellegrino, A. M. Stanley, & C. West (Eds). *The Oxford handbook of preservice music teacher education in the United States* (pp. 603-624). Oxford University Press.

- Meckler, L. & Rabinowitz, K. (2019, December 27). America's schools are more diverse than ever. But the teachers are still mostly white. *The Washington Post*.
<https://www.washingtonpost.com/graphics/2019/local/education/teacher-diversity/>
- Mellizo, J. (2020). Music education, curriculum design, and assessment: Imagining a more equitable approach. *Music Educators Journal*, 106(4), 57–65
- Michelli, N. & Jacobowitz, T. (2016). Why do we educate in a democracy?: Implications for music education. In L. DeLorenzo (Ed.), *Giving voice to democracy in music education: Diversity and social justice*, pp. 36-50. Routledge.
- Muhammad, G. (2020). *Cultivating genius: An equity framework for culturally and historically responsive literacy*. Scholastic.
- National Center for Education Statistics. (2021). Racial/Ethnic Enrollment in Public Schools. Accessed at https://nces.ed.gov/programs/coe/pdf/2021/cge_508c.pdf. July 8, 2021.
- Paris, D. & Alim, H.S. (2017). *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world*. Teachers College Press.
- Pellegrino, K. (2020). Music teacher identity development. In C. Conway, K. Pellegrino, A. M. Stanley, and C. West (Eds). *The Oxford handbook of preservice music teacher education in the United States* (pp. 269-294). Oxford University Press.
- Rabinowitz, K., Emamdjomech, A., & Meckler, L. (2019, September 12). How the nation's growing racial diversity is changing our schools. *The Washington Post*.
<https://www.washingtonpost.com/graphics/2019/local/school-diversity-data/>
- Raiber, M. (2020). Developing effective dispositions for teaching music. In C. Conway, K. Pellegrino, A. M. Stanley, & C. West (Eds). *The Oxford handbook of preservice music teacher education in the United States* (pp. 323-344). Oxford University Press.

- Rasch, G. (1980). *Probabilistic models for some intelligence and attainment test*. MESA Press.
(Original work published 1960)
- Regelski, T. A. (2018). Curriculum traditions, music education, and the paraxial alternative. *TOPICS for Music Education Praxis*, 2018(1), 1–45.
- Reyes, M., Brackett, M., Rivers, S., White, M., & Salovey, P. (2012). Classroom emotional climate, student engagement, and academic achievement. *Journal of Educational Psychology*, 104(3), 700-712. <https://psycnet.apa.org/doi/10.1037/a0027268>
- Robinson, K. (2006). White teacher, students of color: Culturally responsive pedagogy for elementary general music in communities of color. In C. Frierson-Campbell (Ed.), *Teaching music in the urban classroom: A guide to survival, success, and reform* (Vol. 1, pp. 35-53). Rowman and Littlefield.
- Russell, P. (1997). Musical tastes and society. In D. Hargreaves & A. North (Eds.) *The social psychology of music* (pp. 141-160). Oxford University Press.
- Samovar, L. & Porter, R. (1991). Basic principles of intercultural communication. In L. A. Samovar & R. E. Porter (Eds), *Intercultural communication: A reader* (pp. 5-22). Wadsworth.
- San Pedro, T. (2017). “This stuff interest me”: Re-centering indigenous paradigms in colonizing schooling spaces. In D. Paris & H. S. Alim (Eds.) *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world* (pp. 99-116). Teachers College Press.
- Shaw, J. (2012). The skin that we sing: Culturally responsive choral music education. *Music Educators Journal*, 98, 75-81. <https://doi.org/10.1177%2F0027432112443561>

Shaw, J. (2015). “Knowing their world”: Urban choral music educators’ knowledge of context.

Journal of Research in Music Education, 63(2), 198-223.

<https://doi.org/10.1177%2F0022429415584377>

Sloboda, J. (2015). Can music teaching be a powerful tool for social justice? In C. Benedict, P.

Schmidt, G. Spruce, & P. Woodford (Eds.) *The Oxford Handbook of Social Justice in Music Education* (pp. 539-550). Oxford University Press.

Taebel, D. (1980). Public school music teachers’ perceptions on the effect of certain

competencies on pupil learning. *Journal of Research in Music Education* 28(3), 185-197.

<https://doi.org/10.2307%2F3345236>

Teachout, D. (1997). Preservice and experienced teachers’ opinions of skills and behaviors

important to successful music teaching. *Journal of Research in Music Education* 45(1),

41-50. <https://doi.org/10.2307%2F3345464>

Temmerman, N. (2005). Children’s participation in music: Connecting the cultural contexts—an

Australian perspective. *British Journal of Music Education*, 22(2), 113-123.

<http://dx.doi.org/10.1017/S0265051705006091>

Thibeault, M. (2009). The violin and the fiddle: Narratives of music and musician in a high-

school setting. In C. Abril & J. L. Kerchner (Eds.), *Musical experience in our lives:*

Things we learn and meanings we make (pp. 255-276). Rowman and Littlefield.

Tobias, E. (2013). Toward convergence: Adapting music education to contemporary society and

participatory culture. *Music Educators Journal*, 99(29), 30-37.

<https://doi.org/10.1177%2F0027432113483318>

- Villegas, A. & Lucas, T. (2002). Preparing culturally responsive teachers: Rethinking the curriculum. *Journal of Teacher Education*, 53(1), 20-32.
<https://doi.org/10.1177%2F0022487102053001003>
- Villegas, A. M., & Lucas, T. (2002). *Educating culturally responsive teachers: A coherent approach*. State University of New York Press.
- Villegas, A. M., & Lucas, T. (2007). The culturally responsive teacher. *Educational Leadership*, 64(6), 28-33.
- Volk, T. (1993). The history and development of multicultural music education as evidenced in the *Music Educators Journal*, 1967-1992. *Journal of Research in Music Education*, 41(2), 137-155. <https://doi.org/10.2307%2F3345404>
- Volk, T. (2004). *Music, education, and multiculturalism: Foundations and principles*. Oxford University Press.G
- Wesolowski, B., Wind, S., & Engelhard, G. (2016). Rater analysis in music performance assessment: Application of the many facet Rasch model. In T. Brophy (Ed.) *Connecting Practice, Measurement, and Evaluation: The Fifth Symposium on Assessment in Music Education*, Williamsburg, VA (pp. 335-336). GIA Publications.
- Wesolowski, B., Athanas, M., Burton, J., Edwards, A., Edwards, K., Goins, Q., Irby, A., Johns, P., Musselwhite, D., Parido, B., Sorrell, G., & Thompson, J. (2018). Judgmental standard setting: The development of objective content and performance standards for secondary-level solo instrumental music assessment. *Journal of Research in Music Education*, 66(2), 224-245.
- Whitaker, M. C. & Valtierra, K. M. (2019). *Schooling multicultural teachers: A guide for program assessment and professional development*. Emerald Publishing.

- Wiggins, J. (2001). *Teaching for musical understanding*. McGraw-Hill.
- Wilson, M. (2004). *Constructing measures: An item response modeling approach*. Taylor and Francis Group.
- Woodward, S. C. (2015). Music: An alternative education in the South African freedom struggle. In C. Benedict, P. Schmidt, G. Spruce, & P. Woodford (Eds.) *The Oxford Handbook of Social Justice in Music Education* (pp. 614-630). Oxford University Press.
- Wright, B. D. (1998). Rating Scale Model (RSM) or Partial Credit Model (PCM)? *Rasch Measurement Transactions*, 12(3), 641-642.
<https://www.rasch.org/rmt/rmt1231.htm#:~:text=The%20rating%20scale%20model%20specifies,its%20own%20rating%20scale%20structure>.
- Wright, B. D. & Linacre, J. M. (1994). Reasonable mean square fit values. *Rasch Measurement Transactions*, 8(3), 370. <https://www.rasch.org/rmt/rmt83b.htm>
- Wright, R. (2016). Informal learning in general music education. In C. R. Abril & B. M. Gault (Eds.), *Teaching General Music: Approaches, Issues, and Viewpoints*. Oxford University Press.
- Zillmann, D. & Gan, S. (1997). Musical taste in adolescence. In D. Hargreaves & A. North (Eds.), *The social psychology of music* (pp. 161-187). Oxford University Press.

APPENDIX A

Table 2.3*Category Diagnostics: Category Usage, Average Observed/Expected Measures, and Outfit MSE*

Criteria	Category Usage (%)				Average Observed Logit Measure (Average Expected Logit Measure)				Outfit MSE			
	1	2	3	4	1	2	3	4	1	2	3	4
1.01	-	§ 2(1)	53(26)	147(73)	-	.99(1.60)	2.27(2.12)	2.76(2.80)	-	0.6	1.2	1.1
1.02	-	21(10)	118(58)	63(31)	-	0.64(-0.05)	0.56(0.53)	0.92(1.22)	-	1.5	1.0	1.3
1.03	§ 1(0)	§ 3(1)	72(36)	126(62)	3.16(0.93)	1.59(1.31)	1.82(1.84)	2.50(2.51)	†4.1	1.2	0.9	1.0
1.04	-	-	§ 11(5)	191(95)	-	-	2.53(2.52)	3.22(3.22)	-	-	1.3	1.0
1.05	§ 10(5)	33(16)	136(67)	23(11)	0.53(-0.53)	0.34(-0.06)	0.51(0.55)	0.44(1.25)	†2.4	1.6	1.2	1.2
1.06	-	§ 1(0)	73(36)	128(63)	-	2.06(1.87)	2.41(2.40)	3.08(3.08)	-	0.9	1.0	1.0
1.07	-	§ 4(2)	72(36)	126(62)	-	1.25(1.17)	1.59(1.70)	2.44(2.38)	-	1.0	0.8	0.9
1.08	§ 2(1)	§ 12(6)	33(16)	155(77)	1.98(0.81)	1.60(1.17)	1.62(1.66)	2.26(2.30)	†3.5	1.8	1.1	1.1
1.09	-	§ 2(1)	37(18)	163(81)	-	1.64(1.66)	1.95(2.17)	2.90(2.85)	-	1.2	0.7	0.9
1.10	-	§ 1(0)	36(18)	165(82)	-	0.97(2.01)	2.37(2.52)	3.25(3.21)	-	0.4	0.7	1.0
1.11	-	§ 1(0)	63(31)	138(68)	-	2.21(1.91)	2.39(2.44)	3.14(3.12)	-	1.0	0.9	1.0
1.12	§ 1(0)	§ 15(7)	138(68)	48(24)	2.59(0.50)	1.32(0.95)	1.64(1.55)	1.85(2.26)	1.7	1.2	1.2	1.3
1.13	§ 2(1)	§ 18(9)	124(61)	58(29)	0.93(0.36)	0.79(0.80)	1.30(1.38)	2.21(2.07)	1.3	1.0	0.8	0.9
1.14	-	§ 12(6)	70(35)	120(59)	-	0.98(0.60)	0.93(1.13)	1.87(1.79)	-	1.3	0.6	0.9
1.15	-	-	39(19)	163(71)	-	-	1.00(1.59)	1.81(1.79)	-	-	0.8	1.0
1.16	-	§ 2(1)	57(28)	143(71)	-	1.08(1.59)	1.89(2.11)	2.88(2.79)	-	0.7	0.7	0.9
1.17	§ 3(1)	§ 7(3)	71(35)	121(60)	-0.02(0.56)	1.39(0.94)	1.23(1.45)	2.22(2.11)	0.4	1.4	0.6	0.9
1.18	-	§ 8(4)	70(35)	124(61)	-	1.04(0.82)	1.12(1.34)	2.12(2.02)	-	1.2	0.7	0.9
1.19	§ 1(0)	§ 10(5)	81(40)	110(54)	0.29(0.87)	1.75(1.27)	1.67(1.79)	2.52(2.46)	0.6	1.7	0.8	1.0
1.20	104(51)	76(38)	§ 14(7)	§ 8(4)	-1.39(-1.76)	-1.42(-1.15)	-1.81(-0.54)	-0.08(-0.01)	1.4	1.5	†4.2	1.1
1.21	35(17)	83(41)	75(37)	§ 9(4)	-0.65(-1.30)	-0.63(-0.78)	-0.63(-0.16)	0.55(0.48)	1.8	1.3	2.0	1.0
1.22	-	§ 7(3)	123(61)	72(36)	-	0.79(0.56)	1.08(1.14)	1.93(1.84)	-	1.1	0.9	0.9
2.01	-	§ 13(6)	80(40)	109(54)	-	0.30(0.51)	0.88(1.04)	1.84(1.71)	-	0.8	0.7	0.8
2.02	§ 2(1)	25(12)	89(44)	86(43)	0.70(0.54)	1.07(0.95)	1.23(1.49)	2.37(2.15)	1.2	1.1	0.5	0.8
2.03	§ 2(1)	36(18)	85(42)	79(49)	0.19(0.50)	0.89(0.93)	1.43(1.47)	2.17(2.11)	0.8	0.8	0.9	1.0

2.04	-	§ 1(0)	§ 14(7)	187(93)	-	1.11(2.08)	2.43(2.58)	3.29(3.28)	-	0.2	0.7	1.0
2.05	§ 9(4)	50(25)	82(41)	61(30)	-0.24(-0.10)	0.38(0.34)	0.75(0.88)	1.69(1.51)	0.9	1.0	0.8	0.8
2.06	§ 7(3)	§ 14(7)	47(23)	134(6)	-0.01(0.34)	1.01(0.71)	0.93(1.19)	1.90(1.82)	0.5	3.0	0.4	0.9
2.07	§ 2(1)	22(11)	84(42)	94(47)	0.25(0.58)	0.79(0.99)	1.36(1.52)	2.36(2.17)	0.8	0.7	0.6	0.8
2.08	-	§ 17(8)	85(42)	100(50)	-	0.25(0.33)	0.63(0.86)	1.74(1.53)	-	0.9	0.5	0.8
2.09	§ 2(1)	42(21)	71(35)	87(43)	0.50(0.55)	0.97(0.97)	1.39(1.49)	2.21(2.12)	0.9	0.9	0.8	0.9
2.10	§ 1(0)	§ 14(7)	78(39)	109(54)	0.16(0.87)	0.99(1.27)	1.61(1.79)	2.62(2.45)	0.5	0.7	0.5	0.8
2.11	§ 1(0)	21(10)	85(42)	95(47)	0.26(0.81)	1.12(1.22)	1.58(1.75)	2.59(2.41)	0.7	0.8	0.5	0.8
2.12	-	§ 3(1)	30(15)	169(84)	-	0.66(1.48)	1.72(1.98)	2.73(2.67)	-	0.3	0.5	0.9
2.13	-	§ 12(6)	40(20)	150(74)	-	0.54(0.74)	1.18(1.24)	1.92(1.89)	-	0.7	0.7	1.0
2.15	-	§ 12(6)	96(48)	94(47)	-	0.60(0.46)	0.89(1.01)	1.79(1.68)	-	1.1	0.7	0.9
2.16	-	§ 10(5)	80(40)	112(55)	-	0.62(0.65)	1.00(1.18)	1.99(1.85)	-	0.9	0.6	0.9
2.17	§ 1(0)	§ 11(5)	67(33)	123(61)	0.09(0.92)	0.99(1.31)	1.65(1.83)	2.62(2.49)	0.4	0.6	0.6	0.8
2.18	-	23(11)	86(43)	93(46)	-	-0.10(0.14)	0.46(0.68)	1.60(1.34)	-	0.7	0.4	0.7
2.19	42(21)	119(59)	30(15)	§ 11(5)	-0.76(-1.34)	-0.83(-0.77)	-0.62(-0.13)	0.26(0.46)	1.4	1.0	1.8	1.4
2.20	§ 1(0)	§ 13(6)	63(31)	125(62)	0.90(0.93)	1.50(1.32)	1.63(1.83)	2.58(2.49)	0.4	1.1	0.6	0.9
2.21	§ 3(1)	33(16)	82(41)	84(42)	0.54(0.40)	0.82(0.82)	1.22(1.35)	2.10(1.99)	1.3	0.9	0.8	0.9
2.22	§ 3(1)	§ 9(4)	54(27)	136(67)	0.04(0.61)	0.84(0.99)	1.20(1.48)	2.27(2.14)	0.4	0.6	0.5	0.8
2.23	-	§ 2(1)	51(25)	149(74)	-	1.29(1.61)	2.01(2.13)	2.85(2.81)	-	0.8	0.8	1.0
2.24	-	§ 1(0)	76(38)	125(62)	-	0.70(1.85)	2.31(2.39)	3.13(3.07)	-	0.8	0.9	0.9
3.01	125(62)	68(34)	§ 7(3)	§ 2(1)	-1.97(-2.36)	-2.18(-1.69)	-2.14(-1.03)	-3.04(-0.51)	1.5	1.8	†3.1	†7.2
3.02	§ 11(5)	61(30)	87(43)	43(21)	0.13(-0.31)	0.25(0.15)	0.62(0.71)	1.28(1.35)	1.6	1.2	1.2	1.1
3.03	§ 4(2)	§ 4(2)	36(18)	158(78)	0.74(0.59)	0.85(0.94)	1.25(1.43)	2.12(2.08)	†4.2	1.8	0.6	0.9
3.04	-	-	22(11)	180(89)	-	-	1.44(1.77)	2.50(2.46)	-	-	0.7	0.9
3.05	§ 1(0)	-	34(17)	167(83)	0.98(2.02)	-	2.28(2.53)	3.27(3.21)	0.4	-	0.7	0.9
3.06	-	§ 1(0)	20(10)	181(90)	-	1.90(2.06)	2.15(2.57)	3.30(3.26)	-	0.7	0.5	0.9
3.07	§ 2(1)	§ 6(3)	73(36)	121(60)	0.37(0.68)	0.87(1.07)	1.59(1.59)	2.27(2.26)	0.7	0.9	1.0	1.0
3.08	§ 1(0)	§ 4(2)	49(24)	148(73)	0.51(1.00)	0.53(1.37)	1.54(1.88)	2.69(2.55)	0.5	0.3	0.5	0.8
3.09	§ 1(0)	§ 16(8)	102(50)	83(41)	1.80(0.74)	1.65(1.16)	1.73(1.71)	2.26(2.39)	1.6	1.6	1.1	1.1
3.10	-	-	51(25)	151(75)	-	-	0.41(0.76)	1.56(1.44)	-	-	0.6	0.8
3.11	§ 11(5)	62(31)	118(58)	11(5)	0.37(-0.84)	-0.08(-0.34)	0.06(0.29)	0.75(0.99)	†2.4	1.4	1.4	1.1
3.12	-	§ 7(3)	103(51)	92(46)	-	1.53(0.71)	1.17(1.26)	1.99(1.95)	-	1.4	0.9	1.0
3.13	§ 3(1)	21(10)	99(49)	79(39)	1.30(0.36)	0.94(0.79)	1.14(1.33)	2.15(1.99)	1.8	1.2	0.6	0.9
3.14	-	§ 6(3)	73(36)	123(61)	-	0.96(0.96)	1.37(1.48)	2.23(2.16)	-	1.0	0.7	0.9
3.15	§ 6(3)	28(14)	105(52)	63(31)	-0.03(0.05)	0.80(0.48)	0.90(1.03)	1.77(1.69)	1.1	1.7	0.7	0.9

3.16	-	§ 3(1)	113(56)	86(43)	-	1.13(1.09)	1.50(1.65)	2.55(2.35)	-	1.0	0.7	0.8
3.17	§ 7(3)	32(16)	106(52)	57(28)	0.03(-0.05)	0.68(0.39)	0.85(0.95)	1.61(1.61)	1.1	1.4	1.0	1.0
3.18	§ 1(0)	§ 9(4)	75(37)	117(58)	0.67(0.90)	1.41(1.29)	1.66(1.81)	2.57(2.48)	0.8	1.2	0.6	0.9
3.19	§ 3(1)	27(13)	102(50)	70(35)	-0.80(0.31)	1.20(0.74)	1.12(1.29)	2.05(1.96)	0.8	1.6	0.8	0.9
3.20	109(54)	86(43)	§ 3(1)	§ 4(2)	-1.65(-2.07)	-1.80(-1.41)	-2.86(-0.75)	-1.73(-0.22)	1.4	1.7	†5.7	†3.2
3.21	-	§ 3(1)	108(53)	91(45)	-	0.80(1.12)	1.51(1.68)	2.59(2.38)	-	0.9	0.7	0.8
3.22	-	§ 7(3)	98(49)	97(48)	-	0.77(0.74)	1.25(1.29)	2.01(1.97)	-	1.0	0.9	1.0

Note. Category 1 = “Strongly Disagree/Not Important;” Category 2 = “Disagree/Slightly Important;” Category 3 = “Agree/Important;” Category 4 = “Strongly Agree/Very Important.”

Criteria: See *Figure 1*.

§ Indicates category usage under 10%;

† Indicates outfit MSE ≥ 2.00 .

APPENDIX B

Figure 2*Culturally Responsive Pedagogies for Pre-service Music Educators Scale—Original Scale*

Domain		Rating Scale Categories			
Student Learning and Achievement					
1.01	All students are capable of academic achievement.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.02	It is important for students to be held to high musical standards.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.03	Assessing students' academic and social limitations is important.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.04	Students' personal experiences affect their academic, emotional, and social behaviors in school.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.05	The music teacher is the main disseminator of instruction in the music classroom.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.06	Students are co-creators of knowledge alongside the music teacher in the classroom.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.07	Class discussion used to gather information about student experiences and preferences is important.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.08	Students come to the music classroom with diverse musical experiences.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.09	Students' individual musical experiences, traditional and/or non-traditional, are valuable to the classroom context.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.10	Multiple perspectives of musical experiences enrich student understanding of musical concepts.	Strongly Disagree	Disagree	Agree	Strongly Agree

1.11	It is important to consider students' strengths when deciding how to deliver musical content.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.12	The music teacher is responsible for selecting content of the music curriculum.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.13	The music teacher is responsible for highlighting members of the local music community in their classrooms.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.14	Student input is valued when creating classroom rules and procedures.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.15	Cultivating a community of learning affects student achievement.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.16	Creating a space for students' musical preferences to be heard is important.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.17	If the music teacher works collaboratively with students in the classroom, students feel supported in addressing social issues (e.g., racism, economic inequalities).	Strongly Disagree	Disagree	Agree	Strongly Agree
1.18	Through the study of music, students' ideas of who they are and what they believe are valued.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.19	Equitable music instruction does not lessen nor disregard students' cultural heritages.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.20	Student growth is measured by comparing individual student growth to other students' individual achievements.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.21	Student growth is measured by comparing individual student achievement to specified music standards.	Strongly Disagree	Disagree	Agree	Strongly Agree
1.22	Music teachers utilize instructional approaches that focus on student engagement.	Strongly Disagree	Disagree	Agree	Strongly Agree

Cultural Competency

Please rate the following statements by level of importance when selecting instructional strategies for music learning.
How important is it...

2.01	...to consider students' personal experiences when selecting instructional strategies for music learning?	Not Important	Slightly Important	Important	Very Important
2.02	... to consider students' personal experiences when deciding what will be included the music curriculum?	Not Important	Slightly Important	Important	Very Important
2.03	... to connect school music experiences to home music experiences?	Not Important	Slightly Important	Important	Very Important
2.04	... to develop meaningful, caring relationships with students in the music classroom?	Not Important	Slightly Important	Important	Very Important
2.05	... for musical instruction to rely on students' personal experiences and knowledge when learning musical concepts?	Not Important	Slightly Important	Important	Very Important
2.06	... for students to see musicians that look like them in the instructional material and resources in the music classroom?	Not Important	Slightly Important	Important	Very Important
2.07	... for students to be able to describe identifying features of music from different cultures?	Not Important	Slightly Important	Important	Very Important
2.08	... for students to distinguish the cultural context of musical selections?	Not Important	Slightly Important	Important	Very Important
2.09	... for students to understand and analyze the historical background of musical selections studied in music class?	Not Important	Slightly Important	Important	Very Important
2.10	... for students to be able to apply what they have learned about cultures to their musical performances?	Not Important	Slightly Important	Important	Very Important

2.11	... for students to be able to apply what they have learned about the history of musical selections to their musical performances?	Not Important	Slightly Important	Important	Very Important
2.12	... for music teachers to be aware of how their personal background influences their teaching practices?	Not Important	Slightly Important	Important	Very Important
2.13	... for music teachers to develop a relationship with the communities in which their students live?	Not Important	Slightly Important	Important	Very Important
2.14	... for music teachers to participate in their students' musical and non-musical community activities?	Not Important	Slightly Important	Important	Very Important
2.15	... for music teachers to collaborate with students' families regarding student growth?	Not Important	Slightly Important	Important	Very Important
2.16	... for learning to connect to students' personal experiences?	Not Important	Slightly Important	Important	Very Important
2.17	... for students to make connections between what is learned in the music classroom and musical activities in their communities?	Not Important	Slightly Important	Important	Very Important
2.18	... for students' musical experiences within their communities to connect to musical experiences from other cultures?	Not Important	Slightly Important	Important	Very Important
2.19	... to use a curriculum based on Western Art music approaches?	Not Important	Slightly Important	Important	Very Important
2.20	... to value a variety of approaches to reading and/or performing music?	Not Important	Slightly Important	Important	Very Important
2.21	...to have student input when selecting literature for study or performance in the music classroom?	Not Important	Slightly Important	Important	Very Important
2.22	... to have a multicultural music curriculum?	Not Important	Slightly Important	Important	Very Important

2.23	...for students to have social interactions in the music classroom?	Not Important	Slightly Important	Important	Very Important
2.24	When students in the music classroom learn through their own personal experiences, they are more likely to feel success in the music classroom.	Strongly Disagree	Disagree	Agree	Strongly Agree
2.25	A music curriculum that is multicultural is also sensitive to students' personal experiences.	Strongly Disagree	Disagree	Agree	Strongly Agree

Critical Examination

3.01	Intelligence is determined at birth.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.02	An awareness of race ensures equity in the classroom.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.03	A music teacher's willingness to examine his/her own beliefs in order to identify potential biases (i.e., race, gender, socioeconomic, student preference) is important.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.04	It is important for the music teacher to consider points of view other than their own.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.05	Consistent reflection on teaching practices is an important component of teacher growth.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.06	Openness to feedback concerning teaching practices is an important component of teacher growth.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.07	Music teachers are allies to groups of people who experience discrimination and exclusion (social, political, and economic).	Strongly Disagree	Disagree	Agree	Strongly Agree
3.08	It is important to develop instructional skills that facilitate learning across different cultures.	Strongly Disagree	Disagree	Agree	Strongly Agree

3.09	Traditional, Western-based pedagogical practices have been repeatedly endorsed through the curriculum.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.10	It is important to engage in practices that provide all students with the resources they need to learn, even if it requires obtaining different materials for a variety of student needs.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.11	The suggested Core Arts National Standards guide well-rounded music content.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.12	One purpose of school music is to prepare students to work together in a community setting.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.13	Curricula and assessment protocols impact equity in the music classroom.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.14	School policies have an impact on the music classroom environment.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.15	Controversial topics (e.g. race, gender, sexuality, religion, etc.) are appropriate conversations for discussion should they arise in the music classroom.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.16	Cultural practices around formal and informal rules of behavior can change over time.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.17	Music can act as a political force that influences students' political views.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.18	Positive social change can be enacted through the study and practice of music.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.19	Musical study in the classroom exposes students to social and political beliefs that are outside of traditional Western music.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.20	Teacher reflection is the basis for all instructional guidance in the music classroom.	Strongly Disagree	Disagree	Agree	Strongly Agree

3.21	Students develop self-understanding through musical practice in the classroom.	Strongly Disagree	Disagree	Agree	Strongly Agree
3.22	Students' critical thinking skills are developed through the use of a problem-based learning approach in the music classroom.	Strongly Disagree	Disagree	Agree	Strongly Agree
