ABSTRACT

Title of Dissertation: OBJECT SOUNDS: CONNECTING MUSIC EDUCATION AND MUSEUM EDUCATION AT THE NATIONAL MUSEUM OF AFRICAN AMERICAN HISTORY AND CULTURE

Christian Michael Folk, Doctor of Philosophy, 2024

Dissertation directed by: Dr. Robin Giebelhausen, School of Music

The National Museum of African American History and Culture (NMAAHC), part of the Smithsonian Institution (SI) complex in Washington, D.C., is the only SI museum with a permanent music exhibition, titled *Musical Crossroads*. This exhibit traces significant figures and developments in African American musical cultures, demonstrating "how African American music provided a voice for liberty, justice, and social change" (NMAAHC, 2016). In this document, comprised of three interrelated studies, I navigated the connections between music education and museum education in this unique space. In the first study, I relayed the narratives of performing arts curator Dr. Dwandalyn Reece and her team on the development of *Musical Crossroads*. For the second study, I surveyed current NMAAHC visitors to determine the efficacy of the *Musical Crossroads* exhibit. Finally, in the third study, I described the experiences of three music teachers who use SI's online platform, Smithsonian Learning Lab (SLL), to teach lessons on African American musical cultures using objects found in *Musical Crossroads*. In the

final chapter, I traced the throughline of these studies and provide implications for future connections between music education and museum education pedagogies.

The first study, a narrative inquiry, traced the development of *Musical Crossroads* from the perspectives of three key figures in the exhibit's history: Dr. Dwandalyn Reece, former curator of music and performing arts; Dr. Kevin Strait, a former curatorial assistant for the exhibition; and Ms. Hannah Grantham, a current curatorial and research assistant for NMAAHC. These narratives are bound by temporality, sociality, and place, highlighting the crux of music and museum education in the development of *Musical Crossroads*. I identified several common themes through their stories, including: (a) the educational, professional, and musical backgrounds of participants; (b) the themes and objectives of *Musical Crossroads*; (c) the curation and collaboration process; (d) tensions in the development process; and (e) the role of education in *Musical Crossroads*. Although three distinct experiences were present throughout, I funneled the three perspectives into one cohesive narrative.

In the second study, I distributed surveys to *Musical Crossroads* visitors (n = 422) over several months to examine if visitors meet the experiential and educational goals set by NMAAHC staff. The survey contained questions on visitors' overall experience in the exhibit, what genres they experienced, what elements of the exhibit they interacted with, if they learned about various themes of African American musical cultures, and several demographic items. Results of the survey showed that *Musical Crossroads* visitors generally had a positive experience in the exhibit, had varied levels of interaction with exhibit elements, and are learning about key themes of African American musical cultures developed by NMAAHC staff. In the conclusion of this study, I discussed implications based on various survey items, including visitor demographics, exhibit interactive spaces, musical genres, and exhibit themes.

For the final study, I conducted a multiple case study of music teachers' perceptions and implementations of the Smithsonian Learning Lab (SLL) program. SLL is an online platform that provides users access to millions of museum artifacts, specimens, recordings, and other materials from all museums across the SI ecosystem, including NMAAHC. I tasked three music teachers with using SLL to conduct two lessons that included African American musical cultures. Each participant approached these lessons differently based on their varied classrooms and comfort with the SLL program. I identified several findings, including the varied impressions of SLL from the teachers, how they incorporated SLL based on various specialties and grade levels taught, and how they perceived and practiced culturally relevant pedagogy and object-based learning using SLL. Along with these findings, I discussed how music teachers may utilize SLL in the future and possible improvements to SLL.

I conclude this dissertation with an overview of the three studies, their connections to each other, and their relevance in music and museum education. Additionally, I discuss how this dissertation uniquely contributes to the music and museum education literature. Finally, I provide a reflection on this specific project and how music and museum educators can influence each other in future projects and research.

OBJECT SOUNDS: CONNECTING MUSIC EDUCATION AND MUSEUM EDUCATION AT THE NATIONAL MUSEUM OF AFRICAN AMERICAN HISTORY AND CULTURE

by

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Dissertation submitted to the Faculty of the Graduate School of the
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Dedication

This dissertation is dedicated to ten incredible women who have taught me invaluable life lessons.

To my mom, Vicky Jumper, who taught me how to live

To my wife, Christy Zuelsdorf, who taught me how to love

To Dr. Lorrie Crochet, who taught me how to teach

To Dr. Mandi Schlegel, who taught me how to research

To Dr. Robin Giebelhausen, who taught me how to think outside/beyond the box

To Dr. Stephanie Prichard, who taught me how to talk to people

To Dr. Alexandria Carrico, who taught me that every body is a good body

To Dr. Dwandalyn Reece, who taught me that music belongs in museums

To Vanessa Williams, who taught me that I always have a seat at the table

To Beyoncé Giselle Knowles-Carter, who taught me how to love myself

"Been down, been up, been broke, broke down, bounced back
Been off, been on, been back, what you know about that?
Been the light, been dark, been the truth, been that King Bey energy
I been thick, been fine, still a ten, still here, that's all me"

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"I'm one of one, I'm number one, I'm the only one."

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The place in which I'll fit will not exist until I make it.

- James Baldwin

Chapter 1: Introduction

On September 24th, 2016, the National Museum of African American History and Culture (NMAAHC) opened to the public, becoming the 19th Smithsonian Institution (SI) museum and taking its place on the National Mall in Washington, D.C. When NMAAHC opened, it included a permanent exhibition titled *Musical Crossroads*, which demonstrates "how African American music provided a voice for liberty, justice, and social change" (NMAAHC, 2016). The exhibit is organized by musical genres (e.g., classical, soul, and hip-hop) rather than chronologically and displays music-related artifacts, including instruments, clothing, and other related items. Though SI staff have curated temporary exhibits dedicated to music (National Museum of the American Indian, 2011; S. Dillon Ripley Center, 2012), *Musical Crossroads* is currently the only permanent music exhibit housed in an SI museum. Outside of SI, attendees can encounter extensive collections of musical instruments and other musical artifacts at the Victoria & Albert Museum in London, the Metropolitan Museum of Art in New York City, the Musical Instrument Museum in Phoenix, Arizona, the Louvre Museum in Paris, and many other museums in the United States and internationally.

Despite the rise in music-related museum exhibits, including *Musical Crossroads*, and the steadfast public views of museums as places of learning (Crowley et al., 2014; Dudzinska-Przesmitzki & Grenier, 2008; Falk et al., 1998; Hooper-Greenhill, 1992, 1999; Sobel & Jipson, 2016), minimal research examines the intersections of music education and museum education. This document consists of three interrelated studies that situate NMAAHC and *Musical Crossroads* as a site rich with music teaching and learning. Each study explores this notion from different perspectives of individuals with varying roles in the museum ecosystem, specifically, museum curators and staff, museum visitors, and music educators from the Washington, D.C.,

Maryland, and Virginia (DMV) area and the greater United States, identifying how they individually and collectively experience and facilitate music teaching and learning. Through various research methods–including narrative inquiry, surveys, and multiple case study–I construct a throughline that highlights how music education occurs in each stage of the museum experience and beyond at *Musical Crossroads*.

Organization of the Document

In Chapter 1 of the document, I outline the document as a whole and provides rationales for the studies contained herein. First, I detail my positionality as a researcher, explaining how I came to the intersection of music and museums through three formative experiences and how my background complements these studies. Next, I describe the need for each of the three studies by identifying museums as spaces for music teaching and learning, provide a brief overview of music and music education in museums, situate *Musical Crossroads* as a counter-narrative from traditional museum spaces, and describe the current gaps in music education and museum education literature. Following, I explain the purpose and research questions of each study individually and collectively and highlight NMAAHC as an appropriate and unique research site. Finally, I illustrate my initial research design and overarching theoretical framework for music and museum education research and identify the scope and limitations of the studies.

The second chapter is my review of scholarly literature that broadly contextualizes NMAAHC and the SI. Using primary source documents, I detail the history and significance of NMAAHC as a historical and cultural institution, its place within the SI, and its organizational structure, including the museum's purpose and layout. The chapter also describes how museum staff members from various departments worked in tandem to create the museum and its galleries, establishing the collaborative nature highlighted in the first study.

In Chapters 3, 4, 5, and 6, I present three empirical studies through which I examine music education as facilitated through *Musical Crossroads*. Each chapter includes a brief introduction, a relevant literature review, method, results, and discussion sections. In the first study, I completed a narrative inquiry of the music curators and educators who developed *Musical Crossroads.* I identified how NMAAHC staff incorporated music education pedagogy and delineated the experiential and educational goals set for exhibit visitors. These goals are then explored in the second study, a survey of exhibit visitors that determines if individuals who experience the visit are meeting the expectations set forward by NMAAHC staff. Finally, the third study is a multiple case study examining the experiences of three music educators who utilized the SI Learning Lab program to teach lessons on African American music in their classrooms using *Musical Crossroads* objects and resources.

In Chapter 7, I synthesize the three studies and provide recommendations for future research on and development of *Musical Crossroads* and related educational programs, and for research involving music education in museum spaces more broadly. Along with the written chapters, I have also created an accompanying digital exhibit that readers can use to explore materials and findings related to this document (see https://bit.ly/objectsounds). This digital exhibit provides a multi-modal opportunity to visualize, hear, and explore the rich data and results featured in this paper.

Positionality: Why Music in Museums?

The first museum I visited was the South Carolina State Museum in Columbia, South Carolina when I was eight years old in 2002. I remember being entranced by the exhibits on the state's agricultural past, wondered why my history teachers never talked about narratives of enslaved individuals in school like the museum did, playing at the

interactive science exhibition, and touching the giant slice of petrified wood displayed in the museum lobby. After this initial visit, I (often unrequitedly) begged my mother and grandmother to take me every weekend for years until my elementary and middle school classes began taking field trips to the South Carolina State Museum and other museums in the area multiple times per year. Around this time, I also started my journey in music education, taking general music classes in elementary school and joining band on euphonium in sixth grade, just two years after my first museum visit. Even though music and museums were formative parts of my life, both in education and beyond, I never thought of how they were related until much later in my educational career.

As my love for museums increased over many years, I became obsessed with visiting the many museums that make up the Smithsonian Institution in Washington, D.C. My first visit to D.C. happened in 2013 while attending the United States Army Band Tuba-Euphonium Workshop, the first major conference I attended related to euphonium playing and low brass education. While at the conference, I had one free day to explore D.C. and the Smithsonian, where I visited 11 SI museums in 10 hours. From seeing dresses worn by every first lady, to a dotted pumpkin sculpted by Yayoi Kusama, to Amelia Earhart's plane, I had never realized the depth and breadth of history and culture that could be discovered within museum walls.

My third formative experience, and the event that led to the creation of this document, was my first visit to the National Museum of African American History and Culture in 2017 during my first year as a practicing music teacher. A towering building at the backdrop of the Washington Monument, NMAAHC was a modern behemoth that attempted to encapsulate the monumental challenges and achievements of African

Americans, from pre-enslavement to the present day, and with galleries dedicated to sports, visual art, film, music, and community. Although I saw musical objects in other SI museums on prior visits, I had never encountered an exhibition in any museum solely dedicated to music. I was able to view artifacts of musical artists I knew and loved, like Missy Elliott and Luther Vandross, and of musicians I was learning about for the first time, like enslaved flutist Tom Wiggins Greene, and Alton Adams, the first Black bandmaster of the United States Navy. After visiting the exhibit, I immediately began incorporating lessons on the musicians and items on display into my classrooms. I sincerely believed that my students of all ages needed to know this exhibit existed and that the contributions found therein were monumental to music history.

Bridging Experiences

I only connected the various threads of influence that music and museums had on my development as a student, educator, and researcher once I viewed these three transformative experiences through the lens of being an emerging music education and museum education scholar. In the first experience, I developed a love for music education and museums separately but concurrently, never thinking they were interrelated. During my first visit to D.C., I attended a music educational workshop and the SI museums for the first time, entrenching my obsession with music and museums but continuing to view them as individual entities. Finally, on my first visit to NMAAHC, I began bridging the gaps between music and museums, incorporating my educational experiences into my classrooms and teaching lessons on items from NMAAHC and beyond.

As I progressed in my doctoral studies in music education, I began exploring the possibilities of bridging museum education and music education, ultimately completing a

concurrent graduate certificate in museum studies and material culture that greatly informed this document. In scouring the literature of both fields, I identified a gap in the research literature on how various manifestations of music teaching and learning can occur in museum spaces. Visiting NMAAHC and *Musical Crossroads* for the first time was the encounter that first led me to link music education and museums, and due to its unique positioning within SI and museums more broadly, it unfolded as an appropriate and vital location to conduct research for these studies.

Positionality as Researcher

Alongside outlining my journey to this research through essential experiences, I must also detail my positionality as a researcher. Scholars from the fields of music education (Bennett et al., 2022; Hess, 2018; Kallio, 2021) and museum education (Cruickshanks & van der Vaart, 2019; Kletchka, 2021; Ng et al., 2017) have written on the importance of positionality in education research. In locating and voicing my identity, I strive to use my positionality as a tool for listening (Kallio, 2021), in which I "listen in order to locate ignorance. The term 'ignorance' here is employed not to denote stupidity, inferiority, or a lack of capacity for knowing but rather a refusal of the hierarchy of knowledge: a refusal of authority" (p. 62). My identity and experiences represent only one manifestation of knowledge, and each participant in the contained studies have their own complex and vast identities and knowledge. Although I am in a position of power and privilege as a researcher, I acknowledge that the findings in this document are one interpretation of the many individual experiences that make up this research.

An essential step in breaking down the ever-present hierarchies between researcher and participant(s) is detailing my identity and how it influences the research process. I identify as a white, queer, disabled, non-binary male music and museum educator and researcher residing in a middle-class household. Through my research, I focus on issues of social justice,

marginalization, race, disability, and lesbian/gay/bisexual/transgender/queer/intersex/asexual+ (LGBTQIA+) studies in music education, along with a focus on intersections between music education and museum education related to the issues previously listed. My understanding of these issues and my overall worldview is shaped by my childhood experiences in a lower-middle-class household in a rural, majority-white Southern low-income school district, my time teaching in the same rural district where I attended school, my intersectional queer and disabled identities, and other related life experiences.

As this document focuses on a museum and exhibition dedicated to African American history and culture, I attempt to decenter myself, especially my whiteness, by centering the individuals who created and those who visit this space. I have not personally experienced much of the marginalization discussed by others in these studies, and my identity and interactions with various participants inform my perception and analysis of data. As a white person, I acknowledge that whiteness and institutional racism have historically served as the primary marginalizing force that impacts non-white identity groups, especially those who identify as, or have been identified as, Black. In the first study, I used direct quotes from recorded interviews as much as possible to craft the narrative inquiry. I also relay information directly from survey participants in the second study. Additionally, I attempted to include as many works by racial and gender-minoritized scholars as possible when conducting literature reviews for each study. To conclude, this document and the contained studies are only one framing of the background, results, and discussion of the problems I am attempting to address, and these are all impacted by my positionality as an individual and as a researcher.

Identification of the Problem

Imagine two unique individuals who decide to attend the same temporary exhibit on the history of musical instruments at the Metropolitan Museum of Art in New York City. The first individual is an elementary general music teacher in New York City public schools who is only visiting this museum to see the music exhibit, and the second individual is a retired non-profit administrator who is a museum member and will include other exhibitions beyond the music exhibit in their visit. The music teacher believes their students will benefit from touring this exhibit and experiencing the objects on display in person, so they contact a museum educator after the visit to inquire if a field trip would be possible. The retired administrator enjoys the exhibit, especially when they see a 1930s Conn trombone like the one their father played when they were a child. While the administrator has no formal music training and will likely not revisit the exhibition, they learned something new about several different instruments during their experience. These two contrasting visitors, with varying backgrounds and motivations, were influenced by the music education processes at play within the museum and exhibition space. One individual will continue this cycle of music teaching and learning with their students, while the other will depart the museum with an informal and culturally relevant educational experience that involved their personal history with music. Although both visitors interact with music teaching and learning in starkly different ways, their unique visits demonstrate the potential for music education pedagogy to function in many ways within these untapped areas of study.

In this document, I contend that museums, specifically NMAAHC, can provide spaces conducive to music teaching and learning, as noted in the preceding anecdote. In the following section, I identify several congruent themes between music education and museum education pedagogy, provide an overview of music and music education in museums, situate *Musical*

Crossroads as an example of museum counter-storytelling, and note the gaps in music and museum education literature addressed by this document.

Parallel Trends in Music and Museum Education

In the last 40 years, museums and similar cultural institutions have shifted their priorities from artifact and collections research to providing educational experiences for visitors (Tišliar, 2017). This development of an educational focus has broadened into the field of museum education and museum pedagogy (Tišliar, 2017), which is rooted in informal learning (Carliner, 2013), culturally relevant educational experiences (Evans, 2013), research-practitioner partnerships (Jipson & Sobel, 2016), and object-based learning (Bunce, 2016; Schultz, 2018). Concurrently, music education researchers have adopted similar pedagogies of informal music learning (Green, 2017), culturally relevant music education (McKoy & Lind, 2016), and music education research partnerships (Austin, 2019). These developments in the literature are detailed in subsequent chapters.

I position museum staff, museum visitors, and practicing music educators as vital members of the varying stages of music teaching and learning at NMAAHC. Thus, these three studies broadly examine *Musical Crossroads* and its use of informal learning, culturally relevant pedagogy, and the potential for researcher-practitioner partnerships at the intersection of music and museum education.

Music (Education) in Museums

Alongside the parallel developments in music education and museum education, it is also pertinent to provide an overview of the current state of music and music education in the United States (US). As mentioned, prominent museums and cultural institutions are dedicated solely to music throughout the US. Some examples include the Rock and Roll Hall of Fame in Cleveland,

Ohio; the Musical Instrument Museum in Phoenix, Arizona; the Grammy Museum in Los Angeles, California; the American Jazz Museum in Kansas City, Missouri; the National Music Museum in Vermillion, South Dakota; and the National Museum of African American Music in Nashville, Tennessee. Several prominent museums in the US and internationally, including the Metropolitan Museum of Art in New York City and the British Museum in London, also contain extensive instrument and musical object collections.

Although the most outward-facing components of these institutions are their exhibitions and displays, they also offer abundant educational programming for children, adults, and educators. For example, the Rock and Roll Hall of Fame (n.d.) provides "free lesson plans, artifact images and materials, videos, playlists and writing prompts all designed by education staff" (n.p.) and onsite programs for school field trips. Similarly, the Musical Instrument Museum (n.d.), which has a collection of over 15,000 instruments, "offers free professional development sessions at the museum for prekindergarten through high school classroom teachers, arts and homeschool educators, and curriculum specialists" (n.p.), including sessions on incorporating science, technology, engineering, and math (STEM) in music classrooms. Each museum listed previously has similar educational programming, including field trips, tours, online resources for educators and parents, and professional development sessions for practicing music educators.

Finally, SI itself has an expansive music collection. The SI music division website (n.d.) states, "the Smithsonian's combined musical resources constitute the world's largest museum of music. Music is an integral part of the Smithsonian's connective tissue, spanning a remarkable number and diversity of collections, programs, and exhibitions" (n.p.). Included in the SI's music programming and resources, especially on the SI Folkways website, are free online lesson plans

for music teachers, interactive games for students, and dozens of videos and audio recordings from the SI's music collection.

Several scholars have also researched various functions music can have in museum spaces, mainly from the fields of musicology and museum curation. Various authors have examined the curation and collections of popular music museums (Baker et al., 2016; Fairchild, 2017; Leonard, 2010), while others have inquired how individuals experience and interpret sound and music in museum spaces (Bailey et al., 2019; Everrett, 2019; Gibson & Connell, 2007; Kannenberg, 2019; Schulze, 2019; Wiens & Visscher, 2019). Despite this growing body of literature connecting the physical presence of music in museum spaces, no identifiable studies examine the music educational experiences found in museums. As *Musical Crossroads* is the only permanent music exhibition in the "world's largest museum, education, and research complex" (Smithsonian Institution, n.d., n.p.), utilizing this site aids in establishing this unique positioning within music and museum education literature.

Object Sounds: Musical Crossroads as Counter-Story

Aside from studying *Musical Crossroads*' pedagogical aspects, I contend that the exhibit serves as a counter-narrative to traditional museum spaces. Since NMAAHC is an institution dedicated to African American history and culture, and *Musical Crossroads* is the only music-specific permanent exhibit in the Smithsonian Institution museums, acknowledging its unique position in SI and museums more broadly is essential. A core tenet of critical race theory (CRT) is counter-storytelling. In educational research, this tenet "offers space to conduct and present research grounded in the experiences and knowledge of people of color…stories can be used as theoretical, methodological, and pedagogical tools to challenge racism" (Solórzano & Yosso, 2002, p. 23). In music education, counter-storytelling has been used in professional learning

communities (Lewis, 2022), to provide autoethnographic accounts of racism and marginalization (Goings, 2015), and to critique resilience in music education (Hess, 2019). Museum education scholars have used counter-storytelling as public pedagogy in community arts programs (Quayle et al., 2016), to promote social justice through autobiographic opportunities for museum visitors (Huhn & Anderson, 2021), and to challenge whiteness in heritage institutions (Griem & Allen, 2022).

To link the three individual studies, I posit that *Musical Crossroads* is an exhibit grounded in counter-storytelling in that it offers a space for visitors to develop "new perspectives in the way African American music is perceived" (Reece, 2016, n.p.) and can offer opportunities for music education, specifically regarding African American music, through informal learning and cultural relevancy. Although other museums in the Smithsonian Institution present exhibitions and artifacts related to both music and African American history and culture, this specific space dedicated to African American music is a stark contrast to the dominant colonial and white male-centered history often found in museum spaces (Kohl & Halter, 2017), specifically in music exhibitions (Leonard, 2007). I title this dissertation "Object Sounds" because of this counter-storytelling aspect, in that the objects on display tell unique stories and that the exhibit itself objects to typical museum narratives. In these studies, I examined how the counter-storytelling in Musical Crossroads affects the decisions and experiences of museum staff, visitors, and music educators.

Purpose, Research Questions, and Rationale

The purpose of these studies was to examine the utilization of and experiences with music teaching and learning at NMAAHC through the perspectives of museum educators and curators, museum visitors, and music educators. These various stakeholder experiences are

essential to crafting a comprehensive overview of music education at and through *Musical Crossroads*. Each of the studies in this document examines music teaching and learning from increasingly zoomed-in viewpoints, beginning broadly with the crafting of the exhibition, to the current visitor experience, and ending with practicing music educators implementing *Musical Crossroads* and SI materials in their classrooms. In this section, I provide a brief explanation and research questions for each study that will be expanded upon in subsequent chapters, along with a closing rationale for the studies collectively.

Study 1

In the first study, I completed a narrative inquiry that employed oral history interviews of several critical NMAAHC staff members that illustrates the creation of *Musical Crossroads*. By combining oral histories of museum educators, curators, and designers, I articulate the collaborative design process and development of experiential and educational objectives for the *Musical Crossroads* exhibition. This study is framed through the concepts of informal learning and culturally relevant pedagogy. The following research questions guided this study:

1. What were the educational, professional, and musical backgrounds of individuals who developed *Musical Crossroads*?
2. What are the main themes present in *Musical Crossroads*?
    a. What is the layout of the exhibit?
3. What was the curation and collection process for *Musical Crossroads*?
4. What tensions arose between stakeholders in the *Musical Crossroads* development process?
5. What is the role of education in *Musical Crossroads*?

Study 2

The second study is a survey of museum visitors that I conducted over the course of four months on-site at NMAAHC. In crafting the survey instrument, I incorporated items from previous SI surveys on temporary musical exhibitions along with items based on the educational and experiential goals of *Musical Crossroads* set forth by museum staff in Study 1. Survey results demonstrate if NMAAHC visitors are meeting the expectations of museum staff and how they are experiencing music teaching and learning within the *Musical Crossroads* space. Similar to Study 1, this study is framed through the concepts of informal learning and culturally relevant pedagogy, along with the theory of object-based learning. These research questions guided my inquiry:

1. What are the demographics of *Musical Crossroads* visitors?
    a. Are demographics associated with how visitors experience the exhibit?
2. What forms of music learning are museum visitors experiencing in *Musical Crossroads*?
3. Are museum visitors meeting the educational and experiential goals set forth by NMAAHC staff? Why or why not?

Study 3

In the final study, I completed a multiple case study with elements of qualitative intervention and program evaluation with three US music teachers. Each participant teaches a different grade level and classroom type (i.e. band, general music, choir, etc.). This study began with the researcher providing a one-hour training session on using SI Learning Labs, a free program that allows educators to create lesson plans and classroom activities using SI's digitized collections. Participants then created two lessons on African American musical cultures based on items found in *Musical Crossroads*, with the materials used and focus of the lesson entirely

decided on by study participants. I conducted individual interviews with each participant before and after each lesson taught. The goal of this study was to determine music teachers' perceptions of and experiences with museum-created educational resources to aid in teaching African American musical history and culture. Additionally, this study sought to provide an initial evaluation of Learning Labs in the context of music education as an impetus for expanded SI educational materials and initiatives for music teachers. Like Studies 1 and 2, this study utilized culturally relevant pedagogy and object-based learning as a foundational framework. I employed the following research questions for this final study:

1. What are the experiences of music teachers who use SI Learning Labs in their classrooms?
2. How do music teachers who teach various specialties and grade levels incorporate NMAAHC and *Musical Crossroads* materials in their classrooms?
3. How do music teachers perceive and practice culturally relevant pedagogy and object-based learning while using SLL?

Rationale

As explained in the identification of the problem, there is a gap in research literature exploring the connections between music education and museum education pedagogy. These three studies provide an initial step forward in addressing this gap while also examining the music and museum education connection through various stakeholder perspectives. Additionally, NMAAHC serves as an appropriate site to conduct this research due to its unique positioning as a museum and cultural institution. NMAAHC holds one of the largest collections of museums dedicated to African American history and culture in the US and is one of the most visited museums in the SI system (NMAAHC, n.d.). As stated previously, NMAAHC is also the only

museum in SI that contains a permanent exhibition dedicated to music, making it an appropriate site to begin this research on music and museum education.

Alongside this research addressing critical gaps in music and museum education literature, these studies also provide critical findings that can improve NMAAHC and *Musical Crossroads* programming moving forward. In a justification letter to the SI institutional review board (IRB), Dr. Dwandalyn Reece, the lead curator of *Musical Crossroads* and music curator for NMAAHC, explains these benefits. She writes:

> This research project, which bridges the divide between music education and museum education, is important work and will provide information on both how well the exhibition is accomplishing its stated goals in expanding musical and cultural literacy on the topic and what visitors themselves are drawing from the exhibition's content and design. The results of this project, in addition to supporting Mr. Folk's dissertation research, will inform the decisions made by NMAAHC curators when considering new objects and story-telling devices to use in the permanent display. (Reece, 2023a, n.p.)

In designing these studies, it was imperative that the research addressed the gap in music and museum literature while also benefiting NMAAHC and the future development of music education at *Musical Crossroads*.

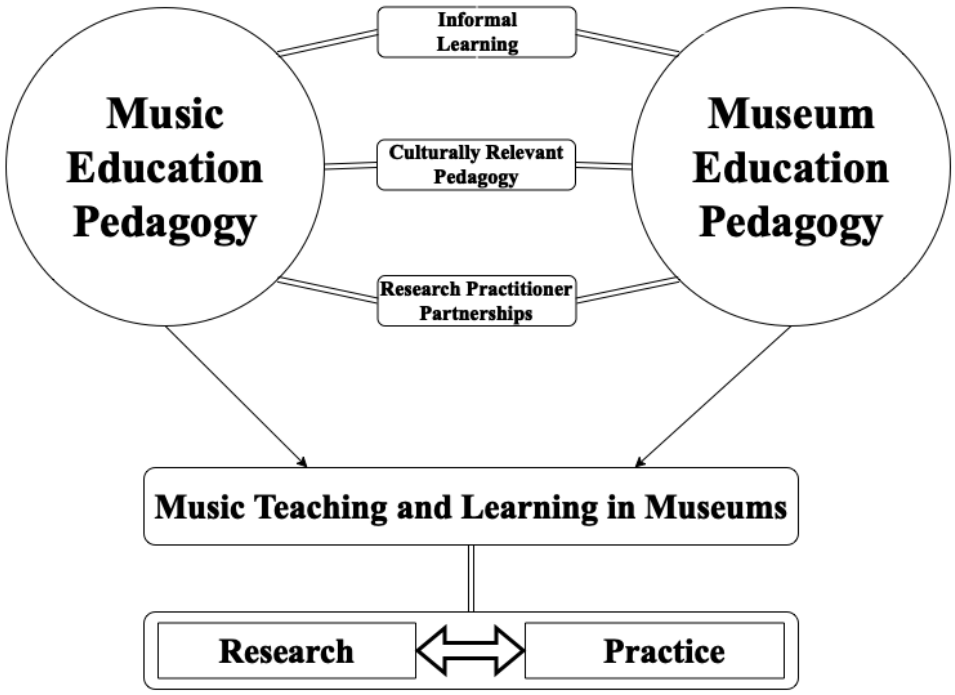
Theoretical Framework

The previously outlined intersections between informal learning, culturally relevant pedagogy, and researcher-practitioner partnerships in music education and museum education research present a unique space for expanding both fields and improving the music learning experiences of museum visitors and other stakeholders. In an initial framework for studying these connections between music teaching and learning in museum spaces (see Figure 1.1), I

situate these ties between music and museum pedagogy using the three main themes. In creating this framework, I establish an initial agenda for music education and/or museum education researchers to reference, primarily through establishing research-practitioner partnerships (RPP) and examining how research on music teaching and learning in institutions inform museum practices. This framework serves as a foundation for each of the three studies, with each study relying on varying combinations of the primary concepts. Study 1 examines informal learning and culturally relevant pedagogy, Study 2 utilizes informal learning and culturally relevant pedagogy, and Study 3 includes elements from informal learning, culturally relevant pedagogy, and RPP. I present detailed literature reviews on these topics with an imagined narrative in each study chapter. I discuss informal learning in Chapter 3 (Study 1), culturally relevant pedagogy in Chapter 5, and RPP in Chapter 6.

Figure 1.1

An Initial Music/Museum Education Research Framework

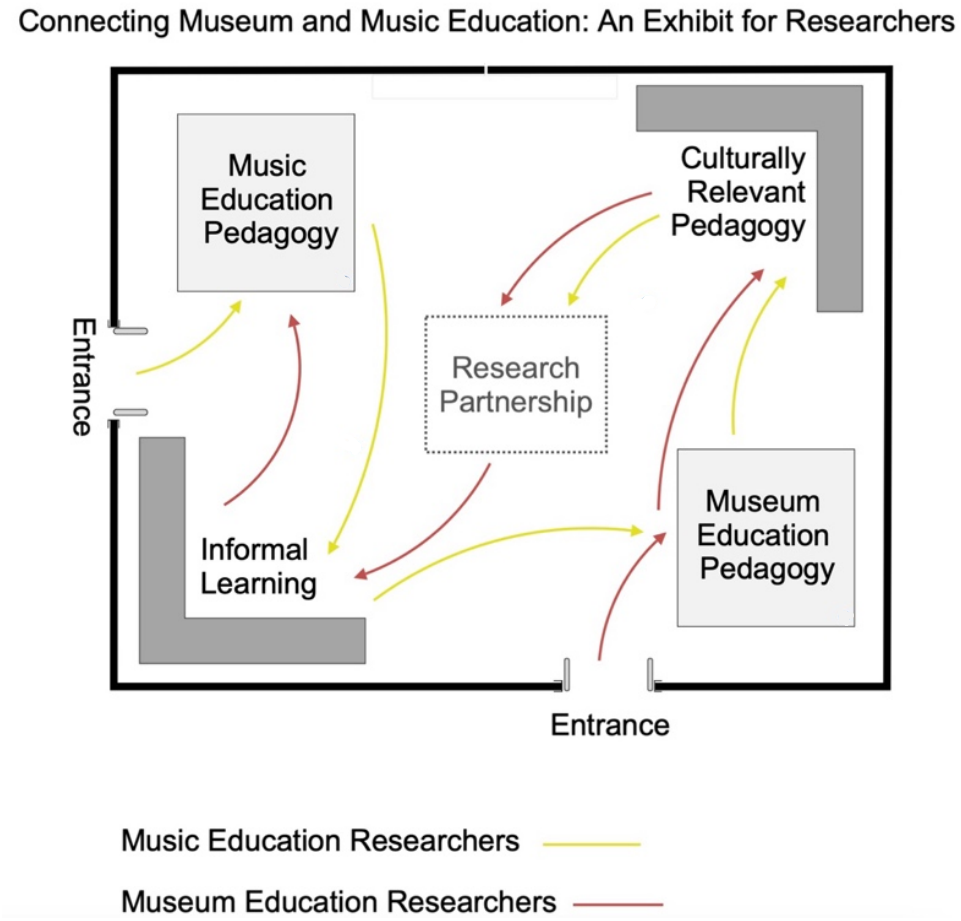


A Music/Museum Education Research "Exhibit"

The intersections between informal learning, culturally relevant pedagogy, and RPP in music education and museum education research present a unique space for expanding both fields and improving the music educational experiences of museum visitors and other stakeholders. In an initial framework for studying music teaching and learning in museum spaces (see Figure 1.2), I situate these connections between music and museum pedagogy through an exhibit diagram. In the figure, music education and museum education researchers interact with common pedagogies by using different pathways, as visitors in a museum would experience an exhibit. The music education researcher first visits music education pedagogy, then informal learning, museum education pedagogy, culturally relevant pedagogy, and finally, RPP. The museum education researcher has a different trajectory but still experiences all the connections present in the exhibit. In creating this framework, I establish an initial agenda for music education and/or museum education researchers to reference, including the studies in this document, primarily through establishing RPP and examining how research on music teaching and learning in institutions can inform museum education practices.

Figure 1.2

A Music Education and Museum Education Exhibit for Researchers



Many more elements connect music and museum pedagogy besides informal learning, culturally relevant pedagogy, and RPP. However, these aspects of both fields have a substantial foundation in the literature and therefore serve as the roots of this framework. Outside of the studies in this document, future scholars can employ this framework and should especially pay close attention to the cyclical nature between research and practice in studying music teaching and learning in museum spaces, in which jointly negotiated partnerships between researchers and practitioners are mutually beneficial in expanding theoretical, methodological, and practical knowledge of both fields.

Scope and Limitations

The studies contained in this document are limited specifically to NMAAHC and *Musical Crossroads*, and to the time the studies were conducted. In the first study, I was only able to report the findings of museum staff members who were willing and able to participate. Some NMAAHC staff members who were involved in the development of *Musical Crossroads* no longer work at NMAAHC or were unavailable to participate, therefore, the narrative inquiry does not include every perspective of museum staff. For the survey study, I am only able to relay the experiences provided by those who willingly participated in the survey and who were able to visit NMAAHC in person. While some issues of museum accessibility are outlined in Chapter 2, a long-form examination of accessibility and exclusion for marginalized populations at NMAAHC and *Musical Crossroads* is beyond the scope of this document. Finally, the multiple case study is only representative of the three participants' unique experiences. While I made several efforts to support the validity and reliability of these studies, each study has limitations, which are explained in greater detail in their respective chapters.

Chapter 2: Contextualizing the Smithsonian Institution and the National Museum of African American History and Culture

> *This is the place to understand how protest and love of country don't merely coexist but inform each other; how men can proudly win the gold for their country but still insist on raising a black-gloved fist. Here's the America where the razor-sharp uniform of the Chairman of the Joint Chiefs of Staff belongs alongside the cape of the Godfather of Soul. We have shown the world that we can float like butterflies and sting like bees; that we can rocket into space like Mae Jemison, steal home like Jackie, rock like Jimi, stir the pot like Richard Pryor; or we can be sick and tired of being sick and tired, like Fannie Lou Hamer, and still Rock Steady like Aretha Franklin. And that's what this museum explains -- the fact that our stories have shaped every corner of our culture. The struggles for freedom that took place made our Constitution a real and living document, tested and shaped and deepened and made more profound its meaning for all people.* (Obama, 2016)

This excerpt, taken from former President Barack Obama's speech at the official dedication of the National Museum of African American History (NMAAHC) on September 24th, 2016, succinctly illustrates the breadth and significance of this unique and essential cultural institution. Obama drew parallels between distinct figures in African American history and culture like Colin Powell, James Brown, Muhammad Ali, Mae Jemison, Jackie Robinson, Jimi Hendrix, Richard Pryor, Fannie Lou Hamer, and Aretha Franklin. Even before the museum was open to the public, connections were established between important historical and cultural figures that would remain a crucial focus in NMAAHC's mission.

The purpose of this chapter is to provide a broad contextual framing of the Smithsonian Institution (SI) and NMAAHC in relation to the three studies I conducted. As noted in Obama's (2016) speech, this museum is a place where African American history and culture work in tandem. Although the studies focus specifically on music education in *Musical Crossroads*, situating the exhibit within the larger frame of SI and NMAAHC is crucial in establishing its role and importance in the museum. This chapter includes a broad history of the SI, details regarding the fight to establish NMAAHC, NMAAHC's organization and layout, the external and internal design of NMAAHC, the museum's staff structure and collaborative processes, how education functions within the museum, and other pertinent information. To develop this overview, I consulted primary and secondary source documents, including official records of and texts published by the Smithsonian Institution and NMAAHC. I scrutinize the information provided in this chapter further in Chapters 3 and 4, specifically regarding the development of *Musical Crossroads*.

A Castle on the Mall: Smithsonian Past and Present

The Smithsonian Institution (SI) has remained a beacon of progress, innovation, and history for almost 200 years (Post, 2013). In the following sections, I broadly trace the history of the SI from its inception to the present, establishing its importance and unique positioning as a national institution in the US capital. This framing of SI is also pertinent in proceeding segments that contextualize NMAAHC's place within SI.

From Smithson to Smithsonian

James Smithson (1765–1829) was a British chemist and mineralogist and the sole founding donor of the SI. Upon becoming deceased in 1829, his will proclaimed that his estate should "found at Washington, under the name of the Smithsonian Institution, an establishment

for the increase and diffusion of knowledge among men" (Smithson, 1829, n.p.), despite Smithson never visiting Washington, D.C. during his life (where he is now entombed in the vestibule of the Smithsonian Castle). After two decades of debate in the US House of Representatives following Smithson's death, in which members of congress proposed various uses for Smithson's estate, including a university, a national library, and a publishing house, the SI was formed as a "suitable building with rooms for…natural history objects, a library, and an art gallery…all objects of art and natural history belonging to the United States should be transferred to and held within the Smithsonian" (H.R. Con. Res. 5, 1846).

Several key dates in the SI's history followed this resolution, including the building of the Smithsonian Castle (1855) (see Figure 2.1), the SI being designated as the "National Museum of the United States" (1857), and the openings of the National Zoological Park (1891), Natural History Museum (1910), Freer Gallery of Art (1923), and National Museum of American History (1964).

Figure 2.1

Smithsonian Castle After Snowfall in 1903

Note. Photograph of Smithsonian Castle from 1903 by an unknown photographer. Reprinted from *Historic Pictures of the Smithsonian*, by Smithsonian Institution Archives. Retrieved 2023 from https://siarchives.si.edu/history/historic-pictures-smithsonian/smithsonian-institution-building-castle. Copyright Smithsonian Institution.

Legal History

The SI is a "trust instrumentality" of the US government, allowing the organization to carry out Smithson's final wishes. Congress created a Smithsonian Board of Regents (H.R. Con. Res. 5, 1846) to complete these duties, which currently consists of the Chief Justice of the US Supreme Court, the Vice President, three members of the US Senate and three members of the US House of Representatives, and nine citizen members appointed by the US Congress. As a federal establishment, the SI is uniquely positioned. It is not an executive branch agency and does not have regulatory powers except over its own buildings and grounds. However, it is part of the federal government and free from state and local regulation. Unlike most federal agencies, the SI can accept gifts and generate revenue outside federal appropriations (SI Office of the General Counsel, n.d.). Funding for the SI comes from federal appropriations, donations, and investments. The museums and divisions of SI have been created through various means, including acts of Congress and decisions of the SI Board of Regents. However, the museums and divisions have "no separate, independent legal status: they are all part of the same legal 'whole,' the Smithsonian Institution" (SI Office of the General Counsel, n.d., n.p.).

Governance and Organization

The SI is led by a Secretary of the Smithsonian, considered its chief executive officer. The first SI Secretary, established in the 1846 legislation, was Joseph Henry, who formulated an initial organization of the SI, developed scientific research laboratories, and oversaw the

construction of initial museum buildings (SI Archives, n.d.). Lonnie G. Bunch III is, as of this writing, the current SI Secretary and the first Black individual to serve in this role. Along with the SI Secretary are the aforementioned Board of Regents, who are tasked with electing a secretary, evaluating the secretary's performance, reviewing SI's strategic plan, approving SI budgets, and working with the US Congress on budgetary and human resource concerns.

Museums and Research Centers

The SI is considered the "largest museum and research complex in the world" (SI, n.d.) and comprises 19 museums and the National Zoo, located in Washington, D.C., Maryland, New York City, and Virginia. The current museums that make up the SI include:

- Smithsonian Institution Building, "The Castle" (Washington, D.C., opened 1855)
- National Museum of Natural History (Washington, D.C., opened 1858)
- Arts and Industries Building (Washington, D.C., opened 1881)
- National Zoo and Conservation Biology Institute (Washington D.C., opened 1889)
- Cooper Hewitt – Smithsonian Design Museum (New York, NY opened 1897)
- Freer Gallery of Art (Washington, D.C., opened 1923)
- National Air and Space Museum (Washington, D.C., opened 1946)
- National Museum of African Art (Washington, D.C., opened 1964)
- National Museum of American History (Washington, D.C., opened 1964)
- Anacostia Community Museum (Washington, D.C., opened 1967)
- Smithsonian American Art Museum (Washington, D.C., opened 1968)
- National Portrait Gallery (Washington, D.C., opened 1968)
- Renwick Gallery (Washington, D.C., opened 1972)
- Hirshhorn Museum and Sculpture Garden (Washington, D.C., opened 1974)

- Arthur M. Sackler Gallery (Washington, D.C., opened 1987)
- National Postal Museum (Washington, D.C., opened 1993)
- National Museum of the American Indian's George Gustav Heye Center (New York, NY opened 1994)
- National Air and Space Museum Steven F Udvar-Hazy Center (Chantilly, VA, opened 2003)
- National Museum of the American Indian (Washington, D.C., opened 2004)
- National Museum of African American History and Culture (Washington, D.C., opened 2016)

Additionally, the US Congress passed resolutions to form the Smithsonian American Women's History Museum (H.R. Con. Res. 1980, 2019) and the National Museum of the American Latino (H.R. Con. Res. 2420, 2019). These museums are currently in the fundraising and collection stages and are both at least 10 years from opening (American Women's History Museum, 2023, n.p.).

Alongside its museums, the SI has nine research centers across the US utilized to advance scholarly work in the arts, sciences, and other areas. Currently, the SI research centers include:

- Smithsonian Libraries (Washington, D.C.; Suitland, MD; Edgewater, MD; Landover, MD; New York, NY; Panama City, Republic of Panamá; founded 1846)
- Smithsonian Astrophysical Observatory (Cambridge, MA; Mt. Hopkins, AZ; Mauna Kea, HI; founded 1890)
- Smithsonian Institution Archives (Washington, D.C., founded 1891)
- Archives of American Art (Washington, D.C., founded 1954)
- Museum Conservation Institute (Suitland, MD, founded 1963) (see figure 2.2)

- Smithsonian Environmental Research Center (Edgewater, MD, founded 1965)
- Smithsonian Marine Station at Fort Pierce (Fort Pierce, FL, founded 1971)
- Smithsonian Conservation Biology Institute (Front Royal, VA, founded 1975)
- Smithsonian Tropical Research Institute (Panama City, Republic of Panamá)

Figure 2.2

Smithsonian Museum Conservation Institute in Suitland, Maryland

Note. Undated photograph of Museum Conservation Institute, which holds the majority of SI collections, by Jeff Tinsley. Reprinted from *Museum Conservation Institute*, by Smithsonian Institution Archives. Retrieved 2023 from https://siarchives.si.edu/history/museum-conservation-institute. Copyright Smithsonian Institution.

"Who Owns America's Past?" Controversy at The Smithsonian

Despite its position as an internationally renowned cultural and educational institution, the SI has faced many controversies since its inception. Due to the long and troubled road related to NMAAHC's creation as detailed below, it is important to highlight some of these past issues to dispel the notion that the SI is an unimpeachable institution with no problematic components in its storied history. The SI has especially had many controversies surrounding its treatment of racially minoritized individuals and artifacts/specimens from marginalized cultures, which serves as a precursor to the challenges faced by NMAAHC in its early stages. The proceeding sections detail some prominent examples of these past (and present) controversies.

Confronting Difficult Moments

The SI has frequently had to wrestle with how to display difficult events in America's history, partially due to contradictions in the mission of the institution. Archibald (2014) writes:

> Many museums struggle with articulating their purpose, but the Smithsonian is particularly burdened by a mandate fraught with contradictions. It is expected to be all things to all people: a museum "of the people" and yet a place for elite scholarship; a museum that honors the free-minded pursuit of culture and yet doesn't offend mainstream mores; a museum that serves the interests of Congress and is yet historically objective; a museum that selects, curates, and filters, but is all-inclusive; a museum that represents living culture and is yet a repository of objects; and finally, a museum at the vanguard of historiography and museum practice, yet governed by stakeholders with contempt for academic trends. The Smithsonian's tortured bureaucratic maneuverings magnify the awkward fit between intellectual inquiry and American pragmatism; to some degree, the Smithsonian spells the fate of culture in mainstream America. (n.p.)

With so many contradictions at the heart of the SI's purpose as a cultural and educational institution, curators and other staff are impossibly tasked with displaying and interpreting history, science, and culture that appeases all stakeholders.

A prominent example of this impossible mission occurred in the 1990's with a proposed exhibit on the Enola Gay at the National Air and Space Museum. The Enola Gay, which dropped the first and only atomic bombs in warfare on Hiroshima and Nagasaki in 1945, was to be the subject of a display that questioned the reasoning in the US resorting to atomic weapons in WWII. The exhibition would have displayed the fuselage of the plane alongside graphic photos of its victims instead of being shown as a technological marvel that aided in a heroic mission. WWII veterans expressed immense outrage at the proposed exhibit, and the Republican-controlled Congress threatened to pull SI funding, causing the exhibit to be cancelled (Post, 2013). This example illustrates the conflict present in the SI's institutional mission of accurately portraying historical events while not angering potential detractors, especially those who provide funding.

Similar events have occurred throughout the history of the SI. In 1966, National Museum of American History (NAMH) curator Peter West acquired a railroad-flat "slum dwelling" (Archibald, 2014, n.p.). He wanted to put this dwelling in an exhibit on population growth, highlighting poverty in America during the 19th century. There was widespread derision on this decision both within the Smithsonian and from the broader public. A letter to the Washington Post following the exhibit announcement asked if the SI should also "overlook the brothel, the abattoir, or the privy? How about a hanging, or better, a lynching?" (Archibald, 2014, n.p.). In this instance, instead of articulating why displaying a slum was important, the SI fired West, cancelled the exhibit, and hired Daniel Boorstin as the new NMAH director. Boorstin (1968)

infamously noted in his first speech as director that under his leadership, the museum would not take part in "self-flagellation" (n.p.). Other exhibits that proved controversial and experienced threat of cancellation included an exhibition on same-sex intimacy titled "Hide/Seek" at the National Portrait Gallery in 2010 (Ulaby, 2011) and a gallery titled "¡Presente! A Latino History of the United States" at the NAMH in 2022 (National Museum of the American Latino, 2023). These events highlight the SI's ongoing struggle to balance its multifaceted mission while contending with unique financial and governing structures, an issue that is prominent in the creation of NMAAHC detailed in proceeding sections.

The Racial Brain Collection

Additionally, the SI, like many museums and cultural institutions, has a troubled history in its handling and displaying of racially minoritized communities and cultures. While these practices are well-documented in the research literature (Henderson & Kaeppler, 2016; Nichols, 2014), I detail a recent controversy surrounding the SI's "racial brain collection" (Dungca & Healy, 2023). In August 2023, the Washington Post published an article detailing a collection of 268 brains of Black and Indigenous individuals removed upon death in the early 1900s at the request of Ales Hrdlicka, a then curator at SI. Dungca and Healy (2023) write:

> The remains are the unreconciled legacy of a grisly practice in which bodies and organs were taken from graveyards, battlefields, morgues and hospitals in more than 80 countries. The decades-long effort was financed and encouraged by the taxpayer-subsidized institution. The collection, which was mostly amassed by the early 1940s, has long been hidden from view…The vast majority of the remains appear to have been gathered without consent from the individuals or their families, by researchers preying on people who were hospitalized, poor, or lacked immediate relatives to identify or bury

> them. In other cases, collectors, anthropologists and scientists dug up burial grounds and looted graves. (n.p.)

The National Museum of Natural History (NMNH), which holds the racial brain collection, has only repatriated four brains in the almost 100 years since the collection began. This is partially due to an SI policy that requires individuals with a legal right or personal interest to make a formal request for repatriation.

To begin addressing this racist and unethical collection, current SI Secretary Lonnie Bunch, III, (2023) issued an apology and formed a new Human Remains Task Force housed at SI. Bunch stated, "what was once standard in the museum field is no longer acceptable. We acknowledge and apologize for the pain our historical practices have caused people, their families and their communities, and I look forward to the conversations this initiative will generate in helping us perform our cutting-edge research in a manner that is ripe with scholarship and conforms to the highest ethical standard" (n.p.). At the time of this document, the SI has released no further updates on repatriation of the brains or any other human remains in their collection.

The cases written about in the preceding sections, primarily the controversies of the Enola Gay exhibit and the racial brain collection, demonstrate the past and present realities of the SI's mission and practices. While a full history of issues at the SI is beyond the scope of this document, the complex does have many accomplishments and is still a worthy site to conduct research. However, the SI is not infallible and has a future of continuing to reckon with its problematic past.

Conclusion

Due to its museum, research centers, and collections, which include over 150 million objects and specimens, the SI is a uniquely situated institution in the museum field. The SI Collections division states that SI holdings are an "astonishing record of American and international artistic, historical, cultural, and scientific achievement…include works of art, historical artifacts, living animals and plants, images, archives, libraries, audio and visual media, and digital assets. In terms of sheer numbers, Smithsonian collections have a scope and depth that no other institution in the world can match" (SI Collections, n.d., n.p.). Similar to the SIs status as a government entity, several countries contain government-operated museums, including Argentina, Australia, Canada, India, Indonesia, Japan, Korea, and England, UK. Some museums and cultural institutions in the US have overwhelming individual collections, like the Metropolitan Museum of Art in New York City or the Field Museum in Chicago, Illinois. Despite these large individual institutions, no museum in the US outside of SI is under the purview of or organized by the federal government, making the SI a unique case for study within the context of this document. This contextualization of the SI is critical for the proceeding sections on NMAAHC's history.

Building a Beacon: Creating the National Museum of African American History and Culture

Unique in its own right within the SI, NMAAHC faced over 100 years of struggle, pushback, and argument before taking its place on the National Mall in Washington, D.C. The following segment of this chapter details the long fight for NMAAHC, how the museum was designed externally and internally, the museum's physical organization and layout, and how NMAAHC provides educational opportunities for visitors and educators.

Missing Memorials

Following the Civil War and Reconstruction, individuals began advocating for institutions and landmarks that memorialized the contributions of African Americans as none existed at that time (Wilson, 2016). Organizations like the Grand Army of the Republic (GAR) dedicated memorial plaques to Black soldiers at important Civil War battle sites, and the annual pilgrimage to these sites eventually led to the establishment of Memorial Day as a national holiday. Simultaneously proud of their service but excluded from prominent Civil War memorials, Black Americans, including abolitionist Frederick Douglass, campaigned for national and local monuments honoring African American soldiers. Douglass (ca. the late 1800s) writes, "I am more than pleased with the patriotic purpose to erect…a monument in honor of the colored soldier who, under great discouragements, at the moment of the national peril, volunteered to go to the front and fight for their country" (n.p.). Following these unanswered cries for a national monument, the GAR and related organizations established the National Association for the Erection of a Monument at the National Capital in Honor of the Negro Soldiers and Sailors Who Fought in the Wars of Our Country in 1916, which was later shortened to the National Memorial Association. The first bill to establish a national museum and monument dedicated to African American history was introduced by Congressman Leonidas C. Dyer in 1916 (H.R. Res. 18721), 100 years before the opening of NMAAHC.

Several successive bills were introduced in the proceeding years to establish a national museum, including in 1928 (H.R. Con. Res. 60, A Bill Authorizing the Memorial Building in Commemoration of the Negro's Contribution to the Achievements of America) and 1968 (A Bill to Establish a National Commission on Negro History and Culture). Congressman James W. Taylor (1928) wrote in his resolution that the "memorial would take the shape of a brick public

building rather than a towering shaft or useless pile of stone" (n.p.), entrenching the idea of a museum dedicated to African Americans and not just a monument. Several prominent African American history and culture museums emerged throughout the 20th century, including the National Afro-American Museum and Cultural Center in Wilberforce, Ohio (1987); the Studio Museum in Harlem, New York (1968); the National Civil Rights Museum in Memphis, Tennessee (1920); and the African American Museum in Philadelphia, Pennsylvania (1976). Despite these institutions' creation and the establishment of the African American Museums Association (AAMA), which lobbied for a national museum for decades, bills proposing a national African American history and culture museum in Washington, D.C., continued to fail.

Signed Into Law

In 1988, Congressman John Lewis sponsored the National African American Heritage Museum and Memorial Act, with Lewis becoming the museum's most public and fierce spokesperson (Bogues & Bunch, 2015). Following, in 1989, Lewis introduced a revised bill that stipulated the museum would be included in the SI. During the years when Lewis and others attempted to establish the museum, SI featured exhibits related to African American history and culture in its museums, including "Field to Factory: Afro-American Migration 1915-1940" (National Museum of American History, 1987-2006).

Beginning in 1988, John Lewis reintroduced the National African American Heritage Museum and Memorial Act in every congressional session to no avail due to detractors from House of Representatives Republicans and Democrats. Various congresspeople pushed against Lewis's proposals for reasons of financial hurdles, space on the National Mall, and perceived lack of rationale for the museum. Finally, in 2001 and 2003, respectively, Congress passed the National Museum of African American History and Culture Plan for Action Presidential

Commission Act (2001), establishing a presidential commission to study the possibility of founding NMAAHC, and the National Museum of African American History and Culture Act (2003), which established the museum as part of the SI. The two acts were consequently signed into law by former President George W. Bush. In the following years, NMAAHC Director Lonnie G. Bunch, III and other museum staff had the monumental task of raising millions of dollars in funding, securing a site for the museum to be approved by Congress, designing the museum, and building a collection. NMAAHC officially broke ground on February 22nd, 2012, and the museum opened to the public on September 24th, 2016, over 100 years after the creation of the National Memorial Association.

Beginning with the Past: Designing NMAAHC's Exterior

In 2007, SI selected Max Bond and Philip G. Frelon, who had collectively designed the New York Public Library's Schomburg Center for Research in Black Culture, the Studio Museum in Harlem, the Reginald F. Lewis Museum in Baltimore, Maryland, and San Francisco's Museum of the African Diaspora, to develop an organizational plan for NMAAHC (Wilson, 2016). Core programming and design teams also met with scholars from Yale, Brown, Columbia, and Howard Universities for input on museum content and scope. Additionally, six architecture firms were selected to submit proposals for the museum, with Freelon Adjaye Bond/SmithGroup, a collaboration between Max Bond, Philip G. Frelon, David Adjaye, and SmithGroup, eventually winning the bid (see Figure 2.3). The NMAAHC architects conclusively "believed that the building should participate in the storytelling and should have a hand in expressing the mission and vision of the institution" (Wilson, 2016, p. 62).

Figure 2.3

Architectural Sketch of NMAAHC

Note. Artist rendering of NMAAHC created by David Adjaye of Freelon Adjaye Bond/SmithGroup from 2010. Reprinted from *Design for National Museum of African American History and Culture*, by Smithsonian Institution Archives. Retrieved 2023 from https://siarchives.si.edu/collections/siris_sic_12690. Copyright Smithsonian Institution.

The Porch, the Corona, and Celebration

Various aspects of African American history and cultures influenced the architects and designers of NMAAHC, including shotgun houses of the South, Yoruban art and architecture, antebellum cast-iron metalwork, and the "ring shout" of African American dance. Wilson (2016) writes, "for more than three hundred years, these unique sites and architectural features served

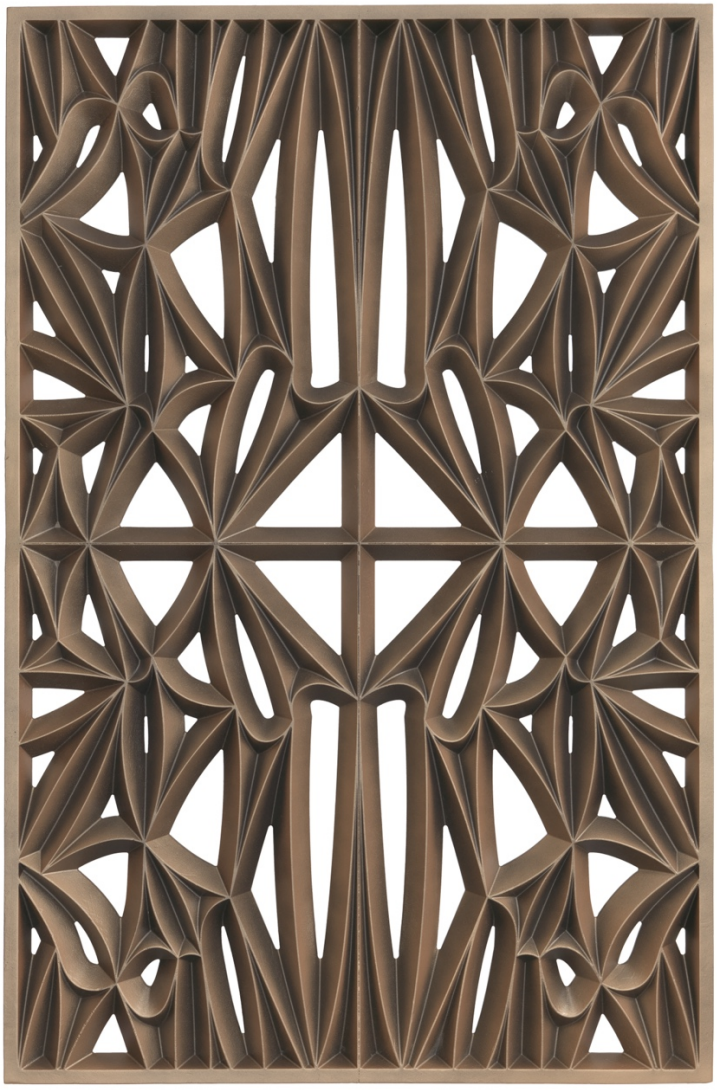
as…visual reminders of spaces where African Americans shared the bonds of family, community, and citizenship…support the Museum's mission to 'bridge a gap in our national memory'" (p. 74). Complementing the unique positioning of NMAAHC as a counter-narrative to traditional museums in Chapter 1, architect David Adjaye, comparing NMAAHC to other SI museums, states, "Black scenography of architectural space can play a counter to the classical, traditional way of making space and offer really creative alternatives" (Wilson, 2016, p. 74). It is important to note that the content, scope, and galleries of NMAAHC present a counter-narrative to other SI museums and that the building itself also serves this purpose, especially considering its place on the National Mall in Washington, D.C.

As mentioned, three fundamental design aspects of the museum architecture are Yoruban columns, shotgun house porches, and the "ring shout" motion in African American dance. The three-tiered metallic portion on NMAAHC's exterior, dubbed the "corona" by museum architects, features 3,600 bronze-colored cast-aluminum panels (see Figure 2.4), which draw inspiration from antebellum-era metallurgy. The trapezoidal structure of NMAAHC, seen in the artist rendering from Figure 2.3, was inspired by the sculptures of Olowe of Ise, an early 20th-century Yoruban artist whose work was used as columns to support porches of shrine houses (Wilson, 2016). The motion of the three tiers upwards to the sky is also meant to evoke the "ring shout," a ceremony or ritual in African American culture where an individual or group throws their hands up in celebration. Finally, the outside entrance to the museum evokes a porch, a typical covered outdoor space featured in shotgun houses of the US South. The NMAAHC porch, which measures 200 feet long and extends 44 feet from the corona (see Figure 2.5), serves as a transition space from the museum's exterior and the central interior hall and welcoming space. These fundamental elements of NMAAHC's exterior reflect the museum's mission of

creating a space, both inside and out, that reflects the rich past and future of African American history and culture.

Figure 2.4

Corona Panel Designed for NMAAHC



Note. Bronze-colored aluminum-cast panel that make up the NMAAHC corona structure from 2013. Reprinted from *Corona panel designed for NMAAHC*, by National Museum of African American History and Culture. Retrieved 2023 from https://nmaahc.si.edu/object/nmaahc_2016.41.3. Copyright Smithsonian Institution.

Figure 2.5

The Porch at NMAAHC

Note. Photograph of the porch on the exterior of NMAAHC from 2016. Reprinted from the National Museum of African American History and Culture. Retrieved 2023 from https://twitter.com/NMAAHC/status/776788315391557633. Copyright Smithsonian Institution.

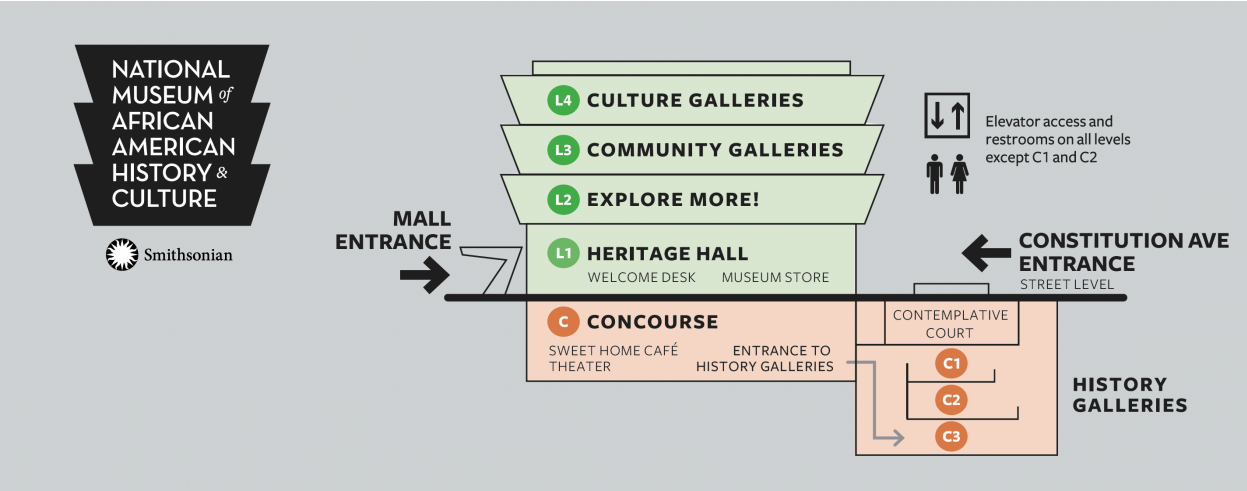
Inside NMAAHC: Museum Organization and Layout

Complementing its impressive and culturally significant exterior, the inside of NMAAHC is also critical to examine from a design and organizational standpoint. NMAAHC is over 400,000 square feet large and consists of 10 stories, with five stories located underground and five stories aboveground (Wilson, 2016). When visitors arrive at the museum, they enter through

the Heritage Hall, a “meeting space” (Adjaye, 2016, n.p.), which then leads downstairs to the history galleries or upstairs to the culture galleries (see Figure 2.6). In the following sections, I briefly describe each history and culture gallery and its importance in the museum.

Figure 2.6

National Museum of African American History and Culture Floor Map



Note. Illustrated floor map for the National Museum of African American History and Culture. Reprinted from *Museum Maps*, by National Museum of African American History and Culture. Retrieved 2023 from https://nmaahc.si.edu/visit/museum-maps. Copyright Smithsonian Institution.

History Galleries

The NMAAHC history galleries comprise the museum's bottom three floors, each representing a different historical period. Visitors first enter the “Slavery and Freedom” gallery on level C3 (see Figure 2.1 throughout), which encompasses the era between the early 15th century and 1875 and contains items like Harriet Tubman’s shawl, Nat Turner’s bible, and Frederick Douglass’s cane (NMAAHC, n.d., n.p.). While heavily emphasizing the horrors of

enslavement, the exhibit space also includes objects related to community building and cultural development among African Americans during this period.

The second history gallery on level C2 is titled “Defending Freedom, Defining Freedom: Era of Segregation 1876-1968” and “explores the years after the end of Reconstruction, examining how the nation struggled to define the status of African Americans” (Wilson, 2016, p. 120). This gallery includes objects related to significant individuals who were influential in the advancement of civil rights, like Rosa Parks’s dress, Thurgood Marshall’s glasses and watch, and Emmett Till’s casket. Additionally, the gallery features significant items related to African American culture, including a pew from the Quinn Chapel African Methodist Episcopal Church and bricks from several prominent historically Black colleges and universities (HBCUs).

Finally, visitors ascend to the last history gallery, located on level C1 and titled “A Changing America: 1968 and Beyond,” which “explores contemporary Black life through stories about the social, economic, political, and cultural experiences of African Americans during the years from the death of Martin Luther King Jr. to the second election of Barack Obama” (NMAAHC, n.d., n.p.). This gallery contains the most artifacts related to African American culture of the three galleries, including objects like Oprah Winfrey’s couch, publications by Sonia Sanchez and Alice Walker, and the keyboard used by Sly Stone.

The NMAAHC history galleries present a broad timeline of African American history from pre-enslavement to the present day, interweaving significant historical and cultural artifacts to craft a narrative of struggle, perseverance, hope, and monumental achievement. Again, the interplay between history and culture through every facet of history and culture galleries is crucial in tracing the museum’s experiential goals for visitors.

Culture and Community Galleries

The culture and community galleries at NMAAHC are housed on the top two floors of the museum and are organized by theme instead of chronologically like the history galleries. In the community gallery on floor L3, exhibits include "Making a Way Out of No Way," highlighting education, medicine, women's history, and businesses, and "Double Victory: The African American Military Experience," focusing on military history. The community gallery also hosts the "Sports: Leveling the Playing Field" exhibit, which contains significant artifacts and narratives related to sports as a catalyst for social change.

Floor L4 hosts the NMAAHC culture gallery, which includes four distinct spaces: "Taking the Stage," "Musical Crossroads," "Visual Art and the American Experience," and "Cultural Expressions." "Taking the Stage" contains television, film, comedy, dance, and theatre items, while "Visual Art and the American Experience" includes rotating visual artworks from prominent and emerging Black artists. "Cultural Expressions" showcases various contributions African American artists have made to fashion, design, and other cultural realms. *Musical Crossroads* is detailed extensively in Chapter 4 and is the largest of the three exhibits; it contains important objects from historic and modern musicians along with interactive digital spaces.

Education at NMAAHC

Although I examine educational programming related to *Musical Crossroads* extensively in Chapter 4, it is beneficial to provide a brief layout of NMAAHC's educational initiatives in this broader contextualization chapter. NMAAHC offers extensive educational resources for educators, students, parents, and adults. NMAAHC hosts multi- and single-day professional development sessions for educators and provides free resources and lesson plans through Smithsonian Learning Lab (see Chapter 6). NMAAHC also hosts reading challenges, National

History Day events, and gallery guides for student visitors aged 3rd-12th grade. Further examination of NMAAHC's educational outreach is provided in Chapters 3 and 4 of this document.

Conclusion

This overview of the museum's exterior, the interior layout, how the galleries are organized, and the interrelation between history and culture are vital in establishing *Musical Crossroads* as a significant component of NMAAHC and a site conducive to music teaching and learning as shown in the three contained studies.

Chapter 3: "If It Can Tell a Story" - The Past, Present, and Future of *Musical Crossroads* - Part I

Introduction and Overview of the Chapter

Curating and developing an exhibit at any museum or cultural institution requires collaboration and coordination between curators, educators, designers, and various other museum staff members (Obrist, 2014; Pegno & Ferrar, 2017; Villeneuve, 2019; Villeneuve & Love, 2017). Related to the Smithsonian Institution (SI), researchers have focused on the experiential and educational factors associated with the curation of various exhibits and programming, including fossil halls (Marsh, 2019), computer technology (Foti, 2018), photography (Haberstitch, 1985), and the SI Folklife Festival (Cadaval et al., 2016). Additionally, museum scholars have completed work specifically centered on the National Museum of African American History and Culture (NMAAHC), including NMAAHC's digitization practices (Coyle, 2018), the curation of Black Lives Matter collections at NMAAHC (Salahu-Din, 2019), and the museum's educational initiatives (Cross, 2017; Flanagan, 2017; Hindley & Edwards, 2017). Separately from research on museum curation and education at SI and NMAAHC, authors have built connections between music and museums, especially related to popular music curation (Baker et al., 2016; Fairchild, 2017; Leonard, 2007, 2010; Wiens & de Visscher, 2019).

The purpose of this study (Study 1) was to examine the development of the *Musical Crossroads* exhibit at NMAAHC through narrative inquiry. By completing oral history interviews with several museum staff members, including exhibition curators and research assistants, I traced the evolution of *Musical Crossroads*' creation, the collections process, museum department collaboration, and experiential and educational development, including

relevant goals for museum visitors set by museum staff. Through narrative inquiry, I incorporated various perspectives that highlight how the creation of *Musical Crossroads* lies at the intersection of music education, museum education, and museum curation.

This chapter contains a literature review and method for Study 1, and the proceeding Chapter 4 contains the resulting composed narrative. The literature review includes relevant research on informal learning in music and museum education, the theory of material culture in museum curation and education and its parallels in music education, and the collaborative processes between museum curators and other departments. Following, the method and written narrative detail the research process and findings for this study. To guide this narrative inquiry, I developed the following research questions:

6. What were the educational, professional, and musical backgrounds of individuals who developed *Musical Crossroads*?
7. What are the main themes present in *Musical Crossroads*?
    a. What is the layout of the exhibit?
8. What was the curation and collection process for *Musical Crossroads*?
9. What tensions arose between stakeholders in the *Musical Crossroads* development process?
10. What is the role of education in *Musical Crossroads*?

Literature Review

The review of literature for this study is divided into three main topics: informal learning in music and museum education; material culture in museum curation and education, including musical objects; and collaborative processes between museum curators and educators. These three topics provide a foundation for the fundamental components of exhibit curation and the

development of experiential and educational goals, specifically in creating *Musical Crossroads,* as detailed in the narrative inquiry.

Informal Learning

Informal learning serves as the first core tenet of this document's overarching theoretical framework and is a cornerstone in museum education pedagogy. As informal learning is discussed heavily in the proceeding narrative provided by NMAAHC staff, I provide an overview of this concept following an imagined narrative.

Linny's Story

In the New York City borough of Brooklyn, Leonard, nicknamed Linny, is a Black ninth-grade student who attends a fine arts magnet high school. He lives with his mother, father, and grandmother in a high-rise apartment. Linny began playing trombone in sixth grade after auditioning for his school's band program. Although he is a very talented trombone player, evident by his acceptance into the fine arts magnet school, Linny feels disconnected in his band class from the music his band director selects for the ensemble to perform. Even though the band director programs pieces by Black and other racially minoritized composers, the music still sounds like "classical" music, not the music Linny grew up listening to with his family. Linny is also the only Black trombone player at his school and feels out of place in the section with his primarily white peers.

One day on the way home from school, Linny sees an advertisement on the subway for a musical instrument exhibit at the Brooklyn Museum, which is only a five-minute walk from Linny's apartment. He visits the exhibit and is overwhelmed by the number of instruments on display, many of which he has never seen before. Since Linny plays trombone, he is drawn immediately to the trombone display at the rear of the

exhibit space. He reads placards about the development of the trombone and has the opportunity to play an electric trombone with the help of a museum docent. Along with the instrument's history, Linny sees trombones played by classical and jazz musicians, including Wycliffe Gordon, J. J. Johnson, and Anthony Barfield. Until he visited this exhibit, Linny had never seen another Black trombone player. Linny visited other parts of the exhibit, including the violin, piano, and drums sections, while avoiding instruments he did not care for, like the clarinet. The next day at school, Linny showed his band director pictures of the exhibit and the Black musicians he had read about and expressed to the director that having the opportunity to explore instruments and diverse musicians without the pressure of performing in an ensemble reinvigorated his love for playing trombone.

Informal Museum Education

In the 19th century, education researchers and practitioners began viewing museums and artifact collections as possible learning environments for the public (Allen & Crowley, 2014). During this period, museum curators primarily focused on preserving artifacts and cultural collections. The quantity and variety of museums have grown substantially in the 20th and 21st centuries, with a growing movement within the field of museum studies or museology to view museums as educational institutions. Some present-day museums, like interactive science museums or museums focused on children, have no collections and are specifically designed to provide educational experiences for audiences. This recent shift in institutional goals is "motivated by increasing pressure on museums to demonstrate that they serve a broader public, and not only an educated and cultured elite" (Crowley et al., 2014, p. 461).

It is crucial to define formal and informal learning environments in the context of this and the following studies. Formal learning environments, like traditional school classrooms, have a defined set of classroom routines, include standard curricula for all subjects, and emphasize individual testing to measure student growth. Informal learning spaces, including museums, allow for free choice, include a diverse range of topics and materials, and have no assessments to measure what visitors learn (Callanan et al., 2011).

Museums are complex spaces filled with varied opportunities for informal learning encounters. Visitors are guided by their interests and learning needs when navigating museum spaces, exemplified in Linny's narrative when he visited the museum for the music exhibit and then gravitated toward the trombone display. Depending on the institution, potential topics that individuals and groups can explore include art, science, history, and other sociocultural practices. These aspects of choice and visitor interest frame museums as informal learning spaces that require educational researchers to adapt from a typical formal, in-school educational setting.

Scholars have focused on school field trips to museums to bridge formal and informal education research. Field trip researchers emphasize that the most successful museum trips take advantage of the unique museum learning environment, specifically free choice, while also including interventions and resources provided by classroom teachers and museum educators that develop student knowledge (Pierroux, 2010). In addition, Crowley et al. (2014) state, "the most effective designs for learning on field trips have a moderate level of structure and guidance from curators and teachers, with tasks that allow time for inquiry, dialog, and collaboration" (p. 470). Research highlighting effective trips include using a dialogic approach during guided museum tours (Leinhardt & Crowley, 2002), having pre-visit preparation and post-visit reflection

in the classroom (DeWitt & Storksdieck, 2008), and using social media to support inquiry and dialogue amongst student visitors (Russo et al., 2009).

Alongside child and student learning in museums, a substantial body of literature in museum education focuses on informal adult learning. Dudzinska-Przesmitzki and Grenier (2008) identify two main themes regarding adult learning in museums, including the influence of individuals on their learning and the influence of museum exhibits on learning. Factors that impact individual museum learning include visitors' agendas (Falk et al., 1998) and prior knowledge (Roschelle, 1997). In contrast, the primary component of a museum that impacts adults' informal learning is exhibit design, which includes factors like labeling, object placement, technology, multi-sensory experiences, and interactivity. Duzinska-Przesmitzki and Grenier (2008) explain, "exhibit designers should focus on developing learner-driven environments that support visitors' innate learning processes…the key to exhibit designs that foster visitor learning is the ability to keep patrons intrinsically motivated and interactive throughout their experience" (p. 17). Taylor and Neill (2008) similarly identify four leading practices by museum educators to achieve effective informal adult learning: (a) appraising visitors' interests; (b) a content-driven epistemological approach; (c) answering questions from visitors; and (d) a fun and pleasurable experience.

The emphasis on free choice, visitor interests and agendas, and content-driven experiences in the museum education literature provides a foundation for the analysis of informal learning environments. These concepts relate directly to scholarly work on informal music learning and aid in establishing the connection between music education and museum education.

Informal Music Education

Research on informal music education has roots in scholars examining how popular musicians learn to perform various types of music (Bayton, 1997; Davis, 2005; Green, 2002). These works then evolved into experimentation with researchers and music teachers utilizing those informal practices in traditional music classrooms (Green, 2008). Green (2010) highlights five key characteristics of informal music learning where students: (a) choose what music they will learn; (b) copy recordings by ear instead of reading notation; (c) self-direct and peer-direct learning; (d) assimilate skills in idiosyncratic and holistic ways; and (e) integrate listening, performing, improvising, and composing throughout the learning process. In Green's theorization of informal music education, the onus of learning is placed on student creativity, with the teacher serving as a guide in the process but not the primary transmitter of knowledge.

Narita and Green (2015) also highlight that music students' life experiences affect their ability to understand musical materials, stating, "the level of students' familiarity and competence with a certain style of music correspondingly affects their ability to understand the inter-relationships of sonic materials within that style and to attribute some meaning to those materials" (n.p.). Along with musical materials like chords, intervals, and phrases, Narita and Green (2015) refer to "delineated" (n.p.) musical meanings, which are the relationships between those musical materials and extra-musical associations like racial, ethnic, cultural, religious, or political connotations.

Several scholars have examined the impact of informal and popular music pedagogy on student experiences in and out of the music classroom. These include works on forming popular music ensembles in general music classes (Boespflug, 2004; Jaffurs, 2004), using rock music in guitar and string ensembles (Horn, 1984; Siefried, 2006), and analyzing improvisation in Black female students' playground games (Harwood, 1998). Music teacher educators have also studied

pre-service music teachers' perceptions and implementations of informal music pedagogy (Davis & Blair, 2011; Poblete et al., 2019; Vasil, 2019; Wright & Kanellopoulos, 2010).

Recent researchers of informal music education have focused on "modern bands," which are ensembles that use music technology and popular music instruments like guitar, bass, drums, keyboards, synthesizers, and vocals and that center student leadership (Powell & Burstein, 2017). The phrase modern band was coined as a class description by the Los Angeles Unified School District in 2010 and is now a music course in over 500 United States school districts (Powell, 2021). Scholarly works on modern band include utilizing aspects of informal music learning like student-led learning (Byo, 2018; Cremata, 2017), perspectives of modern band students (Powell, 2019; Weiss et al., 2017), and experiences of modern band teachers (Randles, 2018).

Similar to the foundations of museum pedagogy, informal music learning practitioners emphasize student interests and free choice in learning sequences and materials. Students in popular music ensembles or modern bands are encouraged to choose meaningful repertoire and develop an individual and sometimes idiosyncratic learning path through musical materials and concepts. When examining informal learning at the nexus of music in museums, visitors should be able to explore musical artifacts and interactive activities that are meaningful to them, with the opportunity to branch out and discover new concepts and materials. In Linny's story, he navigated to the trombone, what he was most familiar with, and then ventured to other areas of the exhibit, demonstrating the core tenets of informal learning in music and museum education. As discussed in the proceeding results of this narrative inquiry, NMAAHC curators and educators similarly utilized aspects of informal learning during the creation of *Musical Crossroads*.

Material Culture and Musical Meaning-Making

The utilization of material culture theory has grown in museum studies and museum education in the last several decades (Berger, 2016), allowing scholars to examine tangible objects and how those objects are used and interpreted. Fleming (1974) proposed an initial model of material culture called "artifact study." In this model, similar to Bloom's (1956) taxonomy in education, objects are subject to four processes by those experiencing an object: identification (factual description); evaluation (judgments); cultural analysis (relationship of the artifact to its culture); and interpretation (significance). Fleming contends that objects contain a multitude of stories and interpretations based on the physical qualities of the object, how the object was used, the cultural implications of the object, and the context of encountering the object. In museums, objects are used in exhibits to convey narratives and to contextualize persons, places, and events. When individual visitors interact with any given object, they will typically follow the steps laid out by Fleming: identifying the object, evaluating the object, analyzing the cultural significance of the object, and then interpreting the object's significance (Wood & Latham, 2014), though they may not complete the steps depending on their interest in the object.

For music-related objects, Reece (2023a) contends that musical materials outside of sheet music and other written forms can serve as significant primary sources for both museum visitors and researchers using Fleming's model, specifically within the context of musical materials at NMAAHC. She writes:

> Material culture studies spell out how artifacts can expand our understanding of music's value and place within everyday life. Traditionally, the various music disciplines–musicology, ethnomusicology, historical musicology, and music education–have been significantly, if not entirely, reliant on written text, recordings, fieldwork, and

> performances. Predictably, the outcome of this work replicates the processes–historical narratives firmly shaped by a fixed set of aesthetic values, musical canons, and hierarchies that assign value based on essentialist notions of authenticity, skill, and interpretation–that favor Western European models. Consequently, the whole culture of non-Western music and the way it functions in society, along with the way people experience it in their daily lives, are omitted or distorted in music discussions and scholarship in ways that hamper a complete understanding of the vibrant musical life happening globally. The Fleming mode's utility for musicological investigations is evident when applied to musical material culture within the NMAAHC's collection. (p. 20)

As detailed in the proceeding sections, museum staff who developed *Musical Crossroads* focused specifically on the value and power of objects to exemplify the importance of an exhibition dedicated to music at NMAAHC. The material culture present in *Musical Crossroads*, as explained above, presents a counter-narrative to typical museum spaces that are dominated by white, colonial, male representation. Reece (2023) states, "as objects within the NMAAHC collection demonstrate, this process [of interpretation] has the power to uplift musicians whose careers have rarely been included in historical examinations" (p. 31). The use of musical objects at NMAAHC within the framing of material culture also draws parallels to Hartman's (2008) theory of critical fabulation, in which archives and other cultural institutions create alternative histories to compensate for the exclusion of marginalized communities.

To provide a concrete example of material culture and musical meaning-making at *Musical Crossroads*, imagine the infamous clock worn by Flavor Flav during his time with Public Enemy in the 1980s (Abrams, 1995). In the first step of Fleming's (1974) model, a visitor

encountering this object would identify the physical components of the clock before evaluating its use and cultural context. If the visitor chose to reach the third and fourth stages of the model, they would possibly read the accompanying text explaining that Flavor Flav utilized this clock to draw attention to issues of racism, corruption, and violence, despite his often-comedic antics when performing (Reece, 2023). If a *Musical Crossroads* visitor is not interested in rap music, they may only reach the first stage of Fleming's model but could invoke later stages with a different object that aligns with their interests, like Marian Anderson's dress or John Coltrane's saxophone. Regardless of what objects or experiences visitors gravitate to in the exhibit, the model of material culture is a crucial element in the development of *Musical Crossroads*, its experiential and educational goals, and its connection to music education.

Museum Curator and Educator Collaboration

In the broader museum studies literature, collaboration is touted as an essential practice for museums and cultural institutions (Knudsen & Olesen, 2019). Scholars have emphasized internal museum collaboration (Hansen & Moussouri, 2004; Lee, 2004; Macdonald, 2007) and external collaboration with other cultural institutions (Kavanagh, 1995; Waibel & Erway, 2009), museum visitors (Mygind et al., 2015; Simon, 2010), educational institutions (Boddington et al., 2013; Søndergaard & Veirum, 2012), and private businesses (Fischer, 2010; Olesen, 2015; Roberts, 2015). Despite this swath of literature, scholars tend to view collaboration "in relation to overall perspectives and outcomes, rather than on how collaboration is actually practiced as a complex work process across various stakeholders" (Knudsen & Olesen, 2019, p. 205). To contextualize the development of *Musical Crossroads* through various stakeholder perspectives, it is crucial to briefly examine previous work focused on collaboration between museum educators and curators.

Studies related to internal museum collaboration, including the current study, typically center on the exhibit design process (Knudsen & Olesen, 2019). The potential for collaboration in designing a museum exhibit is argued to be more effective if various museum staff work holistically across the design process compared to a siloed structure, e.g., where a curator finishes work before handing off the next step to a museum educator (Grasso & Morrison, 1999; Hooper-Greenhill, 1999). Museum educators specifically can be "forced into a remedial role, making the best of a bad job once the exhibition has opened" (Hooper-Greenhill, 1999, p. 38). Recently, a movement within museum education calls for an edu-curated model of museum exhibits, where museum educators and curators, along with other museum departments, work in tandem to develop exhibits without hierarchical power dynamics (Villeneuve & Love, 2017). As shown in this study, NMAAHC and *Musical Crossroads* had a generous mix of educator-curator collaboration and work that was siloed between museum departments, and recommendations are provided for future music-related collaboration at NMAAHC and other museums at the conclusion of this chapter.

Method

As stated, the purpose of this study was to complete a narrative inquiry detailing the development of the *Musical Crossroads* exhibit and its experiential and educational goals for visitors. The following method section describes the selection of narrative inquiry as the research method, prominent uses of narrative inquiry in music and museum education, and the method-related processes used to complete this study, including participant selection, data collection, and data analysis.

Narrative Inquiry as Method

The use of narrative inquiry as empirical research has roots in the work of Bruner (1986), who describes narrative as "how we come to endow experience with meaning…with epiphanies of the ordinary…with human or human-like intention and action and the vicissitudes and consequences that mark their course" (pp. 12-13). Before and after Bruner's foundational work, scholars employed narrative inquiry in the fields of psychology (Smith & Sparkes, 2006, 2009), sociology (Harrison, 2002; Czarniawska, 2007), anthropology (Pinnegar & Daynes, 2007), and various educational fields (Connelly & Clandinin, 1990; Craig, 2011; Huber et al., 2013: O'Grady et al., 2018). The use of narrative inquiry is wide-ranging, and "given the variants of narrative research one might encounter, questions range from philosophical matters having to do with reality, knowledge, and self, to practical problems of procedure, interpretation, and representation" (Stauffer, 2018, p. 165). As this study revolves around NMAAHC staff's lived experiences, both individually and collectively, in creating *Musical Crossroads*, narrative inquiry and its typical bounding of temporality, sociality, and place (Clandinin, 2007) is an appropriate framework to complete this research.

Narrative Inquiry in Music Education and Museum Education

Music education researchers have typically utilized one of three main methods of narrative inquiry: narrative knowing (Bruner, 1986), narrative storytelling (Clandinin & Connelly, 1994), and critical storytelling (Barone, 2001). Narrative knowing in music education has included studies on the self-views of two preservice music teachers (Ferguson, 2009) and young children's musicing practices (Barrett 2009, 2011, 2012). Studies related to story as narrative involve children's experiences with music in inside- and outside-school settings (Griffin, 2009, 2011b), children's lived musical realities (Griffin, 2011a), and a secondary

classroom for students with disabilities (Blair, 2009). Finally, scholars utilizing Barone's critical storytelling model completed research on transgender students in music education (Nichols, 2013), ethical practice in narrative pedagogy (Hess, 2021), and double-consciousness in American music education (Robinson & Hendricks, 2017). Additional methods of narrative inquiry in music education include relational narrative inquiry of a teen garage band (Baker, 2011), collaborative journals in music teacher education (Blair, 2011), and photographs as narrative in music teacher education (Schmidt & Zenner, 2011).

Museum education research has not developed the use of narrative inquiry as swiftly as music education. Related to this study are works involving narrative and art museum education (West, 2012), addressing trauma in art museum education through inquiry (Spiers, 2022), and narrative in museums using digital storytelling programming (Tsiviltidou, 2015). These uses of narrative inquiry in music education and museum education research provide a foundational framing and grounding for the current study, which uses narrative to highlight the crux of music and museum education in the development of *Musical Crossroads* from multiple stakeholder perspectives.

Data Collection and Analysis

Participants

Participants in this study included current NMAAHC staff members who were directly or indirectly involved with the creation of *Musical Crossroads* and the development of the exhibit's experiential and educational goals. The primary participant of this study was Dr. Dwandalyn Reece, the lead curator of *Musical Crossroads* who currently serves as Associate Director for Humanities at NMAAHC. Secondary participants included Dr. Kevin Strait, a museum curator at NMAAHC, and Ms. Hannah Grantham, a contract worker for NMAAHC and *Musical*

Crossroads (participant names printed with permission and in accordance with the University of Maryland and SI institution review board (IRB) protocols). As mentioned in the proceeding written narrative in Chapter 4, there was little direct involvement from NMAAHC educators in the development of *Musical Crossroads*, and no current NMAAHC educators were available to participate in this study. Despite the lack of museum educator involvement, educational experiences were an important consideration of the team that developed the exhibit.

Data Collection

Data sources in this study primarily consist of semi-structured oral history interviews with participants. Additional data includes my researcher fieldnotes and photographs taken at NMAAHC, the *Musical Crossroads* exhibit, and primary source and archival documents supplied by SI and study participants. This study was determined to not be considered human subjects research by the University of Maryland IRB (see Appendix A).

I conducted three semi-structured interviews lasting between 60 and 90 minutes with Dr. Reece, and one interview lasting between 60 and 90 minutes with secondary participants. Interviews for this study took place via Zoom videoconferencing software between September and December 2023, and all interviews were recorded. Interviews consisted of questions related to the participant's involvement in and perceptions of *Musical Crossroads* (see Appendix B for a sample interview protocol used during this study). The multiple methods of data collection (interviews, fieldnotes, photographs, and primary source documents) and sources (primary participant, secondary participants, and various SI and NMAAHC locations) provided multiple reference points that aided and informed the triangulation of and analysis of data (Stake, 1995).

Data Analysis

To craft an overview of the various participants into a cohesive narrative detailing the creation of NMAAHC, I utilized Clandinin and Connelly's (2000) conceptualization of narrative storytelling and incorporated aspects of Polkinghorne's (1995) narrative configuration to streamline the various participant perspectives. In using these approaches, I situated the development of *Musical Crossroads* through the dimensions of temporality, sociality, and place (Clandinin, 2007). By drawing on multiple forms of data with varied participant experiences, I composed a narrative that captures the complexities of creating *Musical Crossroads* in storied form (Clandinin, 2006), while still allowing individuals' experiences to remain unique and equally important.

Consistent with established narrative inquiry processes, I coded and categorized all data, including interviews, fieldnotes, photographs, and primary source documents, to identify the individual and collective experiences of participants (Clandinin, 2006). I utilized multiple rounds of open and closed coding of interview data (Saldaña, 2021) to develop themes for individual participants and the participants collectively. To craft the actual narrative, Polkinghorne (1995) states that analysis is "a synthesizing of the data rather than a separation of it into its constituent parts…narrative text seeks to configure people's accounts into stories" (pp. 14-15). Thus, this engagement with narrative inquiry melds analysis of raw data (interviews, fieldnotes, photographs, primary source documents) into synthesis to create a storied account of *Musical Crossroads*' creation. Transcripts of interviews and narrative accounts were member-checked by participants, providing an opportunity to confirm or challenge the accuracy of data and analysis. Following these member checks, I made some changes to the narrative at the request of participants to clarify language and meaning.

Limitations

In this study, I could only relay the narratives of museum staff members who were willing and able to participate. I contacted 11 different individuals who were previous or current NMAAHC and/or *Musical Crossroads* staff and garnered three participants. Some NMAAHC staff members who helped develop *Musical Crossroads* no longer work at NMAAHC or could not participate. Therefore, the narrative inquiry only contains the perspectives of the three participants, and their experiences are not universally applicable to other staff members. These narratives could contain survivorship bias as each participant still works at NMAAHC.

Chapter 4: "If It Can Tell a Story" - The Past, Present, and Future of *Musical Crossroads* – Part II

Prelude

Dr. Dwandalyn Reece recalls walking into the completed *Musical Crossroads* exhibit for the first time after six years of curating, collecting, and planning:

> It was exciting to see, you know, everything that's been on paper or in drawings…up and present and made real. I was overwhelmed by it…seeing the germs of an idea come to fruition and seeing it put into place is pretty awesome. I did have some disappointments in sections that weren't there…I did go into it with a critical lens. But it came alive in a way that it hadn't in all the planning. And I think the energy of the space has a lot to do with its success as an exhibit in the building.

This contradictory experience, in feeling pride while simultaneously critiquing, sets the backdrop for the creation process of the *Musical Crossroads* exhibit. Dr. Reece and her team of curators, research assistants, collections assistants, and others were given the monumental tasks of building a collection from nothing, telling a comprehensive story of African American music in 6,200 square feet of space, and, creating an educational and interactive space for visitors of all ages, knowledge, backgrounds, and experiences.

This narrative outlines the experiences of Dr. Reece and two of her colleagues at the National Museum of African American History and Culture (NMAAHC), Dr. Kevin Strait and Ms. Hannah Grantham, as they developed, maintain, and look to the future of *Musical Crossroads*. Instead of a chronological narrative, their stories are intertwined into several major themes: (a) educational, professional, and musical backgrounds of participants; (b) the themes and objectives of *Musical Crossroads*; (c) the curation and collection process; (d) tensions in the

development process; and, (e) the role of education in *Musical Crossroads*. Before detailing these narratives, an overview of *Musical Crossroads's* look, sound, and feel is pivotal in contextualizing Dr. Reece's, Dr. Strait's, and Ms. Grantham's stories.

Musical Crossroads – An Overview

As visitors ascend to the top floor of NMAAHC, they encounter the four culture galleries: *Cultural Expressions*, a "circular, experiential, introductory" space that highlights style, culinary, language, movement, and craft cultures; a rotating visual arts space (*Reckoning: Protest. Defiance. Resilience.* at the time of this writing); *Taking the Stage*, dedicated to movies, theatre, and other pop culture mediums; and, *Musical Crossroads*, the subject of this narrative. Situated in the center of the four galleries, *Musical Crossroads* "shows how African American music provided a voice for liberty, justice and social change…visitors have the opportunity to appreciate African American music as a vibrant living art form that has been a vehicle of cultural survival and creative expression" (NMAAHC, 2023, n.p.). According to planning documents, the exhibit is 6,200 square feet and features over 350 objects, 13 media screens, two digital interactive spaces, and dozens of inlaid photographs (Reece, 2016, n.p.).

The first object attendees encounter is Chuck Berry's iconic red Cadillac Eldorado from 1973, situated at the entrance to *Musical Crossroads* (see Figure 4.1). In 1987, Berry drove the Cadillac onto the stage of St. Louis's Fox Theater, a venue that had turned him away from attending a concert as a child (Forbes, 2023). Berry, who Dr. Kevin Strait describes as the "primary sonic architect of rock 'n' roll" (NPR, 2011, n.p.), was reluctant to give up his treasured vehicle and initially told Dr. Strait, "I'm not giving you anything." By placing the car at the front of the space, curators sent a message that *Musical Crossroads* will explore the many tensions between music, race, history, and storytelling that form the foundation of the entire exhibit.

Figure 4.1

Chuck Berry's Red Cadillac at the Entrance of Musical Crossroads

Note. Mockup of *Musical Crossroads* entrance from exhibition planning documents. From Reece, D. (2016). *Musical Crossroads layout – photos*. Copyright Smithsonian Institution.

Organized by Genre

To the immediate left and right of the exhibit entrance are object display cases, arranged by musical genres, that wrap around the back of the space (see Figures 4.2 and 4.3 for exhibit layout blueprints). The genres, from right to left in the exhibit, include sacred, classical, jazz, stage and screen, beyond category, funk, go-go, hip-hop, global impact, rock and roll, R&B/soul, blues/folk/country, and roots (see Figure 4.1 for examples of genre object cases). Each of these sections contains multiple display cases filled with artifacts related to various artists and other influential individuals who shaped or contributed to that genre (See

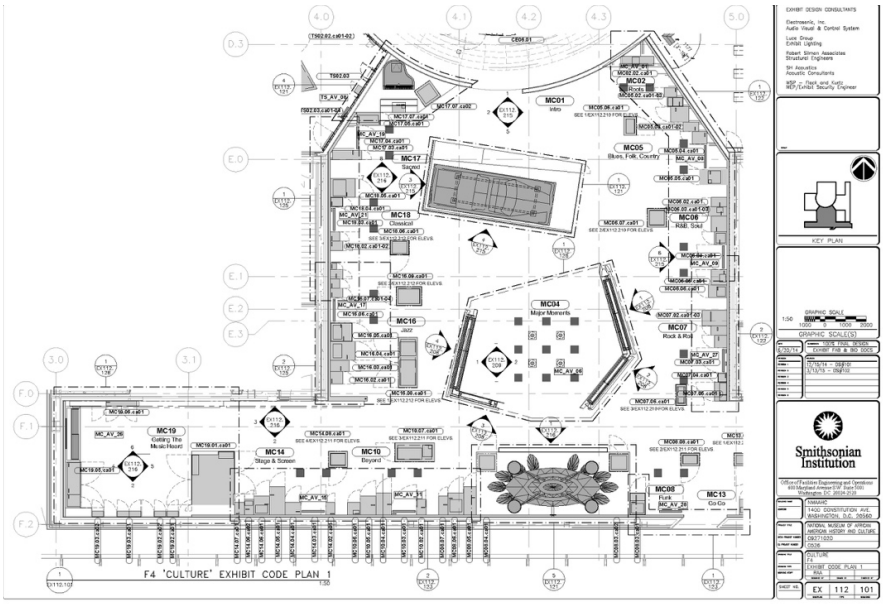
https://nmaahc.si.edu/explore/collection/ for a complete listing of objects on display in *Musical Crossroads*). These range from smaller items like vinyl records, concert programs, or sheet music to larger objects such as musical instruments, performance outfits, and stage props like George Clinton's "Mothership." In explaining the decision to organize the exhibit by genre, Reece (2016) writes:

> The organization of musical genre stories interspersed with thematic sections are integral in the overarching narratives in play. In exploring the stories behind each genre and the social and cultural threads that link one genre to another, *Musical Crossroads* illustrates the numerous ways music creates meaning, influences history and culture, and shapes how we understand ourselves and communicate with each other…visitors are guided by the familiar constructs of genres and musical styles, alongside contextual themes that offer new perspectives in the way African American music is perceived. (n.p.)

Later sections of this narrative describe the decision made by curators and designers to organize the exhibit by genre. This basic overview is provided to aid in visualizing the current exhibit layout.

Figure 4.2

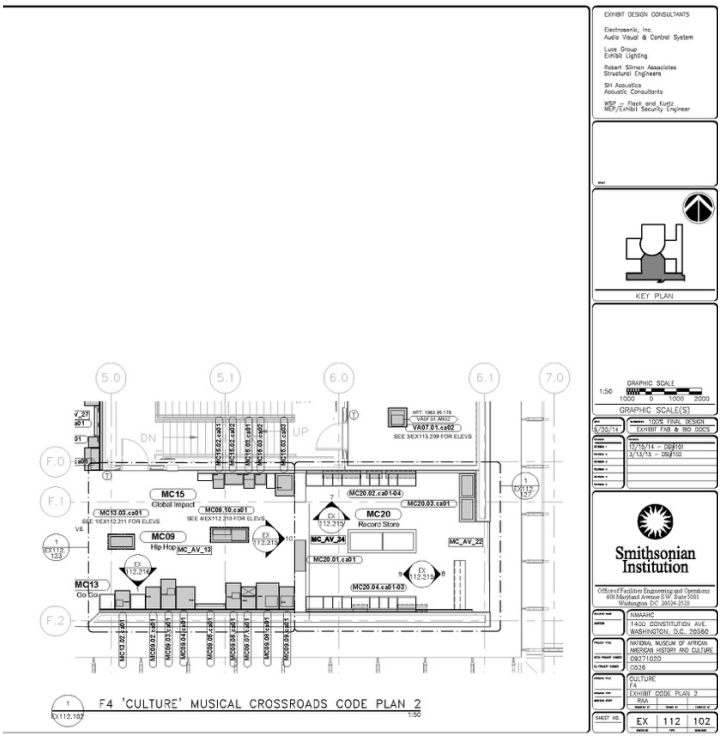
Blueprint of Musical Crossroads Layout – East Section



Note. From Reece, D. (2016). *Musical Crossroads layout – photos*. Copyright Smithsonian Institution.

Figure 4.3

Blueprint of Musical Crossroads Layout – West Section



Note. From Reece, D. (2016). *Musical Crossroads layout – photos*. Copyright Smithsonian Institution.

Interactive Spaces

In addition to the display cases organized by genre, *Musical Crossroads* features multiple interactive spaces that "use audio-visual elements, digital interactives, and experiential spaces that offer visitors several opportunities to engage with music directly" (Reece, 2016, n.p.). The first of these spaces, situated right behind Chuck Berry's Cadillac, is titled "Great Musical Moments" (see Figure 4.4). This area is a "four-screen installation designed to immerse the visitor in the breadth and diversity of musical expression through performance. It is both an introduction and summation of the exhibition's content" (Reece, 2016, n.p.). The video screens surrounding the viewer play content including performance clips and other music-related visuals. The proceeding sections elaborate on the process of designing this and other interactive spaces.

Figure 4.4

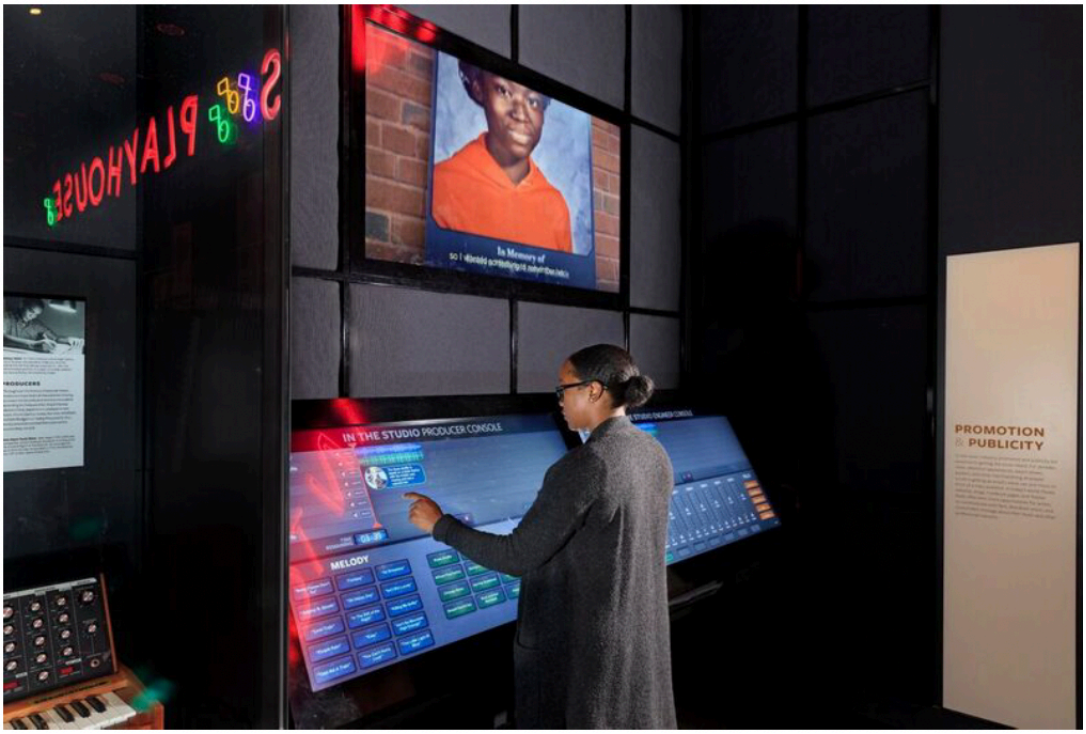
Mock-up of "Great Musical Moments" in Musical Crossroads

Note. From Reece, D. (2016). *Musical Crossroads layout – photos*. Copyright Smithsonian Institution.

In the far east of the exhibition sits the "In the Studio" interactive space (see Figure 4.5), part of the "Getting the Music Heard: African Americans in the Music Industry" section of *Musical Crossroads*. This is one of two digital touch-screen interactives in the exhibit, which "engages visitors in the act of producing and mixing their own song…they learn about the role of melody, harmony, rhythm, and play in the production of a recording. Pop-ups that appear…provide information on musical styles and facts about specific song selections" (Reece, 2016, n.p.). As detailed in proceeding sections of the narrative, Dr. Reece views this interactive as encouraging "musical literacy," providing visitors with a more explicit educational experience that complements the surrounding exhibit objects.

Figure 4.5

Mock-up of "In the Studio" Interactive in Musical Crossroads



Note. From Reece, D. (2016). *Musical Crossroads layout – photos*. Copyright Smithsonian Institution.

Finally, in the far west of *Musical Crossroads* is the "Neighborhood Record Store" interactive space (see Figure 4.6). This area is modeled after community stores where individuals could browse records and connect with like-minded others over music. In the exhibition, this space:

> Is a community space where visitors can bridge the gap between the 20th and 21st century models of music distribution. Visitors can browse the record bins that line the walls or interact with the digital touch table which explores the relationships among genres, interprets recordings from a variety of perspectives, includes a timeline that highlights the historic events that influenced and shaped the music of its time, and the opportunity for visitors to create a community playlist that sonically animates the space. (Reece, 2016, n.p.)

Like the "In the Studio" interactive, the "Neighborhood Record Store" is designed as an educational experience for visitors that promotes musical literacy within the context of community building and collaboration.

Figure 4.6

Mock-up of "Neighborhood Record Store" Interactive in Musical Crossroads

Note. From Reece, D. (2016). *Musical Crossroads layout – photos*. Copyright Smithsonian Institution.

Summary

This brief overview of the *Musical Crossroads* contents and layout contextualizes the experiences of Dr. Reece, Dr. Strait, and Ms. Grantham as they describe how the exhibit came to life. The following sections explain how *Musical Crossroads* was curated and designed, and it may be helpful to refer to this overview as their stories are delineated.

Participants and Backgrounds

Dr. Dwandalyn Reece

Before her tenure as the music curator for NMAAHC, Dr. Dwandalyn Reece was interested in the "idea of looking at American music through a social, a cultural lens." After completing her undergraduate degree, Dr. Reece pursued graduate studies at the University of Michigan, studying with musicologist Richard Crawford and enrolling in the university's

museum practice program. In reflecting on the museum program and her interest in American music and culture, she states, “I didn’t know if I wanted to stay in the academy, I thought there was something more democratic about getting all this knowledge and getting it out there for the public and actually seeing some public good come from it.” After completing her master’s degree at the University of Michigan, Dr. Reece continued to gain experience in public history by completing internships at the Charles Wright Museum in Detroit and the National Museum of American History (NMAH) in Washington, D.C.

Dr. Reece’s time at NMAH, where she worked on a Duke Ellington collection, was formative, saying it “whetted my appetite that I could do music in a public forum. And from then out, that was really my primary focus.” Following these internships, Dr. Reece continued working with museums across the country, “working in history museums at times and then sometimes in a music museum, but always with that public focus.” These varied positions included working at the Henry Ford Museum in Michigan on a project for Popular Mechanics magazine, bringing current museum standards to the Motown Museum in Detroit, conducting ethnographic research, and developing exhibits at the Brooklyn Historical Society in New York City. Dr. Reece cites these positions as a “learning experience in the tension of working with the commercial music industry and an educational enterprise,” setting the stage for her work as the NMAAHC music curator.

Following these opportunities, Dr. Reece returned to graduate school to complete her Ph.D. in performance studies at New York University, conducting a dissertation on singer and actress Ethel Waters. When asked why she chose this field instead of a more traditional program like musicology, Dr. Reece explains, “performance studies is interdisciplinary and quite broad, kind of using performance as a lens. But I also did some museum work with that…that really

kind of heightened my interest, not only in my own subject matter, but the field overall." Dr. Reece moved to Washington, D.C. in 2000 after completing her Ph.D., taking a job with the National Endowment for the Humanities, which "benefited me in what I'm doing now, building a body of knowledge…it's not only about working the subject matter, but…working with donors…knowing institutional organizational structures, negotiating political dynamics, and working in a state, local, federal level." Finally, in 2009, Dr. Reece applied for a job as the inaugural music and performing arts curator for NMAAHC, a role that she explains "felt that I'd come full circle, that that was something that was just tailor-made for me. And so I applied. And I got the job." After serving in the music and performing arts curator role for 12 years, Dr. Reece was named Associate Director for Curatorial Affairs at NMAAHC in 2021 and then NMAAHC's Associate Director for the Humanities in 2023. However, this narrative primarily focuses on her time as NMAAHC's music and performing arts curator.

With her position as NMAAHC music curator in 2009, six years before NMAAHC would open to the public, Dr. Reece was tasked with leading the curation of a collection and exhibit dedicated to African American music, a daunting charge that would require a unique synthesis of her skills in American music history, museum curation, working with complex organizational structures, and navigating government cultural institutions. Dr. Reece began building a team to aid in executing this exhibit, which would become *Musical Crossroads*, including now-NMAAHC curator Dr. Kevin Strait.

Dr. Kevin Strait

Although he is now a museum curator at NMAAHC, including curating the blockbuster 2023 exhibit *Afrofuturism: A History of Black Futures* (NMAAHC, 2023), Dr. Kevin Strait joined the museum in 2010 as a research and curatorial assistant for *Musical Crossroads*. Dr.

Strait completed a music minor in his undergraduate studies and ultimately earned his Ph.D. in American studies with a focus on American music at George Washington University. Foreshadowing NMAAHC's emphasis on the intertwining of history and culture, Dr. Strait reflects on his graduate studies: "I was studying history, but through a prism or lens of music. So that was also beneficial for what the museum was doing, because we have to kind of employ a linear approach to it…to this kind of storytelling." After completing his Ph.D., Dr. Strait began working at NMAAHC with Dr. Reece and others to bring *Musical Crossroads* to fruition.

Dr. Strait's first role at NMAAHC was as a project historian for *Musical Crossroads,* "helping with…research reports on various subjects pertaining to music. I remember writing one on…DJs in Philly in the mid-20th century…but then it…blossomed into something that I could assist with the curation of the project." Due to his scholarly focus on "public history and social history" through a music lens (see Strait, 2015, 2018, 2019, 2023), Dr. Strait's contributions to the early stages of *Musical Crossroads* were invaluable. Along with staying abreast of current scholarship related to the exhibit, Dr. Strait was eventually responsible for curating and collecting some of the most prominent items still on view today at NMAAHC, including Chuck Berry's Cadillac in *Musical Crossroads*. These encounters with living musical legends are detailed in later sections of the narrative. Ultimately, Dr. Strait's background in public history and music aided in making *Musical Crossroads* what it is today, and he continues to bring thoughtful curation to NMAAHC through exhibits like *Afrofuturism: A History of Black Futures*. His story also illustrates the diverse range of experiences past and current NMAAHC staff hold, including current NMAAHC music and performing arts assistant, Ms. Hannah Grantham.

Ms. Hannah Grantham

The newest member of the *Musical Crossroads* team in this narrative, and the only participant who still actively works directly on *Musical Crossroads*, Ms. Hannah Grantham began working at NMAAHC in 2018 as a curatorial and research assistant, a role she still holds as of this writing. Before joining NMAAHC, Ms. Grantham had several unique opportunities that prepared her to work on *Musical Crossroads*. Originally a jazz major at the University of North Texas (UNT), Ms. Grantham switched her major to history as a sophomore, citing a "crisis of conscience" and realizing she did not want to be a full-time performer. Along with working at the UNT music library, Ms. Grantham worked "at the Texas Musicians Museum…that was kind of how I had my inroads. I also volunteered at several other museums while I was doing my undergraduate degree and kind of piecemealed a program together for myself." During this time, Ms. Grantham developed an interest in "material culture and more particularly organology," and ultimately decided to pursue a master's degree at the National Music Museum (NMM) through the University of South Dakota.

During her master's program at NMM, Ms. Grantham received unique training in curation and collecting practices of musical artifacts in museums. She states, "all of our classes were in the museum, we were working on preserving instruments, we were working on cataloging instruments, photographing instruments, putting together exhibitions…which was a once-in-a-lifetime opportunity." Outside of coursework, Hannah was given other tasks that complemented her prior experiences in archival work, including "working with the musical instrument manufacturing archive…cataloging ledgers, deacidifying ledgers, going through…workshop lectures that were on display." These experiences put Ms. Grantham "towards the top of the pack" when she applied for an internship at NMAAHC by combining

expertise in curation, restoration, and archival research, a pivotal skillset when working with the music collection at NMAAHC.

In her current role, which she has held since 2018, Ms. Grantham "wears many hats" for the music and performing arts team at NMAAHC. Her job started with "lots of exhibition processing…managing the annual rotations" of items in *Musical Crossroads*, where some artifacts are taken down for preservation and others are put in their place. To complete these rotations, Ms. Grantham "conducts…searches of possible objects that could be of interest that we already had within our collection…identifying some collecting leads…then helping kind of manage the rotations every year." Additionally, Ms. Grantham works on the exhibit script, including the labels for objects; contributes research for NMAAHC publications (see Reece, 2023); provides justification statements for new items coming into the collection; and, serves as an "untitled secretary" for the Smithsonian Music Executive Committee. Concurrently with her position at NMAAHC, Ms. Grantham is completing her Ph.D. in history of American civilization, focusing on material culture and music. Like Dr. Reece and Dr. Strait, Ms. Grantham has many diverse experiences that aid in maintaining *Musical Crossroads* and its place in NMAAHC.

Summary

The varied backgrounds of the primary participant, Dr. Dwandalyn Reece, and the secondary participants, Dr. Kevin Strait and Ms. Hannah Grantham, provide a brief overview of the many scholarly and personal interests that aided them in creating and maintaining *Musical Crossroads* as a unique exhibit within the Smithsonian. These initial narratives serve as a contextualization for detailing how *Musical Crossroads* came to life, and their stories will continue to permeate the rest of the narrative that focuses on the exhibit's creation.

Themes and Objectives

Before beginning the curation and collection process for *Musical Crossroads*, Dr. Reece (2016) developed five themes that frame the exhibition experience:

1. The African roots of African American music.
2. Hybridization and the intermingling of musical styles and innovations, performance practices, cultural values and beliefs, and social behaviors.
3. Individual and collective expressions of agency and cultural identity as strategies of resistance and self-actualization.
4. The role mass media and the entertainment industries have had in extending the influence of African American music on American culture.
5. The music's global impact.

She writes about these themes and the role they play in the exhibit:

> The role that race has played in the lived experiences of African Americans in the United States is central to the exhibition's overall narrative. It is through this lens that the creation, dissemination and reception of African American music and performance are perceived…These themes challenge the existing borders and boundaries that define African American music opening up space for artistic creativity and the freedom of individual expression. The exhibition narrative mirrors music's fluid natures…the organization of musical genre stories interspersed with thematic sections are integral…in exploring the stories behind each genre and the social and cultural threads that link one genre to another, *Musical Crossroads* illustrates the numerous ways music creates meaning, influences history and culture, and shapes how we understand ourselves and communicate with each other. (Reece, 2016, p. 1)

In developing these themes, Dr. Reece sought to contextualize the exhibit's genre-based layout for herself and visitors to conceptualize "how I was going to treat the topic and how I was going to explore the topic."

The five themes are also crucial in describing the experiential objectives for visitors of *Musical Crossroads*. Although the experiential and educational objectives for the exhibit are not explicitly detailed in archival documents, they are apparent in the narrative provided by Dr. Reece and her team. Aside from displaying objects that encompass genres and broad sweeps of African American musical history, Dr. Reece (2016) also wanted visitors to "engage with music within a social and historical context that illustrates the centrality of music to the African American experience and American cultural expression" (p. 1). This was a daunting task for the *Musical Crossroads* team, and Dr. Reece recalls, "I had to confess my first week, I was really thinking what had I gotten myself into?" Similarly, Dr. Strait speaks about the organization of the exhibit, stating, "we had to determine…what we wanted the audiences to walk away with…so our strategy was to outline it in such a way where…people had these kinds of cues where they could follow a timeline of…where the music began and where it is now."

Ultimately, it was important for all visitors to gain "new perspectives in the way African American music is perceived" (Reece, 2016, p. 2). This was achieved through an emphasis on material culture (see Chapter 3), where visitors can choose how deeply they want to explore each object, and musical literacy, which is expanded upon in this narrative's "education" section. By displaying significant artifacts of African American music history, *Musical Crossroads* also offers a counter-narrative to typical museum exhibits, allowing Black individuals and other marginalized populations an opportunity to be represented in a space they usually are excluded from, another crucial objective in this exhibition. The Musical Crossroads team also wanted

"audio-visual elements, digital interactives, and experiential spaces that offer visitors several opportunities to engage with music directly" (Reece, 2016, p. 2). This goal manifests in the interactive spaces detailed in preceding sections, including "Great Musical Moments," "In the Studio," and the "Neighborhood Record Store." These interactives are also crucial in achieving Dr. Reece's focus on music literacy, providing engaging educational spaces where visitors can directly partake in communal music creation.

Overall, the five themes created by Dr. Reece permeate *Musical Crossroads*' layout and content. Although the exhibit is not spatially organized by the five themes, they are interspersed within each genre so that visitors learn and understand the African roots of African American music; the hybridization of various genres and performance practices; how musicians express their identities through musical performance; how mass media and the entertainment industry impact African American music; and, the global impact of African American music. The five themes also guided the exhibition development team in the curating and collection process before NMAAHC and *Musical Crossroads* opened to the public.

Curation and Collection

Like other aspects of developing *Musical Crossroads*, curating the exhibit and building a collection devoted to African American music was a complex task that took several years of careful planning and guidance. In this portion of the narrative, I highlight three standout components of the curation and collection process from the participants' stories: (a) the role of storytelling; (b) working with musical legends; and, (c) present and future collecting. The collecting process alone could be its own individual study. Consequently, I chose these themes to accentuate the most critical aspects of curating *Musical Crossroads* in relation to the other narrative themes.

The Role of Storytelling

Dr. Reece focused on storytelling from the very beginning of collecting objects for *Musical Crossroads*. She was "very mindful that this was not going to be a hall of fame…this was not the great artists, we were talking about the role of music in African American life." So, in addition to seeking out certain objects like Chuck Berry's Cadillac and George Clinton's "Mothership," the curation team also sought a wide range of artifacts that were "not just limited to manuscripts or instruments or costumes." This meant collecting concert posters, photographs, ticket stubs, and other musical paraphernalia that encapsulated a broad spectrum of musical history. Dr. Reece especially wanted items with historical depth, stating, "if it tells a story, then it's worthwhile…I think what a musical object is, is really more a constellation of how music lives in society and how people use it." Dr. Strait, who collected many of the items on display in *Musical Crossroads*, also recalls, "we understood we weren't going to get everything, we're not going to get every story…but…we can tell a broader story about the genres…that's what we wanted." Ms. Grantham also describes her view of storytelling, saying, "she (Dr. Reece) collected stories, not necessarily people or not necessarily just shiny, historically significant things. If it had a story that was intriguing."

In focusing on storytelling, Dr. Reece also drew back to her roots in material culture that drives her collecting process. She explains:

> All of these things are the material culture of African American music…if an object allows you to tell a story, then it's worth having. And if that's a story you want your collection to tell, or your exhibit to tell, then it's worth having…when you think about music, you think about costumes and instruments…maybe recording equipment, but music lives in society, it doesn't just operate with performer and audience…there's so

> much more to the story that implicates beyond the artist, it's community members, it's fans, it's the business owners, it's the piano teachers…community activists, they're part of what keeps music thriving in society…If you can tell a good story…then it's an object worth including. And I think it makes for a much richer experience than seeing a bunch of costumes or instruments.

Akin to the concept of material culture highlighted in Chapter 3, each visitor to *Musical Crossroads* can choose how deep they explore an object's story. For example, Chuck Berry's Cadillac has a many-layered story. On the surface, the car is shiny and exciting to look at if a visitor chooses to pass by. Another visitor could read the car's label and see that Chuck Berry drove the car onto the stage of a venue that he was not allowed access to earlier in life because of his race. Each object in the exhibition has multiple layers of stories, a requirement of Dr. Reece and the curation team when developing *Musical Crossroads* that still influences their collections process today.

Working with Musical Legends

Although Dr. Reece placed significant emphasis on curating objects that could tell stories, the *Musical Crossroads* team still thought it was crucial to represent artists who were pivotal figures in developing African American musical cultures. Dr. Reece states, "there were…artists we wanted represented, and you had a lot of people…making cold calls and a lot of surprises about things that popped up or didn't. And…there's a sense of imagination and possibility." Before NMAAHC opened, curating items from living artists proved challenging. Dr. Reece explains:

> Because they don't think about themselves and legacy in museum ways…And we didn't have a building that we could point to, or say, come look at the exhibit…there was a lot

> of creative and inventive storytelling and imagination about the possibility and honoring their legacies and stories…there was an opportunity to preserve an individual's legacy, but it was also an opportunity to tell a broader story. I think that curried a lot of favor, that it was something bigger than ourselves…This is really the people's collection. It's not my collection. It's not the museum's collection. We're just stewards of a collection that is supposed to serve audience for years to come.

Consequentially, aside from collecting artifacts that represented African American musical cultures from the 17th century through modern times, Dr. Reece and her team routinely interacted with living musical legends to have their stories represented in the exhibit. When curating for *Musical Crossroads* began in 2009, Dr. Strait reflected on building relationships with living artists:

> There was no real template for it…we had to develop this museum that everyone had an opinion about what it should look like, how it should feel…we had to acquire…3,000-plus objects that are on view plus the 40,000-plus objects that we have in our collection.

The following paragraphs detail stories from Dr. Strait of working with two prominent musical figures, Chuck Berry and George Clinton, and the challenges and triumphs that arose from those interactions.

Like Dr. Reece, Dr. Strait believed in the power of storytelling and the importance of representing critical musical figures in the exhibit. He states, "we're not going to get every story. But if we can get the central figures, like Chuck Berry, in my mind, like George Clinton, we can tell a broader story about all the genres…that's what we wanted." Acquiring Chuck Berry's Cadillac, the initial focal point of the exhibit, was a multi-month endeavor. Dr. Strait recalls:

> You know, I'm on the phone with Chuck Berry. And then six months later, I'm still on the phone with him…I do remember having a specific pitch. I got nervous, like right when I arrived [to Chuck Berry's residence]. I got nervous when he shook my hand and said, 'I'm not giving you a single thing.'…But what I said to him had to be specific, as he was not on board at one point…He was hesitant because like I said, we were making this tremendous ask…But I said I wanted to put him in a room with Duke Ellington. I said, I wanted people to understand his…contributions and achievements…And I think that works. So I wouldn't necessarily call it a pitch, it was more like a plea.

Due to Dr. Strait's persistence, Chuck Berry eventually agreed to part with his prized Cadillac and donated the car to NMAAHC. Dr. Strait speaks about this moment:

> I had to push this 6,000-pound car, no joke, however many yards, it was like 50 yards away to the truck, into the truck, because the lever wasn't working. It took two hours. And I was exhausted. But right before that…he didn't want to see it go. But, you know…in those moments, it's like, wow, this really means a tremendous amount to him.

This experience with Chuck Berry accentuates the many skills curators had to employ in collecting invaluable items for *Musical Crossroads*, especially relationship-building and an ability to communicate the museum's mission. These attributes would benefit Dr. Strait again when working with Parliament-Funkadelic frontman George Clinton.

Much like Chuck Berry, working with George Clinton was a lengthy process for Dr. Strait. He explains:

> I got to know the George Clinton camp through a former roadie. I got in touch with this guy named Bernie Walden, who was a roadie for a lot of famous acts, including Parliament-Funkadelic and Chuck Berry…Now, George Clinton had a website in 2010

> and a management team and all that, but…I don't think everyone was sort of thinking about their legacy or anything like that…So like I said, all these relationships took time to cultivate.

Unlike Chuck Berry, Dr. Strait did not have a specific pitch for bringing George Clinton to *Musical Crossroads*. He describes their relationship:

> With George Clinton, it wasn't much of a sales pitch. It was just persistence…there was no pitch. I remember when things were just kind of going back and forth…I got a call, while I was reheating my leftovers. It was George Clinton on the phone. And we just talked. We talked about him growing up…I remember him talking about Smokey Robinson and just other acts that inspired him…bringing him to the National Mall was important.

George Clinton ultimately donated several items to NMAAHC, including some of his performance costumes, instruments, and the iconic Parliament-Funkadelic "Mothership."

These two anecdotes of Dr. Strait's relationships with living artists are important in illustrating the multi-faceted process of curating for *Musical Crossroads*. Alongside building a collection of important objects that told the complex story of African American music, Dr. Reece and the exhibition team had to work with living musical artists to ensure their stories were told respectfully and sensitively.

Current and Future Collecting

Since NMAAHC and *Musical Crossroads* are now established parts of SI, collecting for the exhibit is more focused and less of a "mad rush," according to Dr. Reece. She elaborates, "you can start to see where there are holes or weaker areas in the collection. So when opportunities come up to get something representative, there's more of an aggressive stance of

trying to get that in the collection." As space is limited and every new collected object will not immediately end up in the exhibit, Dr. Reece and the current exhibit team had to change their pitch to potential donors. The team has relied on "our programming, we've got the [*Musical Crossroads*] book, we've got the [hip-hop] anthology…I think people are always most interested in having their stuff on exhibit. But there are multiple ways that these objects are used and interpreted."

In addition to *Musical Crossroads*, NMAAHC has frequent temporary exhibits that include items from the music and performing arts collection, another opportunity to display these items. There are many music objects in the 2023 NMAAHC exhibit *Afrofuturism: A History of Black Futures*, including the infamous chair from Michael and Janet Jackson's "Scream" music video, Janelle Monae's "ArchAndroid" costume, and a costume designed by Sun Ra. These exhibits can serve as an extension of the permanent *Musical Crossroads* exhibit and allow curators to display more of the NMAAHC music collection. Despite these avenues, some substantial items in the collection have not yet been displayed at the museum, including Thelonius Monk's piano, among others.

The initial and ongoing curation of the exhibit is complex and involves curators, artists, preservationists, and others. The stories in the preceding section on the importance of storytelling, working with living legends, and current collection practices aid in portraying this complicated collection process and further outline the development of *Musical Crossroads*.

Collaboration and Tensions in Development

Developing *Musical Crossroads* required a substantial team of curators, researchers, designers, writers, interns, and others working in tandem to develop the exhibit within NMAAHC. As Marsh (2014, 2019) determined in her examination of the fossil hall at the

National Museum of Natural History, the teams that develop large exhibits for SI and other museums can have some tensions in the creation process. The *Musical Crossroads* team was no exception, and Dr. Reece, Dr. Strait, and Ms. Grantham detail some of these instances of compromise when working with the larger project team.

From 2009 to 2015, Dr. Reece was furiously working to build a collection, write an exhibit script, and collaborate with exhibit designers on the flow and scope of *Musical Crossroads*. She recalls:

> I get here in 2009. And simultaneously, trying to collect…an exhibit and conceptualize it at the same time. And then once the designers are brought on board, you're on this schedule…you're building and steering the ship at the same time…In some things, it was random what was included, because this is what we had at the time and had to make a decision. Other times, designers would just make decisions about things that were there. I think the designers were brought in…maybe a year after…that really puts the pressure on because they want to know what's in it. And you're still trying to do the work. And so there's this…push and pull…it was a pretty intense period. And then writing the whole thing…collaborating with designers and what goes where, what narratives we want to tell.

Working with in-house NMAAHC designers and others required Dr. Reece to create priorities while maintaining her vision for the exhibit. She says:

> There are deadlines from them [the in-house NMAAHC project management staff], there are deadlines from designers, it's all a bunch of deadlines. I think you have some luxuries when you're already open…you have a collection, to spend more time on research. When you try to do everything simultaneously, it's really, really hard. And also kind of hard

> from the content perspective, when you're more on the creative end and project management staff are focused on deadlines. So there's always some kind of tension…Balancing that act and trying to stay on schedule, and still be authentic and honest to your content. So I found myself kind of playing the advocate role…and just letting some things go.

Physical space was also a primary source of tension among the curatorial and design teams. As mentioned, Dr. Reece was tasked with telling the expansive story of African American music in a limited space within the museum. Dr. Reece also had to compromise on some physical elements of the exhibit that were put into place by the design team. She explains:

> The circular, the middle space ["Great Musical Moments"], that was all the designers. But…they wanted to have this design feature in this space. Some people call it a dance floor, it's not a dance floor…Their first design had little pods of genres and they were closed off and that didn't match my vision. So they opened it up some.

Along with concerns about the design of the physical space, compromises were also made on the flow and layout of the exhibit. Again, Dr. Reece elaborates:

> I had a certain vision about what I wanted to accomplish…But I really wrestled with the designers…of their singling out artists and making them the focal point in the story…And so there was some early tension there and trying to communicate that…I really wanted the fluidity of music, I wanted that sense of openness and exchange…but there's some things the designers…insisted on having.

Many exhibit configurations were developed by curators and designers, including iterations organized around the five exhibit themes instead of genres. Ultimately, "we kind of settled on doing a combination of genres and themes."

Despite having varying agendas and priorities, the curatorial and design teams of *Musical Crossroads* reached a consensus. They created an engaging and thoughtful exhibit that balanced Dr. Reece's focus on musical storytelling with the designers' emphasis on the visitor experience. While these anecdotes from Dr. Reece are not an exhaustive representation of the tensions in the exhibit's development process, they are prominent examples of the compromises made by the many parties involved when creating this exhibition.

Informal Learning and Material Culture

As outlined in Chapter 3, *Musical Crossroads* has an overarching focus on informal learning opportunities for visitors and the role of material culture in those learning experiences. While there was minimal involvement of music or museum educators in the exhibit's development, Dr. Reece maintained a focus on education, especially musical literacy, when curating and creating *Musical Crossroads*, making it an abundant space of music educational opportunities.

Throughout the development process, Dr. Reece always viewed *Musical Crossroads* as an educational space. She articulates this focus:

> Everything we do for the exhibit, to me, is learning, a learning opportunity…I think that's how I think about exhibitions and using the collections. I think with projects like these, you're always thinking about the audience…who's going to be viewing the exhibition and what you want them to get out of that. So that would always be foremost in my mind about creating spaces that were familiar, but also facilitated conversation and discussion, as well as some…music and cultural literacy, and just engaging with music in a different way…And so, the learning component is a foundation, and I worked really hard,

> particularly with the editor, in trying to provide content that people wouldn't get elsewhere.

This focus on an educational space also reflects on the concept of material culture and visitors deciding how much they want to engage with different exhibit components. Dr. Reece explains further:

> It is a different type of learning [informal learning] and a different type of space, and much more informal and much more subtle. Sometimes it's quite obvious. But it also, it always is visitor's choice. It's like, how much do you want to read the label? Or how much time do you want to spend on the mixing board activity? Or how deep do you want to go on the touchscreen table in the 'Neighborhood Record Store'? And so one of the things I wanted to give as much as possible is, for the nerds like me, or the people who get curious…is to go deep if they wanted to.

As outlined by Dr. Reece, these opportunities firmly situate Musical Crossroads as an inherently educational space where visitors can choose what they engage with and how they engage.

Now that NMAAHC and *Musical Crossroads* have been open to the public for several years, the current exhibit team also relies on public programs at the museum to provide educational experiences for visitors. In describing the role of programs as an educational outgrowth of the exhibit, Dr. Reece expounds:

> We have this NMAAHC Live series where we would focus on a theme or artists and have live music interspersed with conversation, either with the artists or people tied to the artist, and really getting backstories and interesting stories about what they do…Our education department did a music education series for young learners…One of the things that I've been adamant about…is really representing the diversity and breadth. We've

> done some classical stuff. We've done hip-hop, we've done jazz…to me, the programming as an educational thing is just taking the exhibit further, doing some of the things that you can't do in a static space…we're trying to kind of push beyond the standard barriers of how we interpret African American music, even in the discussions, to get at some of these larger themes.

This programming, combined with the educational opportunities of the physical exhibit space, allows a wide range of visitors to engage with African American musical cultures with a focus on musical literacy, material culture, and visitor choice.

Implications and Conclusions

These narratives provided an initial look into the creation process of *Musical Crossroads*. Dr. Reece's, Dr. Strait's, and Ms. Grantham's stories provided distinct experiences that highlight: the physical layout of the exhibit space; the varied backgrounds of the three participants; the curation and collection process; tensions in the development of the exhibit; and, the role of education in the exhibition and it's programming. Like Marsh (2014, 2019), this study introduces the behind-the-scenes process of creating a new exhibit for a large museum, specifically a significant music exhibit for an SI museum.

The stories in this narrative trace *Musical Crossroads* as a space for informal learning abundant with material culture and musical meaning-making, requiring careful collaboration between various museum specialists. The findings on the exhibit's themes and the emphasis on *Musical Crossroads* being an educational space directly influence the survey instrument used for Study 2, as detailed in Chapter 5. Additionally, an SI educational tool, Smithsonian Learning Lab, is used by participants of Study 3 (Chapter 6) to teach units on African American musical cultures to music students via materials created by NMAAHC staff. However, this narrative

stands on its own as an important contribution to music education and museum education fields in detailing how museum staff create a music-educational space. Future research on this topic could include further narrative inquiries or other qualitative research on the development of other music exhibits in cultural institutions to compare to this study, especially those with additional participants beyond curators.

Postlude

Dr. Reece recently gave a tour of *Musical Crossroads* to graduate musicology students from the University of Maryland. She reflects, "I hadn't walked through in a while. But just telling people the thought processes that went behind it and pointing out a couple of objects, it's just reminding me what's there, and what can be added." The 10-year anniversary of *Musical Crossroads* is approaching in 2026, and the exhibit will likely undergo a major renovation in the future. Though Dr. Reece is now an associate director for NMAAHC and is not directly on the *Musical Crossroads* team, she posed some questions about where this new iteration would focus. "Where do you go next…where do you take it next, knowing that this is an introductory primer for people? Where is the research taking you? Where's the scholarship taking you? And where are the contemporary conversations taking you?" With the talented and dedicated *Musical Crossroads* team, the exhibit will undoubtedly continue to tell influential stories, providing an educational and reflective space for visitors to explore the vast "constellation of African American music."

Chapter 5: The Experiences of *Musical Crossroads* Visitors

Introduction and Overview of Chapter

Museums and cultural institutions have focused heavily in the past several decades on evaluating the experiences of visitors (Hohenstein & Moussouri, 2017) through various methods, including surveys (Davidson et al., 2010; McManus, 1987, 1988; Pekarik et al., 1999), ethnographic methods (Ellenbogen, 2003; Hood et al., 2022; Muskat et al., 2013), and case study (Budge, 2017; Gaia et al., 2019; Lopatovska, 2015; Macdonald, 1992). Visitor studies have also emerged as its own research field within museum studies (Bitgood & Shettel, 1996; Davidson, 2013; Kirchberg & Tröndle, 2012) to identify "social, personal, or physical characteristics (pre-visit parameters) that influence the visitor experience (satisfying, confirming, or aesthetic)" (Kirchberg & Tröndle, 2012, p. 447). Similar research in music education explicitly evaluates student experiences of various music programs and initiatives (Ferguson, 2007).

In this survey study, I aimed to examine visitor experiences at *Musical Crossroads* and determine if visitors meet the experiential and educational goals set forth by the National Museum of African American History and Culture (NMAAHC) staff in Study 1. By conducting on-site surveys with NMAAHC visitors, I determined how visitors respond to *Musical Crossroads* and provide suggestions for the future of the exhibit based on those results.

This chapter contains a literature review, method, results, and discussion sections for Study 2. The literature review contains scholarly work on culturally relevant pedagogy in music and museum education, visitor studies in museum education and its parallels in music education, and meaning-making in music and museum education. Proceeding the literature review, the method, results, and discussion details the research process and empirical findings for Study 2. I developed the following research questions to steer this survey study:

1. What are the demographics of *Musical Crossroads* visitors?
    a. Do demographics influence how visitors experience the exhibit?
2. What forms of music learning are museum visitors experiencing in *Musical Crossroads*?
3. Are museum visitors meeting the educational and experiential goals set forth by NMAAHC staff?

Literature Review

The literature review for this survey study is split into three categories: culturally relevant pedagogy in music and museum education, visitor studies in museum education and its parallels in music education, and meaning-making in music and museum education. These topics complement the framework used to create the survey instrument and the literature reviewed for the previous study.

Culturally Relevant Pedagogy

The second core tenet of this document's overarching theoretical framework is culturally relevant pedagogy (CRP). As demonstrated in the proceeding literature and the framing of this study, CRP is utilized by NMAAHC to ensure visitors are experiencing the museum and *Musical Crossroads* in a way that is relevant to their own experiences. This review of CRP begins with an imagined narrative followed by an overview of CRP in music and museum education.

Kingsley's Story

Kingsley is a general and instrumental music teacher in the Washington, D.C., public school system. They identify as white, non-binary, and use they/them pronouns. As a music teacher, Kingsley teaches band and orchestra classes for students in third through fifth grade and general music for students in kindergarten through second grade. The student population at Kingsley's school is racially diverse, with 80% being racially

minoritized students and 50% of those identifying as Black. Kingsley's principal has started an initiative at school requiring all teachers to implement culturally responsive pedagogy into their teaching routines. The principal has also received some discretionary funds for this initiative from the school district for teachers to purchase classroom materials, attend professional development conferences, or take classes on field trips.

Kingsley began the school year by revamping their general and instrumental music curricula to include teaching materials by gender and racially minoritized musicians and composers. They also started including music requested by their students in various activities. Following the principal's announcement regarding discretionary funds, Kingsley decides to take their general and instrumental music students on a field trip to the National Museum of African American History and Culture. Kingsley has visited this museum before and knows there is an extensive music exhibit in the building's culture galleries. Before the field trip, Kingsley teaches several lessons on the musicians and artifacts students will encounter at the exhibition, along with lessons on how Black musicians have impacted the musical genres on display at the museum.

Following the field trip, Kingsley has their students complete reflections on their experiences at the exhibit and notes that many students write about the impact of seeing the actual instruments, costumes, and other memorabilia on display. One fifth-grade student writes, "we talk about their music and how much they did, but when you see the actual instrument they played on, it makes those stories and videos real." Several orchestra and band students approach Kingsley after the field trip with pieces they hope to play in the future by composers they discovered in the exhibit, like Tom Wiggins and George Walker. Kingsley believes visiting the music exhibit enhanced their culturally

relevant teaching practices and allowed their students to feel an even greater connection to the curricula they used in class.

Defining Culturally Relevant Pedagogy

Challenging scholars' theories of students who were "culturally deprived" or "culturally deficit" due to poverty (Bloom, 1965; Crow et al., 1966), Freire (1970) claimed that education should liberate oppressed students and not only serve as training for assimilation into the dominant culture. Freire developed a "critical pedagogy" in which both teacher and student challenge and problematize what culture is taught and why it is taught. Following Freire, anthropologists and social linguists claimed that all students, regardless of race, ethnicity, or other demographic backgrounds, had diverse cultures and cultural practices that should not be separated from their education (Erickson, 1987; Shade, 1982).

Ladson-Billings (1995) combined multiple ideations of culture and education into her framework of culturally relevant pedagogy (CRP), a theory that the academic achievement of marginalized students did not need to rely on their assimilation into the dominant culture. She states that CRP "not only addresses student achievement but also helps students to accept and affirm their cultural identity while developing critical perspectives that challenge inequities that schools (and other institutions) perpetuate" (p. 469). Recent scholars building on Ladson-Billings's work have introduced new frameworks of culturally sustaining pedagogy (Paris, 2012) and culturally responsive pedagogy (Lee, 1998).

It is also important to outline some characteristics of CRP. In defining these practices, Gay (2010) says that CRP includes "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. 31). Gay also outlines six characteristics of CRP,

defining it as: (a) validating; (b) comprehensive; (c) multidimensional; (d) empowering; (e) transformative; and (f) emancipatory. Echoing Gay (2010), Lind and McKoy (2016) say further, "culturally responsive teaching celebrates diversity and sees it as an instructional resource rather than a problem…it acknowledges the importance of including multiple perspectives in the quest to examine and explore the 'truths' of a discipline" (p. 20).

In the following sections, I connect these characteristics of CRP to the fields of museum and music education. Both areas have a substantial body of literature related to CRP. These works serve as a rich site of examination in navigating the connections between music and museum teaching and learning and establishing the need for studying the experiences of *Musical Crossroads* visitors.

CRP in Museum Education

Defining culturally relevant practices in museum education is difficult as the creation of exhibits and visitor experiences depends on each museum's collections, mission, and methods. Concurrently, museum visitors often want to create meaning through their experiences (Black, 2012). Therefore, museums and museum educators must consider how they define cultural relevance to aid in new projects, exhibition approaches, and visitor experiences. At the same time, museum staff also must justify their relevance socially and financially. Therefore, museum educators could benefit from viewing CRP as an ongoing practice rather than a one-time application for a specific exhibit. Powell (2012) states, "museum educators have a responsibility to develop and implement culturally responsive curricula through the inclusion of content that goes beyond cultural holidays and celebration days or months" (n.p.). Therefore, CRP implementation in museums should include institutions constantly evaluating how existing exhibits and programs are educationally relevant for their diverse array of visitors.

In the museum education literature, most scholars have focused on the institutional perspective of CRP, including researcher critique of exhibits (Hooper-Greenhill, 1999; Witcomb, 2013) and museum educators' intent when developing exhibits or programming (Lindauer, 2006; Marsh, 2019; Nomikou, 2013). However, some audience and visitor studies research on CRP is emerging, especially in science education in museums (Archer et al., 2016; Dawson et al., 2020). Museum educators have also sought to implement CRP by addressing the inherent power balance of museums and their visitors by engaging historically minoritized communities in museum practice (i.e., co-curating exhibits) and researching museum collections (Harrison, 2013).

Another critical component of CRP in museum education literature is authenticity. Hohenstein and Moussouri (2017) posit that authentic or "real" objects in exhibits can "trigger a visceral or emotional response, known as the *numinous experience*, which can help visitors connect to the spirit of a period or person…are characterized by deep engagement, empathy, a sense of awe…and can lead to holistic and deeply meaningful visitor experiences" (p. 154). In essence, when museums expose visitors to authentic objects and materials in a museum space, they are more likely to have an engaging and educational experience. This notion of numinous experiences appeared in Kingsley's story when their students connected the instruments on display to previously seen videos of musicians playing those instruments, enhancing the impact and relevancy of the field trip.

Finally, scholars have utilized CRP frameworks to examine decolonizing museum education practices. Museums have historically been viewed as institutions of colonial practices (Bennett, 1995; Boast, 2011; Hooper-Greenhill, 1992) that acquire collections and materials from cultures around the world through acts of power and violence. Macdonald (2022) explains, "museums and collectors not only claimed ownership over the material object, but also drafted

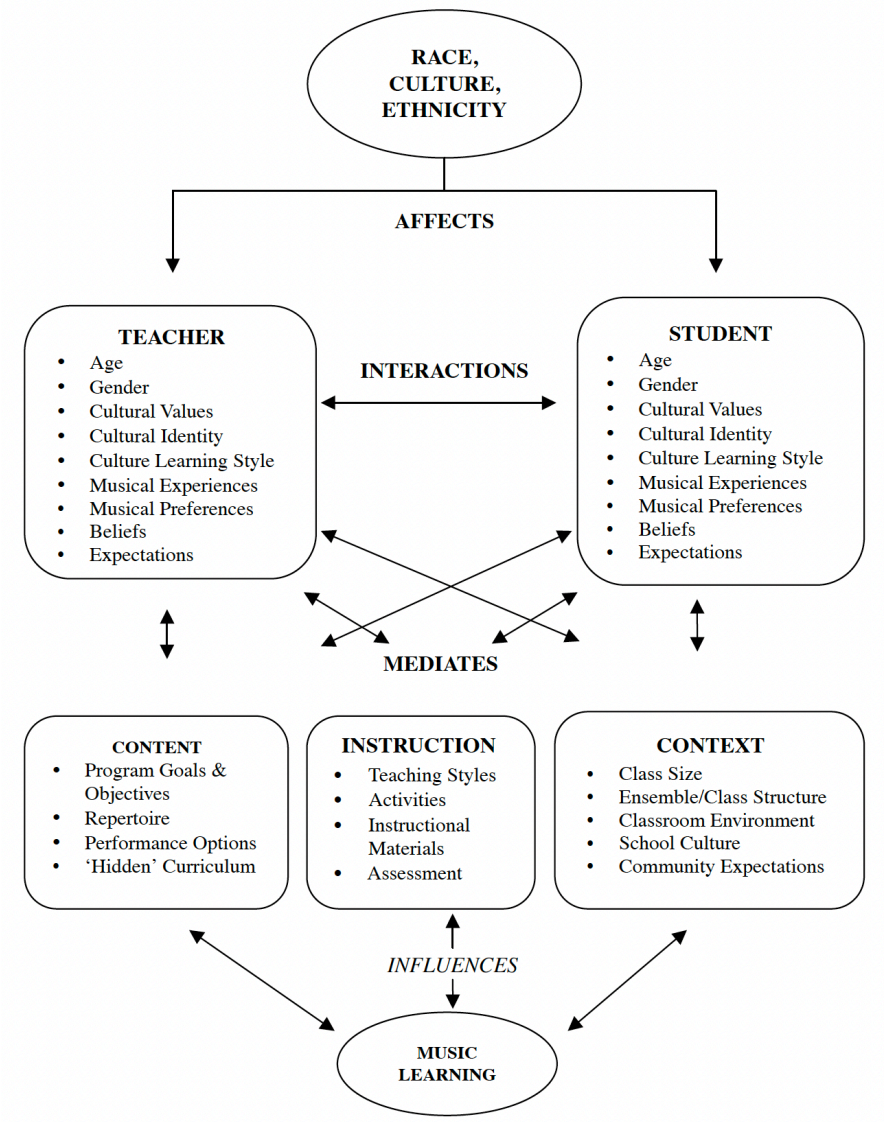
their own narratives and stories of the ‘primitive’ people who made them and their uses. These practices detached Indigenous knowledge, thought, and authority, to be replaced with Euro-American curatorial expertise” (p. 10). Museum education researchers have examined decolonial practices through the Culture Lab imitative at the Smithsonian Institution (Luis, 2022), a social justice program at the National Museum of African American History and Culture (Cross, 2017), and eco-decolonial practices in several South African museums (Jeffery, 2022), among others. These studies highlight museum education practices that “work against a legacy of imperialism, patriarchal values, assumptions based on high culture and a privileging of institutional knowledge” (Witcomb, 2003, p. 12). Parallel to these practices in museum education, music education researchers have developed similar frameworks for applying CRP in music teaching and learning.

CRP in Music Education

Butler et al. (2007) developed a conceptual model of CRP for music education (see Figure 4.1) that examines the “impact of race, ethnicity, and culture on the teaching and learning process in music” (McKoy & Lind, 2016, p. 3). Butler et al. use five categories in the model: learner, teacher, context, instruction, and content. These constructs serve as supports or barriers when teaching music to diverse student populations. In their framework, race, culture, and ethnicity impact both teacher and student, who then mediate between content, instruction, and context of learning. These combined factors influence the practice of music teaching and learning.

Figure 5.1

Culturally Relevant Music Learning Model



Note: Figure 4.1 from Butler, A., Lind, V. R., & McKoy, C. L. (2007). Equity and access in music education: Conceptualizing culture as barriers to and supports for music learning. *Music Education Research, 9*, 241–253.

McKoy and Lind (2016) identify several trends that serve as barriers to CRP in music education. First, school music programs continue to face low enrollment, with the percentage of high school students enrolling in one music class remaining around 34% (Elpus, 2014). Music teachers are also generally uncomfortable teaching creative musical activities like improvisation, composition, or arranging (Hickey & Schmidt, 2019), though the number of modern band

ensembles and similar programs has risen over the last decade (Powell, 2021). Finally, there is a lack of racial diversity among K-12 music teachers, with 81.9% of public-school music teachers identifying as white (Elpus, 2015). Regarding teacher diversity, McKoy and Lind (2016) state, "because our traditional model of…music teacher education privileges those who are proficient in the music of the Western European classical tradition, musicians who are proficient in other musical forms are excluded from the pool of potential music teacher candidates" (p. 135). This claim is supported by research on hip-hop musicians (Kruse, 2018) and popular music performers (Green, 2017) who do not fit the typical mold of school music students and would have more difficulty entering a music teacher education program.

To address these obstacles, music education and music teacher education researchers have examined the varied implementations of CRP in K-12 music classrooms and pre-service music teacher programs. A significant area of study involves repertoire selection (Bond, 2014; Fitzpatrick, 2017). Bond (2017) comments on repertoire, "if repertoires are limited to Eurocentric traditions, students can become indifferent…when one way of musical knowing is held in greater esteem than others…the musicality of some communities is diminished" (p. 160). Music teachers wanting to use CRP in their classrooms may consider implementing musical materials chosen by students that reflect students' diverse cultural backgrounds. Further works include the use of CRP in general music classes (Kelly-McHale, 2013; Robinson, 2006), choral music (Shaw, 2012, 2015), and instrumental music (Boon, 2014; Dekaney & Robinson, 2014). In the music teacher education literature, researchers have examined music teacher educator perceptions and implementations of CRP (Bond & Russell, 2019), the impact of professional development on cooperating music teachers (McKoy et al., 2017), race and ethnicity in tandem with CRP in music teacher education (McKoy, 2020), and the inclusion of interculturality in pre-

service music teacher programs (Westerlund et al., 2020). Concurrently with developments in decolonial museum pedagogy rooted in CRP practices, music education researchers have focused on decolonial applications of music teaching and learning over the last decade (e.g., Bradley, 2012; Hess, 2015; Rosabal-Coto, 2019), though this area of the literature is still developing.

Visitor Studies

The field of visitor studies in museum and cultural institution research dates to Robinson (1928) and his examination of museum visitor behaviors. In the last century, various sub-fields of museum studies have focused on the visitor experience, including museum curation (Packer & Ballantyne, 2016), museum and exhibit design (Davey, 2005; Jones, 2015), accessibility in museums (Asakawa et al., 2018; Levent & Reich, 2013; Pressman & Schulz, 2021), and museum education (Bitgood & Shettel, 1996; Hooper-Greenhill, 1999, 2006; Sterry & Beaumont, 2006). In this section, I review relevant visitor studies research and the parallels of visitor studies in music education research.

Visitor Studies in Museums and Museum Education

A main component of visitor studies in museums and cultural institutions is a shift in perceiving visitors as "active interpreters and performers of meaning-making practices within complex cultural sites" (Hooper-Greenhill, 2006, p. 362) instead of as a mass public. Visitor studies encompass an umbrella of terms, including museum evaluation, visitor behavior, audience studies, and audience research, among others. Most visitor studies are completed internally by museums (Hooper-Greenhill, 2006). Several large-scale policy-related studies occurred in the 1980s and 1990s that analyzed demographic data of museum visitors to several institutions across the US and UK, including age, gender, ethnicity, educational attainment, and socioeconomic status. Most of these surveys concluded that museum visitors were wealthier and

had higher levels of formal education than the general public (Schuster, 1995). However, these studies did not provide commentary on why these variations were present. Beginning in the 1990s and early 2000s, social science researchers also initiated research at museums studying visitor experiences (Katriel, 1997) and research aimed at improving visitor experiences using critical theory and rigorous methods has increased exponentially in the twenty-first century (Hooper-Greenhill, 2006).

Scholars examining visitor experiences have also utilized a myriad of research techniques to explore experiences, including experiments/quasi-experiments (Baum & Hughes, 2001; Doering et al., 1999; Pekarik et al., 1999; Rojas & Camerero, 2006), action research (Hooper-Greenhill, 2000; Kelly & Groundwater-Smith, 2009; Soren, 2009), surveys (Ashworth & Johnson, 1996; Kirchberg, 1996; Ress & Cafaro, 2021), and ethnography (Kushner, 2018; Macdonald, 2001; Reeves, 2018).

In museum education, the subdiscipline of visitor studies revolves around evaluating the educational experiences of museum visitors at various institutions or specific exhibits. Falk et al. (2006) presented an initial framework of five concepts for examining museum education through a visitor studies lens: (a) allow for the individual's own learning agenda to emerge; (b) address the effect of time on learning; (c) respect that learning is always situated and contextualized; (d) be open to a broad range of learning outcomes; and (e) emphasize validity over reliability (p. 329). Museum education researchers could therefore conduct research that captures the infinite lived realities of visitors, include temporality as a variable in museum learning, is flexible in terms of education goals, and acknowledges the tension between reliability and validity when researching visitors with widely varying backgrounds. Mirghadr et al. (2018) then recommend that researchers examine three critical facets of museum education in relation to visitor studies:

(a) executive functions within a museum (displays, technologies, museum staff training, educational programming); (b) executive function relating to the visitor (identifying educational needs, evaluating programs); and (c) policy making (museum advertising, establishing museums as educational, increasing museum audiences). These recommendations are significant in developing an appropriate tool for examining visitor experiences at *Musical Crossroads,* as relayed in this chapter.

Finally, various scholars have researched the impact of museum field trips as arts education on students, the closest connection between visitor studies in museum education and music education in the literature. Greene et al. (2014b) and Kisida et al. (2016) posited that art museum field trips improved students' critical thinking skills. Related to culturally relevant education, Greene et al. (2014a) and Erickson et al. (2022) found that students viewed field trips to art museums as culturally enriching and had an increased desire to consume arts. These studies are beneficial in connecting arts education to museum education, tying directly to this study's focus on music education in NMAAHC.

"Visitor Studies" in Music Education.

Though music education does not have literature related directly to visitor studies in museums, there is parallel scholarship that examines the experiences of individuals who partake in music programs and initiatives. In comparing these two bodies of literature, students in music education research are comparable to visitors in museum education research, and programs or initiatives in music education are parallel to exhibits in museum education. Scholars have completed work evaluating the experiences of programs, initiatives, and curricula from student and teacher perspectives. Researchers have examined undergraduate music education curricula (Schmidt, 1989), regional music programs (Grimmett et al., 2010), community music programs

like New Horizons Band (Coffman, 2009; Jutras, 2011), and prison music programs (Cohen, 2012; Harry et al., 2023; Silber, 2005). Again, these studies on individual experiences in museum education and music education are crucial in examining the educational experiences of NMAAHC visitors in the present study.

Meaning-Making

Related to CRP, meaning-making in educational research positions a learner, or student, as an individual in charge of what and how they will learn. Meaning-making is especially prevalent in music and museum education literature, as detailed in proceeding sections.

Meaning-Making in Museum Education

Grounded in the constructivist educational philosophies of Piaget (1929) and Vygotsky (1930), meaning-making in education was coined by Postman and Weingartner (1969), who posit that "construal of learning through meaning-making provides the sense that the learner is not only in charge of what will be acquired, but is also able to grow in a limitless capacity. As such, meaning-making seems to imply individuality in learners, unending ability to learn, and the facility to tailor the situations in which learning occurs" (Hohenstein & Moussouri, 2018, p. 58). This concept is naturally attractive in museum education (Silverman, 1995), where visitors are varied and can choose how to experience the museum (Hohenstein & Moussouri, 2017). As reviewed in Chapter 3, museum visits are typically grounded in informal (or free-choice) learning and material culture, so museum visitors have cognitive, affective, and kinesthetic learning experiences.

For example, take the "record store" experience at *Musical Crossroads* (see Chapter 4, Figure 4.6). In this section of the exhibit, visitors can flip through "records" of specific musical genres, which are album covers printed on a thick block material. There is also a digital

touchscreen display in the middle of the room where individuals can select any of the records they see in the room, gain background information, and hear samples of any album on display. In this "record store," visitors can receive multiple types of meaning, including cognitive, affective, and kinesthetic. By touching or "flipping through" the individual records, visitors can be reminded of a past visit to an actual record store, along with the feeling of perusing records. Affectively, some visitors may come across a record that is important to them or that they remember from childhood, creating an emotional experience. Finally, depending on their time and interest, visitors can utilize the display and learn more about a record they found in the exhibit, touching on the cognitive level of meaning-making. This "record store" at *Musical Crossroads* is just one example of multi-layered meaning-making visitors can have that enhances their experience at the museum.

Many museum education scholars have studied meaning-making at various museums and cultural institutions, including visitors of varying ages. In a series of studies focusing on children's play and its relation to educational attainment, van Schinjdel and others concluded that young children attained science material through different types of play (van Schijndel et al., 2010a, 2010b, 2015). In separate studies, researchers found that children had widely variable motivations for learning in different museum types (Anderson et al., 2002), that middle school-aged children relayed different information about the same animal on zoo field trips (Birney, 1995), and that elementary school-aged children displayed self-regulated learning and individual meaning-making at history museums (Evans & Lane, 2011; Legare, 2012). Scholars have also examined meaning-making for adult museum visitors (Burnham & Kai-Kee, 2005; Hooper-Greenhill et al., 2001; McManus, 1988; Serrell et al., 2013), determining that adults view museums as educational institutions and visit museums for learning and meaning-making

experiences. These studies on meaning-making in museum education have similar foundations in music education literature.

Meaning-Making in Music Education

Firmly rooted in concepts of culturally relevant pedagogy (McKoy & Lind, 2016), meaning-making in music education research involves an examination of "modes of transition and acquisition used by teachers and students in formal and informal learning contexts" (Barton & Riddle, 2022, p. 346). Schippers (2010) introduced a model of global music education that acknowledges the contextual variability of music learning, the teacher, student, and environmental perspectives, and the varying ways that music is received and transmitted. Different music teaching and learning methods can also involve various modes of communication, including written and oral language, sound and silence, visual images, bodily gestures, and other considerations (Barton & Riddle, 2022). Speaking on meaning-making in music teaching and learning, Barton and Riddle (2022) state, "all aspects of learning and teaching music are movable across time, space, and context and how these dimensions interact determine the ways in which meaning is made" (p. 348). Further, Schippers (2010) writes, "positions are likely to vary from tradition to tradition, from teacher to teacher, from student to student, between phases of development, from one individual lesson to another, and even within a single lesson" (p. 125).

Studies examining meaning-making in music education include the relationship between culturally responsive pedagogy and meaning (Barton & Riddle, 2022), meaning-making in group improvisation (Burnard, 2002), flow experiences in music education (Custodero, 2002), invented notations (Barrett, 2001), and distance music education during the COVID-19 pandemic (Thornton, 2020). The previously detailed literature on meaning-making, along with elements of

culturally relevant pedagogy and visitor studies, were used to create the theoretical framework and survey instrument for the present study.

Method

IRB Approval

This was the only study of the three that required institutional review board (IRB) approval from both the Smithsonian Institution (SI) and the University of Maryland. To obtain SI IRB approval, I had to submit an initial application to NMAAHC and obtain an SI staff sponsor. After securing Dr. Dwandalyn Reece, Associate Director for Humanities and former lead music curator at NMAAHC, as my sponsor, my IRB package also had to be reviewed and signed by NMAAHC museum director Dr. Kevin Young. After receiving the appropriate signatures and a required sponsor justification letter written by Dr. Reece, I submitted the complete IRB package to the SI IRB. As I did not obtain any personally identifiable information (PII) in this study, the study was ruled exempt from being considered human subjects research if consent protocols (detailed below) were followed when obtaining data. After receiving SI approval, I submitted an IRB package to the University of Maryland, which was also ruled exempt if consent protocols were followed. See Appendix A for IRB documents related to this study.

Data Collection and Survey Instrument

I collected data for this study on-site at NMAAHC. To solicit survey responses, I visited NMAAHC 30 times between October 2023 and January 2024 on varying days and times to ensure temporal variety in visitor responses. On alternating days, I distributed surveys from either 10 a.m. (museum open) to 1 p.m. or from 1 p.m. to 5:30 p.m. (museum close). I visited NMAAHC at least twice every weekday (Monday-Friday) and at least four times each weekend day (Saturday and Sunday). To obtain more survey responses from out-of-area visitors, I

followed recommendations from NMAAHC Visitor Services and distributed surveys on several holidays, including Thanksgiving and the day before, Christmas Eve, the day after Christmas, and New Year's Day.

At each data collection session, I positioned myself immediately outside the *Musical Crossroads* exhibit and asked visitors to participate in the survey upon exiting the space. I greeted visitors by saying, "I am conducting a short survey on the music exhibit here at the museum," and then handed them a business card that contained both a QR code and a human-readable URL linked to the survey (https://go.umd.edu/NMAAHCmusicsurvey). All surveys collected at NMAAHC are through QR codes (Dorman, personal communication, 2023), so I followed this protocol to ensure that my data reflected NMAAHC's current practices. Data were collected for this study from October 2023 through January 2024, representing multiple periods of visitor increase and decrease for NMAAHC (i.e., October through November is considered a slow visitor season, while December and January see increased visitors due to winter holidays).

I adapted the survey instrument that I used from previous internal SI surveys on visitor experiences at music exhibits (Smithsonian Institution Office of Policy and Analysis, 2011, 2012) with added items based on informal learning (Green, 2017), culturally relevant pedagogy (McKoy & Lind, 2016), and experiential and educational goals developed by museum staff as detailed in Chapter 3. I also employed techniques on survey length, readability, content, and distribution provided by Diamond et al.'s (2016) tome on evaluating museum visitors' experiences. Three professionals in the music education field, one survey methodology expert, and two SI staff members provided feedback on the survey for validity and reliability. Some respondents answered only some questions, making counts variable across survey items. See Appendix B for a copy of the survey instrument.

The survey began with two questions asking the respondents if they had (a) visited NMAAHC before and (b) visited *Musical Crossroads* before. Following these introductory items, several items asked participants to relay their experiences at the exhibit, including providing an overall rating of their experience on a Likert-type item ("Fair" to "Superior"), relaying which experiences they found satisfying, which of the exhibit elements and sections they interacted with, what ideas they gained from visiting, what concepts they learned about, and if anything could be improved about the exhibit. I also included two open-ended response items, asking, "What is the most interesting thing you learned during your visit to 'Musical Crossroads'?" and "Do you have any other comments regarding your experience visiting the 'Musical Crossroads' exhibit?" Finally, I ended the survey with several demographic items, including respondent gender, race and/or ethnicity, formal educational attainment, and if they were visiting alone or with others. The structure of content followed by demographics is recommended by survey methodologists, including Diamond et al. (2016).

Data Analysis

This survey study was conducted during NMAAHC's winter off-season (the busy season is considered to be between March and August), where between 1,000-3,000 people visit the museum per day (Dorman, personal communication, 2023). Additionally, the maximum estimated number of daily visitors to *Musical Crossroads* is 577, according to museum visitor data (Dorman, personal communication, 2023). Since I conducted 30 days of in-person research, I use 17,310 as my estimated population size (577 possible daily visitors times 30 days of survey distribution). This population estimate is skewed high as I use the maximum estimate of daily visitors and is not indicative of the likely lower number of actual visitors. Using Gill et al.'s (2010) formula, which calculates the sample size needed for a 95% confidence level, 50%

population variability, and a ±5% margin of error, I calculated a minimum acceptable sample size of 376 participants. I distributed 4,053 (*N)* surveys and a total of 422 (*n)* museum visitors completed the survey for a response rate of 10.4%, exceeding the needed sample size for a 95% confidence level in the survey results.

I conducted descriptive statistical analysis of the survey data using Stata statistical software (Version 18). The results included below are only those of the respondents and should not be interpreted as applicable to every NMAAHC or *Musical Crossroads* visitor. Additionally, this survey only measures participants' perceptions of their experience but cannot measure what visitors are specifically experiencing when visiting *Musical Crossroads*. All surveys were self-reported, and the results were subject to some nonresponse bias (Hibberts et al., 2012). An individual completing this survey likely has a more positively or negatively-skewed experience at NMAAHC and *Musical Crossroads* than those who did not respond.

Results

Demographics

Of the visitors who completed the survey, 44.79% were male, 51.90% were female, and 3.32% were non-binary/third gender. Almost half (49.05%) of respondents identified as Black, 33.89% as white, 12.80% as Asian, 3.55% as Latinx, and 0.71% as American Indian/Native American. By reported formal educational level, the largest percentage of respondents had a bachelor's degree (33.89%), followed by those with a high school diploma (16.11%) and those with some college credit but no degree (13.74%). Most visitors attended NMAAHC with other adults (56.40%), 30.57% visited with children under 18, and 36.02% visited alone. Finally, slight majorities of respondents were first-time visitors to NMAAHC (54.27%), though three individuals had visited NMAAHC before but were experiencing *Musical Crossroads* for the first

time. These results are mostly consistent with other SI visitor studies (Smithsonian Institution Office of Policy and Analysis, 2012) and with data collected from the NMAAHC visitor services team (see Table 5.1 for complete survey demographic results).

Table 5.1

Sociodemographic Characteristics of Survey Participants

	n	*%*
Race		
American Indian	3	0.71
Asian	54	12.80
Black	207	49.05
Latino/a/x	15	3.55
Native Hawaiian/Pacific Islander	0	0
White	143	33.89
Gender		
Male	29	24.37
Female	88	73.95
Non-Binary/Third Gender	2	1.68
Educational Background		
Some high school	17	4.03
High school graduate	68	16.11
Some college credit, no degree	58	13.74
Trade/technical training	25	5.92
Associate's degree	33	7.82
Bachelor's degree	143	33.89
Master's degree	52	12.32
Professional degree	8	1.90
Doctorate	18	4.27
First Visit to NMAAHC		
Yes	229	54.27
No	193	45.73
First Visit to *Musical Crossroads*		
Yes	232	54.98
No	190	45.02
Visiting Alone or With Others		
Alone	152	36.02

Other adults	238	56.40
Children under 18	129	30.57

Visitor Experience

At the beginning of the survey, respondents answered an item asking them to rate their overall visiting experience at *Musical Crossroads* from Fair to Superior. These choices are directly adapted from previous SI surveys, which did not include a negative choice except for Fair. Almost all (86.40%) indicated Superior, the highest ranking, followed by 10.98% Excellent, 2.39% Good, and one individual (0.24%) marking Fair. Following this item, visitors indicated specific experiences they found especially satisfying in the exhibit using items used in previous SI research on music exhibits. Most indicated that "seeing rare, valuable, or uncommon items related to African American musicians" (85.78%), "gaining information" (75.12%), and "enriching my understanding of African American music and musicians" (59.95%) were satisfying experiences. These results align with Hooper-Greenhill's (2006) assertion that most museum visitors are hoping to see rare and valuable objects and to have an educational experience. Finally, I asked individuals "Did you feel that the musicians and artifacts on display represented a diverse array of identities and musical genres?" with options ranging from Not at All Diverse to Very Diverse. Over three-quarters of respondents answered Very Diverse (82.23%), 17.77% selected Somewhat Diverse, and no respondents selected A Little Diverse or Not at All Diverse.

These responses generally indicate that the visitors surveyed had a positive experience at NMAAHC and *Musical Crossroads* (see Table 5.2 for complete visitor experience results). Visitors found that gaining information and seeing rare music-related artifacts were especially satisfying experiences. They also indicated that the exhibit showcased a diverse array of

musicians and musical stories. Using bivariate regression analysis, I compared these experiential questions with demographic items, but no significant relationship existed between visitors' experiences and gender, race, or educational background.

Table 5.2

Visitor Experience Items

	n	*%*
Overall Experience		
Fair	1	0.24
Good	10	2.39
Excellent	46	10.98
Superior	362	86.40
Which experiences did you find especially satisfying?		
Being moved by the experiences of African American musicians	117	27.73
Connecting with the emotional experiences of African American musicians	179	42.42
Enriching my understanding of African American music and musicians	253	59.95
Gaining information	317	75.12
Recalling memories	144	34.12
Reflecting on the meaning of what I saw	108	25.59
Seeing rare, valuable, or uncommon items related to African American musicians	362	85.78
Feeling a connection to African American musical culture/history	115	85.78

Did you feel the musicians and artifacts on display represented a diverse array of identities and musical genres?		
Not at all	0	0
A little	0	0
Somewhat	75	17.77
Very	347	82.23

Visitor Interaction with *Musical Crossroads*

I also wanted to determine which elements of the *Musical Crossroads* space visitors were interacting with and for how long. In one survey item, I asked visitors "How much of the following did you do in this exhibit?" with choices of None, Very Little, Some, and Most/All. The highest marked choice was "looked at the artifacts" which yielded only Some (25.36%) and Most/All (72.51%) responses. This item was followed by "read artifact texts" (44.66% Some and 51.46% Most/All) and "looked at the photos" (40.76% Some and 34.83% Most/All). The interactive spaces in the exhibit, including the "In the Studio" display and the "Neighborhood Record Store," had mixed responses. Over half (62.11%) indicated None or Very Little interaction with the "In the Studio" space, while a similar percentage of visitors (60.0%) indicated Some interaction with the "Neighborhood Record Store." The element that was least interacted with by visitors of *Musical Crossroads* was "used the museum's mobile app" (92.65% None).

A similar item asked respondents what could have improved the exhibit using elements from the previous question. Over half (54.50%) selected "more information about current African American musicians," followed by "more objects" (34.36%) and "more hands-on displays" (33.65%). Roughly one in seven respondents (13.98%) selected "no changes needed" (see Table 5.3 for complete element interaction results). This finding is intriguing, as *Musical Crossroads* is one of the most object-heavy exhibitions in NMAAHC (Reece, personal

communication, 2023). It is possible that individuals who took the survey want *Musical Crossroads* to have more objects from current African American musicians, combining the top two most indicated improvements.

Table 5.3

Visitor Interaction with Musical Crossroads Items

	None	Very Little	Some	Most/All
How much of the following did you do in this exhibit?				
Used the museum's mobile app	391 (92.65%)	15 (3.55%)	6 (1.42%)	3 (0.71%)
Read artifact texts	2 (0.49%)	14 (3.40%)	184 (44.66%)	212 (51.46%)
Looked at the photos	0	75 (17.77%)	172 (40.76%)	147 (34.83%)
Looked at the artifacts	0	0	107 (25.36%)	306 (72.51%)
Interacted with the "In the Studio" space	148 (36.19%)	106 (25.92%)	123 (30.07%)	32 (7.82%)
Interacted with the "Neighborhood Record Store" space	83 (20.24%)	34 (8.29%)	246 (60.0%)	47 (11.46%)

	n	%
Which of the following would have improved the exhibition?		
More objects	145	34.36
More photographs	91	21.56
Larger photographs	26	6.16
More hands-on displays	142	33.65
More stories about the musicians' personal lives	94	22.27
More information about current African American musicians	230	54.50
No change needed	59	13.98

Musical Genres

As noted in Chapter 3, *Musical Crossroads* is largely divided into 11 areas based on musical genres. To examine which genres or areas visitors experienced in the exhibit, I asked respondents, "Which sections of the exhibit based on musical genres did you encounter during your visit?" followed by a checklist including each individual music genre. The sections respondents selected the most were R&B/Soul (91.00%), Hip-Hop (90.52%), Jazz (87.91%), and Rock & Roll (86.73%). In contrast, the least selected genres were Blues/Folk/Country (72.75%), Classical (70.85%), Sacred (67.77%), and Roots (66.11%). There were no significant relationships between responses and respondent demographic items.

A cornerstone in museum education pedagogy is for museums and exhibits to encourage individuals to seek further information on a topic that they encountered during their visit (Hohenstein & Moussouri, 2017). I sought to determine which genres individuals might explore further based on their visit to *Musical Crossroads*, measuring one component of the exhibit's focus on music education and exploration. After the question asking what genres they encountered during their visit, I asked respondents, "Are there any genres of music that you will explore further after your visit?", again with a listing of the 11 genres. The genres most frequently selected for further exploration by visitors were Hip-Hop (63.74%), R&B/Soul (60.66%), and Rock & Roll (59.00%). Genres that were least frequently selected for further exploration were Sacred (25.12%), Roots (23.93%), and Blues/Folk/Country (20.14%). Go-Go, one of the smallest genre sections by size in the exhibit, had a relatively high number of selections (45.73%) for further exploration by visitors compared to other genres like Jazz (44.55%). Overall, the most and least frequently selected genres selected for further exploration

generally correspond to the results from the previous question on genre encounters (see Table 5.4 for complete results from the genre-based survey items).

Table 5.4

Survey Items on Musical Genres

	Which sections of the exhibit based on musical genres did you encounter? *n (%)*	**Are there any genres that you will explore further after your visit?** *n (%)*
Blues/Folk/Country	307 (72.75)	85 (20.14)
Classical	299 (70.85)	132 (31.28)
Funk	362 (85.78)	217 (51.42)
Go-Go	322 (76.30)	193 (45.73)
Hip-Hop	382 (90.52)	269 (63.74)
Jazz	371 (87.91)	188 (44.55)
R&B/Soul	384 (91.00)	256 (60.66)
Rock & Roll	366 (86.73)	249 (59.00)
Roots	279 (66.11)	101 (23.93)
Sacred	286 (67.77)	106 (25.12)
Stage and Screen	328 (77.73)	123 (29.15)

Concepts and Themes

Two survey items focused specifically on the educational experiences of *Musical Crossroads* visitors. In the first item, I asked respondents, "Please indicate which of these ideas you took away from this exhibition," followed by a list of four concepts that were adapted from a previous SI music exhibit study (Smithsonian Institution Office of Policy and Analysis, 2011). Each concept was selected by over four-fifths of visitors surveyed. The concepts "social change set the background for African Americans to make important contributions to music" (94.08%) and "African American musicians made key contributions to popular music genres from 1800 to today" (93.84%) were the two most frequently selected concepts. These results suggest that the visitors surveyed are gaining information and understanding the confluence of history and

culture during their visit to NMAAHC and *Musical Crossroads*, a key element of the museum's mission. See Table 5.5 for complete results for this item.

Table 5.5

Key Concepts in Musical Crossroads

	n	%
Please indicate which of these ideas you took away from this exhibition:		
Early African American musicians opened doors for present day African American musicians	340	80.57
Social change set the background for African Americans to make important contributions to music	397	94.08
African American musicians made key contributions to popular music genres from 1800 to today	396	93.84
Some African American musicians use music to express their identity	392	92.89

In Chapter 4, I discuss the five themes created by exhibit curator Dr. Dwandalyn Reece that permeate *Musical Crossroads*. These themes (as shown in Table 5.6) form the core of the exhibit material and are interwoven throughout the sections based on genres. In this second survey item based on visitors' educational experiences, I asked if respondents learned about these themes during their visit. This item aids in determining how visitors perceive the themes and if the exhibit is effective in facilitating the experience curators envisioned during the exhibit's development. Each theme was selected by at least three-fourths of visitors. The two most frequently selected themes were "African American music innovates musical styles and performance practices" (95.97%) and "African American music used as expressions of cultural identity and resistance" (95.50%). These results indicate that a vast majority of visitors to

Musical Crossroads report learning about these critical themes through their experiences with the exhibit, as intended by the exhibition curators.

Table 5.6

Five Themes of Musical Crossroads

	n	%
Which of these themes did you learn about during your visit to the exhibition?		
The African roots of African American music	341	80.81
How African American music innovates musical styles and performance practices	405	95.97
African American music being used as expressions of cultural identity and resistance	354	83.89
Some African American musicians use music to express their identity	392	92.89
African American music's global impact	321	76.07

At the end of the survey, I asked respondents two open-ended questions. The first question asked, "What is the most interesting thing you learned during your visit to *Musical Crossroads*?" The 20 responses to this item were varied and included statements like "I've never heard of go-go music, it sounds interesting" and "never thought about how much protest plays into musical genres." The second open-ended response item asked, "Please list any additional comments you have about your visit" and received 10 responses. These comments were all positive and included statements like "lovely exhibit," "absolutely stunning," and "amazing

exhibit, can't wait to visit again." Based on the preceding results, survey respondents generally had a positive and educational experience while visiting *Musical Crossroads*.

Discussion

Several key themes aligned with the survey results based on visitor experiences at *Musical Crossroads*. This Discussion section is grouped into categories based on the survey questions themselves and on prevalent concepts like culturally relevant pedagogy and meaning-making.

Demographics

Some key demographic data points stand out in the survey results, especially in the racial makeup of visitors. In a study on visitor experiences to an SI exhibit on Latino popular music (Smithsonian Institution Office of Policy and Analysis, 2012), visitors were 71% white, 28% Black, and 8% Asian. Similarly, in the SI's last major visitor study (Smithsonian Institution, 2015), completed before NMAAHC opened, visitors across all SI museums from 2015 to 2016 were 73% white, 12% Latino, and 10% Black. When NMAAHC opened, most visitors were Black (Dorman, personal communication, 2024). This trend continued in the current study, where 49.05% of survey-responding visitors were Black. A possible explanation for this outcome is that NMAAHC is more culturally relevant for and representative of Black visitors compared to other SI museums (Reece, 2023a). As I claim in Chapter 1, *Musical Crossroads* and NMAAHC serve as a counter-story to traditional museum spaces by centering African American history and culture. Therefore, Black visitors may visit NMAAHC more frequently compared to other SI museums. When SI completes an updated visitor study, it may show that NMAAHC's popularity influenced a more diverse demographic makeup of visitors across the entire SI complex. Other

demographic results, including gender, educational background, and if the respondent was visiting for the first time were comparable to previous SI visitor studies.

Additionally, I wanted to examine whether demographics influenced how visitors experienced or reacted to the exhibit, especially the demographic of race. As noted in the Results, I ran regression analyses to determine if visitor demography was related to visitor satisfaction. For example, I ran a bivariate regression analysis between visitors who identified as Black and the survey item "Which experiences in the exhibit did you find especially satisfying?". I found no significant relationships between visitor demography and how visitors reported their satisfaction with the exhibit. This could be due to the overall results showing that most visitors generally had a positive experience while visiting *Musical Crossroads* regardless of age, race, or educational background.

Visitor Interaction with *Musical Crossroads*

Results from survey items on how visitors interacted with *Musical Crossroads* spaces were similar to other SI music exhibit studies. In an SI Office of Policy and Analysis study (2013) on a Native American music exhibit, 94% of visitors selected Some or Most/All for "looked at the photos," 92% "looked at the artifacts" Some or Most/All, and 79% Some or Most/All "read the artifact texts." In the current study, 96% of visitors read Some or Most/All of the "artifact texts," 75% "looked at the photos," and 97% "looked at the artifacts." Like most museum visitors, respondents in this study spent their visit looking at artifacts, reading artifact texts, and looking at photos throughout the exhibit, all expected results based on museum education literature (Hohenstein & Moussouri, 2017).

Interactive Spaces

Interactive spaces, including “In the Studio” and the “Neighborhood Record Store,” are a unique component of *Musical Crossroads* compared to other SI temporary music exhibits. These spaces had differing results in the current study. Nearly two-thirds (62%) of respondents indicated that they spent None or Very Little time in the “In the Studio” interactive space. Meanwhile, almost three-quarters (72%) interacted Some or Most/All with the “Neighborhood Record Store.” This disparity could be due to the current study only surveying visitors over the age of 18 when most visitors who interact with “In the Studio” are children under 18 based on my fieldnotes and observations. Another possible reason is the physical size difference between the two spaces. “In the Studio” only contains two interactive screens and can create lines of people waiting to complete the activity. The “Neighborhood Record Store” is a more informal interactive with multiple activities. If the digital interactive in the center of the area is in use, visitors can “browse” through records until the digital element is open. Despite varying usages in the current study, both spaces offer educational and relevant interactive activities for visitors that aid in achieving the exhibit’s goals.

Musical Genres

The survey items on the musical genre layout of the exhibit provided several interesting findings. The most encountered genres, including Hip-Hop, Funk, R&B/Soul, and Jazz, align with the most popular genres of music that visitors may listen to in their everyday lives (Petitbon & Hitchcock, 2022). Since visitors are likely more knowledgeable about these genres, they may navigate straight to them in the exhibit instead of visiting all 11 genres. These more popular genres also occupy larger spaces in the exhibit. The Hip-Hop area contains four cases of artifacts whereas the Roots genre only contains two cases. Additionally, genres like Sacred, Classical, and

Roots are near the entrance/exit to the exhibit so visitors may miss them as they enter or leave the space.

Results on which musical genres visitors may explore further also coincide with which genres they encountered during their visit. The most frequently selected genres to explore further were Hip-Hop (63.74%), R&B/Soul (60.66%), and Rock & Roll (59.00%). Visitors may have interpreted this question as which genres they might listen to more after their visit. This item could have been reworded to ask, "Are there any genres of music you would like to learn more about?" to clarify the item's educational intent. The most intriguing finding from this question was the relatively high selection of Go-Go (45.73%) for further exploration. Go-Go was developed in Washington, D.C., so local visitors may have gained a newfound interest in exploring Go-Go music after seeing it displayed in the exhibit. Visitors who had not heard of Go-Go before may have also been intrigued by a genre they did not know existed which prompted future exploration. Future iterations of the NMAAHC music exhibit or temporary exhibits could consider a larger presence of Go-Go music based on these findings.

Culturally Relevant Pedagogy

Visitor Experience

The survey items based on visitor experiences, as detailed in the Results section, provide key findings on the relevancy of *Musical Crossroads* and how individuals responded to the exhibit. For the item, "Which experience(s) did you find especially satisfying in this exhibition?", the most popular selections were "seeing rare…items" (85.78%) "gaining information" (75.12%), and "enriching my understanding" (59.95%). As discussed in the Literature Review, seeing items in a museum can "trigger a visceral or emotional response, known as the numinous experience, which can help visitors connect to the spirit of a period or

person" (Hohenstein & Moussouri, p. 154). Visitors in this study indicated that they found seeing music-related artifacts in the exhibit an especially satisfying experience that, for some, enriched their understanding of African American music.

Survey respondents also indicated some components that would improve their visit to *Musical Crossroads*. For the item, "Which of the following would have improved the exhibition for you?", visitors most frequently selected "more information about current African American musicians" (54.50%). This finding indicates that although visitors had a generally positive experience in the exhibit, they may have found it more relevant if it contained artifacts or stories about more modern musicians. Addressing this concern can be a challenge for several reasons. First, most artists still performing are not typically "thinking about their legacy" (Reece, personal communication, 2023) and may be hesitant to donate items to NMAAHC. Second, even if artists provide artifacts, they may not immediately get placed into *Musical Crossroads* due to space, programming, and other factors that determine which items are displayed. Since the *Musical Crossroads* team has received more items from modern musicians since NMAAHC opened, future realizations of the exhibit may include these objects based on the stories that curators want to highlight.

Concepts and Themes

As detailed in the Results, I included survey items based on musical concepts and themes developed by Dr. Reece to measure what visitors reported learning and how they were achieving meaning-making. Through the various exhibit components, including the genre cases and the interactive spaces, visitors are confronted with these themes and can decide how deeply they want to explore. Based on the findings of these two items (see Table 5.5 and 5.6), visitors reported learning about much broader concepts than just looking at artifacts. Survey respondents

report learning about social change in African American music, how African American musicians express their identity, and how African American music is used as cultural expression and resistance, among others. It is clear, based on these results, that the goals for the exhibit expressed by the curators and the development team are being realized. Visitors are generally positive about their visit, they report learning key themes of African American musical cultures, and they are interacting extensively with exhibit components.

Conclusion

There are several potential avenues for future research based on this study. First, it would be beneficial to complete qualitative research with visitors to *Musical Crossroads*. While the survey results display which elements visitors encountered during their time in the exhibit, the findings do not show what emotions visitors have about certain components of the exhibit or individual meaning-making experiences. Research studies could include an ethnographic approach to the exhibit, where individuals are interviewed about their experiences before, during, and after their visit, highlighting the various layers of personal meaning they derive from certain objects or interactive spaces. Additional survey studies could also be completed at temporary music exhibits or permanent pop culture exhibits within SI and at music exhibits in other museums to compare findings with the current study.

Additionally, current NMAAHC and *Musical Crossroads* curators and developers may use these findings to improve the current or future versions of the exhibit. The findings on musical genres and visitor interaction with exhibit elements show some components of the exhibit that visitors are not experiencing as completely as others. While the layout of *Musical Crossroads* cannot change, a future permanent music exhibition may take these results into consideration when deciding the layout and content of that space.

As I noted in Chapter 4, Dr. Dwandalyn Reece stated, “Everything we do for the exhibit, to me, is learning, a learning opportunity… I think with projects like these, you’re always thinking about the audience…who’s going to be viewing the exhibition and what you want them to get out of that.” Each of the preceding findings highlights *Musical Crossroads* as a space that is educational and culturally relevant for visitors with ample opportunities for meaning-making. Visitors have the freedom to explore their favorite musical genres or genres they have never encountered before. They can dive as deeply into an object, like Flavor Flav’s clock or Chuck Berry’s Cadillac, as they like. Most importantly, visitors encounter a space that is educational for all people regardless of previous knowledge, age, or cultural background.

Chapter 6: Curating Music Education: Music Teachers' Perceptions and Implementations of Smithsonian's Learning Labs

Introduction and Overview of Chapter

There is a growing body of literature dedicated to evaluating teachers who implement new technologies and resources into their classrooms in both music education (Giebelhausen, 2015, 2016a, 2016b; Merrick & Joseph, 2023; Nart, 2016; Ouyang, 2023; Ruthmann & Mantie, 2017; Wise et al., 2011) and museum education (Bell & Smith, 2020; Huebner, 2022; Klopfer et al., 2005). Museum educators and researchers have conducted teacher professional development on utilizing museum-created technology resources (Gaylord-Opalewski & O'Leary, 2019; Grabman et al., 2019; Grenier, 2010; Kelton & Saraniero, 2018) and analyzed curricula that integrate museum resources (Harrell & Kotecki, 2015; Sanger et al., 2015; Vallance, 2004; Wishart & Triggs, 2010). Similarly, music education researchers have provided professional development sessions on technological resources (Bauer et al., 2003; Eyles, 2018; Ho, 2004; Zelenak, 2015) and examined those resources in music education curricula (Ohlenbusch, 2001; Portowitz et al., 2014; Southcott & Crawford, 2011; Tobias, 2017; Xiao, 2022) and music teacher education (Bauer & Dammers, 2016; Dammers, 2019; Haning, 2016; Partti, 2017). As noted previously in detailing gaps in music and museum education literature, a gap exists in research focused on music educators implementing museum-created resources and technology.

In relation to museum education technology, the SI Learning Lab (SLL), created by the Smithsonian Institution's (SI) Office of Educational Technology (OET), is an online platform that provides educators with access to millions of museum artifacts, artworks, specimens, recordings, and other materials from all museums across the SI ecosystem, including the National Museum of African American History and Culture (NMAAHC). Describing the purpose

of SLL, the OET (n.d.) writes on their website, “by encouraging users to create and share personalized collections of Smithsonian assets and user-generated resources, the Learning Lab aspires to build a global community of learners who are passionate about adding to and bringing to light new knowledge, ideas, and insight” (n.p.).

Along with the aforementioned museum items, the SLL includes various digital media like interviews with SI staff and outside experts, podcasts, magazine articles, and video clips. Additionally, the SLL contains pre-made lesson plans constructed by SI educational staff and other educators from around the US, and teachers using the SLL can also create their own lesson plans using any combination of SLL resources. In SLL, individual items, like artifacts or artworks, are labeled “resources” (SIOET, n.d., n.p.), while groups of items or lesson plans are labeled “collections” (SIOET, n.d., n.p.) (see https://learninglab.si.edu/q/ll-c/2SHxOCVcIAj6TgKd for an SLL “collection” on musical instruments created by NMAAHC educational staff). When creating lesson plans or “collections” on SLL, teachers can annotate objects and media and create discussion prompts and quizzes that can be integrated into popular educational websites like Google Classroom, Canvas, or Blackboard.

Although scholars have recently completed research on SLL usage and professional development for teachers (Engelke, 2015; Jia & Guo, 2023; Liguori & Rappoport, 2018; Rappoport, 2021; Zinger et al., 2017), no literature examines the implementation of SLL into music classroom settings. The purpose of this multiple case study was to analyze music teachers’ perceptions of using SLL in their classrooms to conduct lessons on African American musical cultures, incorporating items from the NMAAHC collections. Three study participants attended a one-hour professional development training session on SLL with me, the researcher, and designed two lesson plans to implement in their classrooms using the SLL platform.

This chapter contains a literature review, method, results, and discussion sections for Study 3. In the literature review, I examine research-practitioner partnerships (RPPs), the third core tenet of the document's theoretical framework, professional development in music and museum education, and object-based learning (OBL) in museum education, including SLL. Following the literature review, I detail the study and its findings in the method, results, and discussion sections, concluding with implications for future scholarly work on SI professional development opportunities and utilizing museum resources in music classrooms. The following research questions guided my framing and execution of this study:

1. What are the experiences of music teachers who use SI Learning Labs in their classrooms?
2. How do music teachers who teach various specialties and grade levels incorporate NMAAHC and *Musical Crossroads* materials in their classrooms?
3. Do music teachers perceive and practice culturally relevant pedagogy and object-based learning while using SLL? If so, how?

Literature Review

The literature review for this multiple case study is divided into three main sections: research-practitioner partnerships (RPP) in music and museum education, professional development in music and museum education, and object-based learning in museum education and its parallels in music education. These sections complement the framing and design of the case study.

Researcher-Practitioner Partnerships

While designing and conducting this study, I positioned myself as a music and museum education researcher working with in-service music teachers to implement a museum-created

resource. I frame this collaboration and research through the lens of RPP, wherein I, the researcher, collaborated with practitioners to implement museum technology in their classroom in an effort to aid their music instruction. I begin the review of RPP literature with an imagined narrative followed by an overview of RPP in music and museum education.

Sirius's Story

Sirius, who identifies as a transgender woman and uses she/her pronouns, is an instrumental music education faculty member at a public university in Phoenix, Arizona. Her research interests include analyzing non-classroom musical learning environments and informal music learning. Near Sirius's university is the Musical Instrument Museum (2022), whose mission reads, "enriches our world by collecting, preserving, and making accessible an astonishing variety of musical instruments and performance videos from every country in the world" (n.p.). In pursuing her research interests, Sirius wants to study child and adult visitors' experiences at the museum and if visitors perceive those experiences to be educational.

Sirius begins by reaching out to a museum educator. As Sirius has never completed research in a museum before, the museum educator at the Musical Instrument Museum proposes a research-practitioner partnership. This partnership would involve the museum educator providing Sirius with the educational goals of the museum and various exhibits, and Sirius using her study data to suggest areas for improving visitors' educational experiences. They utilize a model of jointly negotiated research, where both researcher and educator collaborate when designing the study and developing improvements in museum practice.

Researcher-Practitioner Partnerships in Museum Education

In museum education, researcher-practitioner partnerships (RPP) involve both external (e.g., university educational researchers) and internal (e.g., research departments) researchers and museum education practitioners utilizing theoretical and methodological knowledge to design, implement, and analyze exhibits and programming (Hohenstein & Moussouri, 2017). Sobel and Jipson (2016) describe three types of RPP: cooperative, collaborative, and jointly negotiated. Cooperative research typically involves museum educators granting access to museum materials and permission to study visitor experiences, while researchers in collaborative relationships propose potential changes to educational design and practice based on their findings.

Allen and Gutwill (2016) identify four principles of jointly negotiated research (JNR): (a) negotiating problems of practice; (b) advancing theory and practice; (c) engaging in collaborative design; and (d) building capacity to sustain change. In advocating for JNR, they state, "in jointly negotiated research, research and practice are built simultaneously by a single collaborative community of researchers and practitioners…jointly characterize both the desired learning impacts and means of achieving them" (Allen & Gutwill, 2016, p. 194). In Sirius's story, she jointly develops all aspects of the research she completes with the museum educator, including the survey instrument, the study implementation, and the recommendations to museum leadership to improve programming, highlighting the four principles of JNR partnerships. In the current study, participants also developed collaboratively with the researcher, including designing their own lesson plans using SLL and providing individual recommendations to SI related to SLL.

A growing number of scholars have highlighted RPP in museum education, emphasizing the need for researchers and practitioners "to take their often separate missions and fuse them

into a common culture, or at least, two cultures that can communicate" (Hirsch-Pasek & Golinkoff, 2016, p. 223). This literature includes analyses of power dynamics in RPP (Bevan, 2016; Gaskins, 2016; Hirsch-Pasek & Golinkoff, 2016), museum collaborations in science education (Bell et al., 2009), and RPP in children's museums (Sobel & Jipson, 2016). These studies also examine informal learning environments and visitor choice in museums, previously mentioned as critical components of museum education.

Research-Practitioner Partnerships in Music Education

RPP is a developing area of music education research. Austin (2019) claims, "for too long, music educators and music education researchers have occupied separate spaces within the U.S. music education ecosystem – aware of each other's existence but unable to recognize natural interdependencies or create mutually beneficial responses to challenges" (p. 9). A typical approach to establishing stronger researcher-practitioner relationships in music education is through research courses in graduate programs. However, this approach is exclusionary as less than 60% of U.S. teachers hold a master's degree or higher (McFarland et al., 2018). Casanova (1989) further suggests that music education researchers should collaborate with classroom teachers to design relevant research projects. It should be noted that completing research in a public or private school setting is often difficult due to school district restrictions on external research projects (Greenberg, 2004; Ulla, 2018).

Most research in music education on RPP centers on university-community partnerships where pre-service music teachers engage with community music programs (Draper & Bartolome, 2021; Prest, 2023; Soto et al., 2009). Additionally, scholars have examined researcher-led professional development for music educators (Conway, 2007; Kastner, 2012, 2014; Pellegrino et al., 2018; Schmidt & Robbins, 2011). While there is a gap in the literature regarding RPP in

music education, there is potential for music education researcher partnerships with museum educators to yield meaningful work regarding music teaching and learning in a museum setting.

Professional Development

Professional development (PD) can be viewed as a byproduct of RPP, wherein researchers can provide training on theory-driven developments in their respective fields that in-service educators can utilize to enhance their teaching. While many definitions of PD exist, I frame the PD conducted in this study as defined by Avalos (2011). She states:

> Professional development is about teachers learning, learning how to learn, and transforming their knowledge into practice for the benefit of their students' growth. Teacher professional learning…requires cognitive and emotional involvement of teachers individually and collectively, the capacity and willingness to examine where each one stands in terms of convictions and beliefs and the perusal and enactment of appropriate alternatives for improvement or change. (p. 10)

Each participant in this multiple case study completed a PD session on SLL before creating their lessons and then decided individually how they would utilize SLL in their lesson plans. As such, I present a brief overview of related literature in music and museum education.

Professional Development in Music Education

In a systematic review of 24 PD initiatives in music education literature, Bautista et al. (2017) found several critical features of effective PD sessions, including a focus on subject-specific content and active learning opportunities for participants. Researchers in music education have previously emphasized the need for music-specific PD (Bauer, 2007; Burkett, 2011; Bush, 2007; Conway, 2008, 2011; Pellegrino, 2010, 2011; Svec, 2017). Further, Desimone (2009) suggests that high-quality music PD provides a deeper understanding of the subject

matter, instructional practices, and how students will learn the subject matter. In relation to active participation, PD should allow participants the opportunity for hands-on engagement (Bautista et al., 2017; Borko, 2004; Darling-Hammond & McLaughlin, 2011) such as curriculum planning, reviewing student work, collaborative writing, and time for reflection (Garet et al., 2001).

In addition to subject-specific content and active participation, music scholars have placed heavy emphasis on collaborative PD settings, often referred to as professional learning communities (PLC) (Kastner, 2012, 2014; Lewis, 2022; Pellegrino et al., 2018; Shin & Seog, 2017; Stanley et al., 2014). In these PLCs, groups of teachers attend PD sessions and work collaboratively to develop new classroom materials. Stanley et al. (2014) interviewed seven music teachers within a PLC to portray the importance of these groups, writing, "collaborative professional development in music allows teachers to share their musicianship with one another and to strengthen musical skills with others who share like goals" (p. 79). In a multiple case study examining a PLC tasked with addressing anti-racism in music education, Lewis (2022) found that "moments of tension, questioning, and revelation influenced the participants' understanding of systemic racism and their dreams for the future of music education" (p. 72). While the current study does not establish a long-term PLC for the three participants, I incorporate fundamental elements of PLCs into the study's design by using focus group interviews and a full-group PD session.

Professional Development in Museum Education

Literature related to PD in museum education is relatively sparse. Most research in museum education on PD involves training educators who work at museums and cultural institutions rather than PD related to using museum resources in a school classroom. Scholars in museum education have studied a STEM-based PD initiative for museum staff (Tran et al.,

2019), PLCs in museum education (Nevins, 2019), and PD for museum-based maker educators (Grabman et al., 2019), along with museum-led PD for the fields of law enforcement (McCormack, 2001) and medicine (Bardes et al., 2002; Loden, 1989). These types of PD in the museum literature are typically centered on technical skills, like providing efficient security services in a gallery, and not on providing educational experiences for visitors.

Museum-led PD for teachers has been studied for various subject areas, including science education (Jeanpierre et al., 2005; Picciano & Steiner, 2008), history and social studies (Marcus, 2008; Meichtry & Smith, 2007), and visual art (Villeneuve et al., 2006). Grenier (2010) completed a case study of museum-initiated PD for teachers at a maritime museum and found that teachers attended the PD for a variety of factors, including museum reputation, the chance to learn with peers, the design of the PD, and PD staff. As stated previously, a gap exists in the music and museum education literature on museum-focused PD opportunities for music educators. This research into museum-led PD is crucial for the implications of this study as detailed in proceeding sections.

Object-Based Learning

Finally, this study incorporates elements of object-based learning (OBL), a "mode of education which involves the active integration of objects into the learning environment. In the museological context, object-based learning describes "learners' active engagement with museum collections within a student-centred [sic] framework" (Chatterjee et al., 2016, p. 7). Similar to the material culture theory introduced in Chapter 3, OBL emphasizes items such as historical artifacts, biological specimens, artworks, or other related materials. As participants in this study will be utilizing SLL to conduct lessons on music-related objects found in the SI and

NMAAHC collections, I conduct a short overview of OBL, including related literature on the SLL, as it is used to frame the design and implementation of the current study.

Object-Based Learning in Museums

Like the concept of meaning-making discussed in Chapter 4, OBL is heavily influenced by constructivist learning (Chatterjee et al., 2015). Hein (1998) modified Kolb's (1984) cycle of learning and applied it to museum education, suggesting that by interacting with physical items, museum visitors construct new knowledge when exploring museum spaces. Many authors have studied the relationship between objects, meaning-making, and learning (Dudley, 2012; Hein, 1998; Rowe, 2002), drawing on the theories regarding objects and materials developed by Dewey (1899) and Vygotsky (1930). In museums and other cultural institutions, Baumeister (1991) suggests that objects are the "mental representation of possible relationships among things and events. Humans bring their own knowledge, experiences, and values to objects and make meaning" (p. 15). Similarly, Pearce (1995) claims that objects in museums function as symbols of identity, nature, society, and power. Several authors have relatedly suggested that museums, specifically items on display, can trigger memories, ideas, and emotions in ways other materials like written texts cannot (Chatterjee & Noble, 2016; Kavanagh, 2000; Lanceley et al., 2012). These concepts are present in the previous examples of Flavor Flav's clock in Chapter 3 and the *Musical Crossroads* record store in Chapter 4.

Many scholars have conducted empirical research on implementing OBL in museum education. These include museum educators utilizing OBL in an anthropology museum (Schultz, 2018), connecting visual art and science at a science museum (Greenslit et al., 2021), teaching biological evolution at a zoology museum (Nicholl & Davies, 2019), and using visitor-generated photography to analyze museum artifacts (Vartiainen & Enkenberg, 2014). More recently,

researchers have focused on the use of OBL in higher education, including the use of touch in design pedagogy (Willcocks, 2015), using OBL in archival research for graduate students (Hodge, 2018), and global education pedagogy using OBL in undergraduate curricula (Meecham, 2015).

Smithsonian Learning Lab.

In addition to the more general literature on OBL, researchers have recently completed empirical work related explicitly to SLL, a vital component of the current study. Zinger et al. (2017) investigated a PD program that prepared middle school social studies teachers to use SLL using a design-based research approach. They found that utilizing SLL increased participant content and pedagogical knowledge of their subject and technological knowledge of the SLL digital platform. Additional research on SLL includes using the platform to teach digital storytelling (Liguori & Rappoport, 2018), creating a time capsule in an elementary school social studies class (Rappoport, 2021), and teaching media and historical literacy (Bousalis et al., 2020).

Conclusively, Jia & Guo (2023) describe SLL as a forerunner in museum blended learning, in which teachers can bring whole collections of critical cultural institutions into their classrooms to enhance their students' learning. They state, "Smithsonian Learning Lab has constructed a new model of museum blended learning in the digital ecosystem. Educators can apply museum pedagogical strategies directly to object-based instructional activities, encouraging meticulous observation and critical reflection on cultural and artistic works" (n.p.). By utilizing SLL in the current study, I introduce study participants to this online platform that can positively impact their music classrooms and spur further research and utilization in the future.

Method

Design

As this study analyzes three individual participants who teach different music specialties, grade levels, and have varying geographic locations, I employed a holistic multiple case study design (Yin, 2018). In the multiple case study design, I consider each participant a separate case with unique contexts. Since the participants all attended the same professional development session on using SLL, I used both within- and cross-case analysis for the data collected in the study. This multiple case study is also exploratory (Yin, 2018) in that it seeks to examine an initiative, the SLL, and its use in music classrooms as an instructional tool. The results are also used to provide recommendations for future large-scale studies of SLL in music education, furthering its positioning as an exploratory study.

After receiving institutional review board (IRB) approval from the University of Maryland (see Appendix A for relevant IRB documents), I began the study with having each individual participant attend one- to two-hour PD sessions on SLL conducted by me in September 2023. I designed this training using materials gathered from attending a four-day workshop intensive on SLL at NMAAHC in July 2023 (see Appendix C for a copy of the presentation given to study participants). The PD provided an overview of navigating SLL, how users can create "collections" using resources and items from NMAAHC and other museums, and how users can incorporate their own materials into a collection. I also introduced how using SLL involves culturally relevant pedagogy, as detailed in Chapter 5, and object-based learning. The session concluded with a 30-plus-minute collaborative "brainstorming" period where the participants and I collaborated on ideas they would consider using when conducting their lessons

using SLL. The timing of these sessions varied depending on questions from participants and how engaged they were with brainstorming ideas.

Following the PD session, participants were tasked with creating two lessons to conduct in their classrooms. The participants had total control over the length, scope, content, and implementation of their lesson, with the only requirement from the researcher being that the lesson had to focus on African American musical cultures and had to utilize at least one object from the NMAAHC collections. The two lessons could be complementary and performed as part of a unit or on two different topics as part of different units. The proceeding results and discussion sections discuss how the participants carried out their lessons. In order to create some uniformity between the cases, participants were asked to teach their first lesson between October 1st and November 15th, 2023, and their second lesson between December 1st, 2023, and January 31st, 2024. The period between the lessons was used to schedule individual interviews with participants, as detailed in the proceeding section on data collection.

Sampling

I employed convenience and criterion case sampling for this study (Miles et al., 2019). All three participants are personal acquaintances of mine who expressed interest in incorporating new technological resources into their classrooms, specifically to conduct lessons that were culturally relevant to their students. These individuals are also all located on the East Coast, as detailed in their individual narratives. Each participant was required to be an active music teacher in a K-12 public or private school, attend the PD training on SLL, complete two lessons in their classrooms using SLL, and complete individual interviews with me. I describe each case/participant below.

Data Collection and Analysis

Data Collection

Data for this study consisted of interview transcripts and document analysis. I conducted individual 30- to 60-minute semi-structured interviews with participants at three points during the study: after the PD session and before the first lesson, after the first lesson and before the second lesson, and after the second lesson (see Appendix B for sample interview protocols). I planned to conduct a final focus group interview with all participants but could not complete this due to scheduling conflicts. All individual interviews were conducted on Zoom videoconferencing software, including the beginning PD session. I transcribed each interview using Otter.AI software. Along with interviews, I also collected documentary data for this study, including participant lesson plans and anonymous student work.

Data Analysis

Data analysis was ongoing and spanned the entire four-month period of this study. Throughout data collection, I transcribed interviews immediately after they occurred and began analysis to review findings and compare data. The findings from the initial PD session and pre-lesson interviews informed the structure of the proceeding interviews, impacting follow-up questions, research questions, and interview formats. I began data analysis for each interview transcript with *in vivo* coding (Miles et al., 2019), where I developed codes based on words used by participants in interviews. I then sorted initial codes into common themes that impacted later data collection and study findings. For example, my final coding schema included primary themes like *culturally relevant pedagogy* and *object-based learning*, each of which contained multiple secondary and tertiary themes like *realness/legitimization of musical genres* or *assessment strategies*.

Trustworthiness

I employed multiple efforts to ensure the trustworthiness of study data (Merriam, 1998; Yin, 2018), including triangulation, peer examination of results, and member checks. Interview transcripts, document analysis, and participant feedback throughout the study aided in triangulation between and within each case. I also had peers and colleagues examine my work for validity, including reviewing interview transcripts and corresponding coding schema. Finally, I conducted member checks with each participant throughout the study, allowing them to review interview transcripts and findings and contact me with any questions or concerns related to SLL or developing their lesson plans. No participant reported any inaccuracies in transcripts or written narratives, and none contacted me for help on using SLL outside of our scheduled interviews.

Limitations

Although this study contains multiple teachers of various specialties and grade levels, their experiences and uses of the SLL program are not generalizable to other music teachers. While this study has interesting complications and considerations for music teachers' usage of SLL, these three individual experiences are not identical to those of any other music teacher who may use the program in the future. The three participants in this study even had some contradictory experiences in both their perceptions and implementations of the SLL program. Another limitation was the inability to have the participants work with and learn from each other due to scheduling issues. In music education research, focus groups in qualitative studies on PD for music educators have provided positive results for participants (Bond et al., 2023; Lewis, 2023), so the lack of a focus group component in this study is a limitation. Some participants

who had issues using the program may have found solace in commiserating with other participants and not just the researcher.

Participants

Frida

The first participant, Frida is 37. She identifies as a Black cisgender woman and uses she/her pronouns. Frida teaches general music for kindergarten through fifth grade at a large, diverse elementary school in a mid-Atlantic state and has taught for ten years. Although she has visited NMAAHC before, Frida has never incorporated museum educational materials into her classroom. When describing her curriculum, Frida sometimes finds it challenging to find materials representative of the diverse cultural backgrounds of students in her classrooms. She states:

> In music classrooms, especially at the elementary level and when I was growing up, it's all about the master composers, you know, Bach, Beethoven, Mozart. That's what we listened to, played on Orff instruments, all that. But as a young Black girl, I never heard or played anything in music class that represented my interests or my culture. And it wasn't just in music class, it was every class. So now that I'm the teacher, I don't want my students experiencing those same isolating feelings. But there's just still not a lot out there…sure, there's posters and I have my composer of the month and we listen to diverse composers and diverse genres, but listening can only take you so far…I just want my kids to feel and be seen.

Frida was excited to utilize the SLL program for her classroom, explaining:

> I've been teaching units on hip-hop beats and soul and songwriting and things like that, but like I said, it's hard to find materials. You can always watch YouTube videos or

> whatever of performances but I want to go further. I wonder if having the students seeing the actual items these performers used and the fact that they're in this museum and building on that for my lessons can increase how engaged they are with it.

For this study, Frida taught her fifth-grade classes two consecutive lessons on the evolution of hip-hop. She began by using SLL to create a "collection" on hip-hop cultures using items in the NMAAHC music and performing arts collection. This presentation included costumes worn by influential artists like Flavor Flav, music production technology such as turntables and mixers, and other items that were pivotal in the history of hip-hop music. The objects were accompanied by videos and audio. For example, a slide of Queen Latifah's recording studio track sheet was supplemented with a video of the artist recording a song.

Following this introduction to hip-hop cultures, Frida developed a project for students to complete in groups. The student groups of three to four were tasked with creating a hip-hop group promotional package. The students had to use items from the SI collection as inspiration to create a hip-hop group name, costumes, and style of hip-hop. They also had to write a hip-hop verse and use SoundTrap software to create a backing track and record their verse. At the end of the second lesson, students presented their hip-hop groups to their peers and completed written reflections on the project. One student wrote, "I didn't know hip-hop was in a museum."

Using SLL allowed Frida to supplement her lessons with hip-hop cultural objects that engaged her students and enhanced her culturally relevant practices. Despite some difficulty using the SLL program, as detailed in the cross-case analysis below, Frida states, "I think this program is so cool and I will be using it in the future as a tool to increase representation in my classroom."

Shea

Shea is 26 years old with three years of teaching experience. She identifies as a white non-binary woman and uses she/they pronouns. Currently in the second school of their teaching career, Shea teaches 6th-8th grade instrumental music, including band and orchestra, at a large and diverse middle school in a mid-Atlantic state. Like Frida, Shea has visited NMAAHC before while supervising a school field trip but has never used museum materials in her classroom. Shea finds it difficult to stray from the typical band and orchestra curriculum when planning lessons. They state:

> My administrators especially expect to see band and orchestra students playing band and orchestra instruments when they come into my band or orchestra classes. So sometimes it's really hard to do other activities, especially since I only see my students for 45 minutes. By the time we get done unpacking, giving out directions, pulling out materials, we're already 10 minutes in. How can I justify doing a lesson on composers, or a lesson on some other music genre, when the students signed up for band or orchestra? So it's a constant challenge that I haven't quite mastered, especially since I'm new to this school and trying to live up to expectations.

Shea was initially nervous about incorporating SLL into her classroom, saying, "the concept behind the program is really cool, but…how can I utilize it in a band class when it's a challenge to get kids to play their instruments that they signed up to play?"

For this study, Shea decided to teach two lessons in her 6th-grade beginning band classes on Black composers and musicians who are featured in the NMAAHC music collections. In their first lesson, Shea created a PowerPoint on Black bandmaster and composer Alton Adams and composer and performer Scott Joplin, using images and information found on SLL. The

presentation included items on view at *Musical Crossroads,* like Alton Adams' flute and the score to Scott Joplin's opera *Tremonisha*. Shea supplemented the SLL objects with performance videos of compositions by Adams and Joplin. Shea used this lesson as a warm-up activity for these classes wherein students browsed through the PowerPoint and listened to performances individually before discussing the content together as a class.

In the second lesson, Shea similarly created a warm-up PowerPoint on famous Black instrumentalists, including flutist Tom Wiggins Greene and saxophonist John Coltrane. Like the first activity, this presentation included introductory biographical information on each musician and videos of performances by the individuals featured. Students took a short quiz on both PowerPoints at the end of the second presentation, which featured questions on the composers and musicians.

The presentations used in the lessons served as a means of representation and culturally relevant materials for Shea's diverse students, who were able to learn about individuals from similar cultures and communities performing and composing varied kinds of music. Despite some difficulties using the SLL program, which led to Shea using PowerPoint for presentations instead of creating SLL "collections," Shea found this endeavor to be a "positive experience for myself and my students" that will "hopefully evolve into more substantial lessons when I have more time to explore the program."

Will

Will, the third participant in this study, is 31 years old and identifies as a white cisgender male who uses he/him pronouns. He is a band director and music teacher at a mid-sized rural high school in a southeastern state. Will teaches several concert bands, jazz band, marching band, and music appreciation classes for students in ninth- through twelfth-grade. Like Frida and Shea,

Will had visited NMAAHC before – on a vacation to Washington, D.C. – but had not, prior to his participation in this study, used SI materials in his classroom.

Will decided to use SLL for his music appreciation classes, where he broadly covers the history and various genres of popular musics in the United States over a quarter (nine weeks). When asked about the decision to use SLL in music appreciation compared to one of his band classes, Will stated:

> One of the challenges in any class is knowing if things are relevant to students…another is making sure things are school appropriate…I want to find things that I can use to bridge knowledge gaps for students not in an ensemble. Music appreciation is perfect for incorporating all kinds of materials into the classroom that may not be relevant or that I have time for in other classes.

Like Shea, Will was initially nervous about using SLL in his classes. He said:

> I was nervous that kids would think it's boring. They're difficult kids to read in terms of what they find interesting. I was worried it would come across poorly to them. I also didn't want to read straight off the screen, I wanted it to seem more organic. It was a challenge at first but I eventually got my groove.

For both lessons in this study, Will used SLL to provide supplementary material for his units on musical genres but did not use the program for any form of assessment. In the first lesson, Will used SLL to contextualize a unit on Rock & Roll music. Will created a "collection" with pertinent items from Black Rock & Roll musicians housed in NMAAHC's collections, including Chuck Berry's Cadillac on display at *Musical Crossroads*, along with related images and videos. For his second lesson, Will created a similar "collection" using SLL but on Hip-Hop music and musicians. Along with creating his own "collections," Will also used pre-existing

collections made by SI staff members to supplement his materials. Overall, Will thought SLL was a "great tool" and hopes to incorporate the program more in future lessons.

Findings

I have organized the findings based on the three research questions for this study. Most findings aligned with the themes of music teachers' experiences using SLL, varied utilization of the program, and how teachers practice culturally relevant pedagogy and object-based learning using SLL. Within-case and cross-case analyses are presented within each of these themes.

What are the experiences of music teachers who use SI Learning Labs in their classrooms?

Using SLL

Classroom teachers are commonly reluctant to use new technologies (Ertmer et al., 2012; Hoban & Herrington, 2005; Tallvid, 2016). Each participant in the study was initially nervous about using SLL and learning a new software. After initial uncertainty, two participants, Frida and Will, had mostly positive experiences using the platform. Frida stated:

> Initially, the program seemed kind of clunky. There are a lot of steps to finding an object, creating a collection, adding external items, all that. But once you get the hang of it, it becomes easier. Just like learning any new program. Once I started treating it as a supplementary program instead of my main way to present information for a lesson, I was less stressed. There could be some improvements but overall I think it's an amazing resource, especially since it's free.

Similarly, Will elaborated:

> It took me a second to get used to it [SLL]. Once I signed in, I said, alright, what do I want to find? Then I thought back to your training. I just needed to refine the search

> down, and then was able to filter in the stuff that I needed…It's pretty straightforward, I kind of like that. It's just like cut and dry…that's my kind of resource.

Concurrently, Shea had some issues with the SLL program's usability. She recalls:

> It was overwhelming honestly. You have what, millions of objects to sort through? If I type in music, I get hundreds of thousands of hits, so it was just hard to find things I wanted. There really isn't an opportunity to explore, you really have to know what you want right away. If I want to teach a lesson on Black musicians in orchestra, you have to know a specific person or else you get an endless list of items that might be relevant…I also thought creating 'collections' was hard. Just to upload a video from YouTube was five extra steps. So I ended up just using images from the program and adding them to my own PowerPoint.

These findings are aligned with research on new classroom technologies (Agnew, 2009). Some teachers, like Frida and Will, pick up new programs more quickly and are eager to implement new technologies. Some teachers, like Shea, find new programs cumbersome and are reluctant to change from what they typically use. Participants in similar studies found SLL challenging to grasp (Jia & Guo, 2023; Zinger et al., 2017), so Shea's experience is not unique. Based on these findings, The SI Office of Educational Technology may consider conducting internal research into the usability of SLL and making improvements to the program based on the other research on teacher usage of SLL.

Lesson Planning

Planning lessons for their classrooms using SLL was naturally a common experience among Frida, Shea, and Will. Participants had to search for artists, objects, images, and videos that they would incorporate to achieve the goals they set forth for each lesson while also

planning around incorporating the SLL platform. In each interview that I conducted, especially the interviews that occurred before the first and second lessons, participants described their approaches to lesson planning using the platform. Will had the clearest ideas for how SLL would be used in his lessons. He describes:

> It wasn't hard…I wouldn't say it was easy, because I did have to do some digging, and like typing different keyword combinations to get what I was looking for…but it helped that I knew what artists I wanted to feature. If I had just gone in and typed Rock & Roll, it might have been harder to siphon through all the information. But I…typed in Little Richard, and then I found like five things that I wanted to use and was able to plug in immediately to fit the flow of the lesson…But yeah, I think the planning part of it was straightforward, it was probably easier than the original lesson series I put together.

Frida had a similar experience when planning her lessons. She states:

> Like I mentioned, once you get the hang of the program, the planning came a lot easier. I knew I wanted to do lessons on hip-hop, so that's what I searched for initially. I got thousands of hits. So I said, okay, what artists do I want to teach about? So then I typed in like Flavor Flav for example, and found the clock. Then I typed in Andre 3000 and 'turntables' and pulled some items from there. Actually finding the items really created the path my lesson would take, because I didn't know what would be there that I could plan around.

Shea began her lesson planning by researching famous Black composers for her unit and then searching for those composers on SLL. She describes this process:

> I knew of some famous composers, like Florence Price, but nothing of hers is at the Smithsonian. So I did some more digging. I came across people like Scott Joplin, who I

> knew about but didn't think about when I was planning, so that was fun to find his items. Then I read about Alton Adams and his contributions to band and I thought that could be really interesting. So narrowing down what composers are in the collection and what items they have really shaped the direction my lesson went.

Shea did find it easier to locate objects for Black musicians who had commercial notoriety, like John Coltrane, stating, "the pop musicians were much easier to plan for than classical…it seems like that's what the museum focused on."

These findings indicate that participants allowed the SLL's collections to guide what content to include in their lessons. This outcome is congruent with Liguori and Rappoport's (2018) discovery that teachers conducting lessons on digital storytelling felt limited by the Smithsonian's collections when lesson planning. In my professional development session with participants, I attempted to make clear that items and materials from artists outside the SI's collection could be incorporated into the SLL. In future iterations of that presentation, I will provide more examples of using external materials in SLL so teachers do not feel bound by the SI's collection when lesson planning. Additionally, I will incorporate various examples of genre and keyword searches on the SLL program during my professional development training sessions that may lessen the overwhelming sensation experienced by participants when searching for certain musicians or objects.

How do music teachers who teach various specialties and grade levels incorporate NMAAHC and *Musical Crossroads* materials in their classrooms?

Elementary Music

Frida teaches general music in an elementary school with grades K-5. She chose to teach her two SLL lessons to three fifth-grade classes that attend music class once a week. As

mentioned, Frida taught two lessons on the evolution of Hip-Hop using SLL. In the first lesson, Frida created an SLL "collection" that she presented to students that covered multiple Hip-Hop artists and cultures, including Queen Latifah, Flavor Flav, deejaying (DJ), and turntables. For the second lesson, Frida tasked students with creating a Hip-Hop group promotional package using items from SLL as inspiration. When asked why she chose to focus on hip-hop for her two lessons, Frida explained:

> Even though some people, parents even, don't like hip-hop or don't think it's 'real music,' it's one of the most popular music genres. It's what my kids listen to…why not foster that? Why not teach the musicality of hip-hop? And the kids love it…they had such a fun time with the promotional package activity. If it's relevant to my students, if it's what they listen to every day, if they feel represented…it's perfect.

Frida also conducted the most involved lessons using SLL of the three participants. Not only did Frida curate multiple "collections," she used SLL as the primary harbinger of instruction during the two lessons. Interestingly, Frida was also the only participant to have her students use SLL when students had to research items for the promotional package activity. This could be explained by several factors, including Frida's overall comfortability with SLL compared to other participants or the fact that she did not feel the "time crunch" of teaching instrumental ensembles like Will and Shea. Overall, Frida used SLL effectively, and multiple students proclaimed how much they enjoyed the two lessons using the platform.

Middle School Band

Shea teaches middle school band and orchestra classes for sixth- through eighth-grade students. They chose to teach the two SLL lessons for this study to her two sixth-grade beginning band classes that meet every day, including one brass and percussion class and one homogenous

woodwinds class. In both lessons, Shea created PowerPoints with images of objects pulled from SLL to teach short segments on Black composers and musicians. Shea focused on Black composers like Scott Joplin and Alton Adams for the first lesson. Then, in the second lesson, they taught about several Black performers, including Tom Wiggins Greene and John Coltrane. Due to the difficulties navigating the program, Shea downloaded images from SLL of objects used or created by these individuals and placed them in a PowerPoint. Explaining why she chose these composers and musicians to prioritize in her lessons, Shea stated:

> Well, even though I mentioned there isn't a ton of time to teach anything but instruments and the music we're working on, I do think it's important for the students to learn about important musical figures, especially Black musicians that my underrepresented students might see themselves in. They might eventually play a piece by Scott Joplin or Alton Adams and think, 'oh, I learned about them in band class.' I will likely keep introducing them to more musicians and composers when we have time and I think showing the instruments they used and things like that are helpful, too.

Despite Shea's difficulties with SLL, they still created meaningful experiences for their students using the program. Shea incorporated SLL the least of all participants due to the previously mentioned "time crunch" and their perceived user experience issues with the platform. However, even if Shea does not frequently create lessons focused on composers and musicians, she now has another technological tool to aid her in finding relevant materials for future lessons. Also, as she is the only participant who used SLL with a large ensemble class like band or orchestra, Shea has provided one model for large ensemble teachers who may only want to incorporate SLL, or other programs, in shorter segments due to time restraints.

High School Music Appreciation

Will teaches several courses for ninth- through twelfth-grade students at his high school, including multiple concert bands, jazz band, marching band, and music appreciation. For this study, Will conducted two lessons using SLL for his music appreciation classes, including students from all four grades. In the first lesson, Will used SLL to showcase musicians – like Little Richard – and objects from Rock & Roll music. Similarly, in the second lesson, Will used SLL to teach about Hip-Hop musical cultures. In his collections presented to students in each lesson, Will included objects, images, and videos from the SLL platform. Uniquely, Will was the only participant to use pre-existing collections from SLL to find appropriate materials for his own collections. Will found pertinent presentations on SLL made by other users on Rock & Roll and Hip-Hop, then transferred over items to his "collections" that he thought would enhance his lessons.

Each quarter, Will teaches various popular music genres to students, like Rock & Roll, Hip-Hop, and R&B, though he often changes what artists he includes in lessons. When asked about why he chose Rock & Roll for the first lesson and his students' response, Will explained:

> I go chronologically through each genre, starting with Rock & Roll then going into R&B and hip-hop…so this is a good starting place. So I talked about Chuck Berry and a couple other African American artists. Then I included Elvis and Buddy Holly because they had things in the Smithsonian as well…And the kids really liked the lesson because I was able to find some objects and videos that went really deep into stuff…the kids got to see the guitars from the museum displays. And then Chuck Berry's car, stuff like that…they actually were like, some of them literally sat up in their seat, and were…more interested in this lesson than other lessons that I teach. So I think because it [SLL] was new and different.

Will was also optimistic when describing the second lesson and his students' reactions to Hip-Hop:

> There are certain artists I'm trying to pull from…and kind of get more on the cultural aspect of hip-hop. Because while I talk about it, like me speaking about it as just like, a 31-year-old white guy, that doesn't really help them compared to seeing, like the actual stuff, or like, an object on display…and if there's an object on display, there's also a video that goes along with somebody explaining the object…the students really liked seeing the actual objects and live performances…I think it made it more real and relevant to them.

Of the three participants, Will was the most complimentary of SLL and the most willing to embrace using the program for future lessons, as detailed in the proceeding section. Although Will did not use SLL for any form of assessment and did not have his students use SLL on their own, he used the program to enhance the relevancy of his lessons and present familiar topics in a new way. It would be interesting to see how Will would utilize SLL in one of his band classes and how those students would react to the program, a consideration that Will expressed interest in exploring for future lessons in our final interview. As displayed with the previous participants, each teacher utilized SLL in varied ways, and the implementation of SLL by these three participants does not reflect how any teacher in a similar role would use the program.

How do music teachers perceive and practice culturally relevant pedagogy and object-based learning while using SLL?

Frida

Despite differences in their implementation of SLL, each participant in this study practiced some form of culturally relevant pedagogy and object-based learning in their lessons.

For Frida, her focus on Hip-Hop music in the two lessons using SLL demonstrated increased relevancy for her students. In her first lesson, Frida introduced Hip-Hop using various artifacts, including costumes, props, instruments, turntables, setlists, advertisements, and videos and audio clips of Hip-Hop performances. She reflects on the efficacy of this lesson:

> I've always shown my students videos and audio when teaching about Hip-Hop but including the objects in the presentation really caught their attention. We would watch videos of Flavor Flav being a hype man, and the students would see the clock…then they saw the clock in the SLL slideshow, and they could explore it and see how heavy it was, things like that, and read more about his activism. That's just one example…we would watch videos of famous DJs like Grand Wizzard Theodore, and then we explored his turntable that's on display at the museum [NMAAHC]. I think it blew the kids' minds that things used by Hip-Hop artists belong in a museum…that was really exciting for them.

In her second lesson, Frida tasked students with creating a Hip-Hop group promotional package, including a group name, sketches of costumes, and writing and recording a Hip-Hop verse. Students had to explore SLL in their groups to find inspiration for their promotions. Frida elaborates on her students' feedback regarding this project:

> This was one of the more special lessons I've done. Just like me, the students had a bit of a learning curve using the program [SLL], but they were just searching for objects to find inspiration, not creating collections. The level of creativity that they showed really surprised me…they came up with amazing names, and some of the more art-inclined students drew some amazing costume sketches…I think this project was just so meaningful for them. They listen to Hip-Hop every day, but they constantly have people

> saying it's not real music, all that. So for them to have a project that embraces Hip-Hop, and a platform that shows that Hip-Hop is in this huge museum, I think that really meant a lot to them.

Frida demonstrates core principles of culturally relevant pedagogy and object-based learning through music and museum education in these lessons. Her students experienced "active engagement with museum collections within a student-centred framework" (Chatterjee et al., 2016, p. 7), especially in the second lesson where students explored SLL independently. Students could also use these object-based experiences with SLL to combat notions that Hip-Hop was not a valid musical genre. This findings aligns with Bond's (2017) notion that "if repertoires are limited to Eurocentric traditions, students can become indifferent…when one way of musical knowing is held in greater esteem than others…the musicality of some communities is diminished" (p. 160). In her lessons, Frida subverted Eurocentric traditions and expectations by privileging a way of musical knowing that was more germane to her students' daily lived experiences. Ultimately, Frida created lessons using SLL that were meaningful and culturally relevant for students that also incorporated components of object-based learning.

Shea

The two lessons conducted by Shea that incorporated SLL also included components of culturally relevant pedagogy and object-based learning. Shea reflects on her first lesson, which focused on Black classical composers Scott Joplin and Alton Adams:

> Since my students are beginners, we haven't got to perform any music by Black composers yet and I don't think they learned about many Black composers in their elementary music classes…so this was a good opportunity for that. I had a Black student come to me after the lesson and say 'I didn't know I could write music.' So I'm glad I did

> the lesson and I will do more in the future. Not sure how much I'll use the museum program, but it may be helpful to find objects for composers. I need to do more research on underrepresented composers.

Like the first lesson, Shea's second lesson using SLL included a presentation on famous Black musicians like John Coltrane. When asked about the impact of this lesson, Shea explained:

> I think this lesson was more impactful since it covered a broader topic…kids were really excited to see musicians playing instruments like the saxophone and flute in a genre that wasn't just classical. And I think seeing Black musicians as well, since most of my students are not white…The museum seems to have more objects for popular musicians so I may use it more for presentations on that if I have time in my classes.

In these reflections, Shea describes several components of culturally relevant pedagogy and object-based learning. In both lessons, students learned about musicians who pushed musical and social boundaries in African American musical cultures. Each presentation utilized objects from SLL along with performance videos and audio clips, drawing a connection between musical performance and musical objects. Some students also demonstrated a feeling of representation, a vital part of culturally relevant pedagogy (McKoy & Lind, 2016). Despite some difficulty using SLL's platform, Shea crafted two relevant lessons, which included musical artifacts, that students felt represented by and that she may expand on in future lessons.

Will

Like Frida and Shea, Will's two SLL lessons involved several elements of culturally relevant pedagogy and object-based learning. Will describes the success of his first lesson, a presentation on Rock & Roll, specifically his use of musical objects from SLL. He states:

> It was cool for them to see, like actual real stuff that these artists used…my students really enjoyed it…I showed them Little Richard's outfits, and they were like, 'what the heck?' So I talked about how he was eccentric and his stage presence, we got to talk about his cultural impact…and I illustrated how the objects promoted their brand. Chuck Berry's cars were iconic, like he featured them in music videos. And Little Richard's clothes were part of his status…I talked about how these objects, how people perceive them because of these things and how it impacted their music…the students liked seeing the car and the clothes because it's not something they really thought about.

In his second lesson on Hip-Hop, Will again used objects from SLL and created a "collection" to teach the lesson. He elaborates:

> So similar to the first lesson, it was kind of a supplementary, enhancement lesson on the evolution of Hip-Hop…we talked about graffiti, breakdancing…we talked about the cars and culture and like, the lifestyle of the artists…it was a similar response to the first lesson where they really liked seeing the actual objects and all the videos…all the items in the collection are so detailed. It wasn't just, here's a picture and here's a description. It was, here's the object, here's what impact this object had on Hip-Hop. And I even learned a couple things about some artists that I was unfamiliar with.

Ultimately, Will crafted two lessons that were, like other participants, rich with culturally relevant materials centered around object-based learning. During his presentations, Will's students were excited to learn about musical artifacts and found the SLL platform novel and exciting, which "made it more real and relevant to them." Will had students interact deeply with multiple objects, mirroring Jia and Gou's (2023) finding that SLL allows teachers to "apply museum pedagogical strategies directly to object-based instructional activities, encouraging

meticulous observation and critical reflection on cultural and artistic works" (n.p.). Will and his students fully embraced the SLL platform in this study, and he plans to use the program for future lessons.

Considerations and Conclusion

SLL User Experience

Each participant in this study indicated various learning curves when learning how to use SLL, despite my professional development session and the guides for the program created by SI. Frida describes, "It was initially really difficult to search for objects, especially if you don't know exactly what you're looking for…maybe a specific guide for search would be helpful." Will also had some difficulty initially when searching for objects. He states, "It took me a second. Once I signed, I said, alright, what do I want to find…then I had to think back to your training and remember…then I just refined the search down and was able to filter stuff that I needed." Based on this study and others focused on SLL (Jia & Gou, 2023; Liguori & Rappoport, 2018; Zinger et al., 2017), the Smithsonian Office of Educational Technology may consider enhancing the user guides on SLL to include training on narrowing down search results and filtering objects to aid new users. As the collection housed on SLL is vast and contains millions of objects, more guidance on navigating the search process could be beneficial.

Teacher Knowledge of SLL

Additionally, Will and Frida explain how they did not know about SLL until they were involved in this study. Will states:

> I think it's a great tool. But I would never have known about it if you hadn't asked me to do this. So I guess, as a teacher, if we could figure out a way…to get it promoted better. And I've even talked about it to the faculty at my school now because I've used it. But I

> had never even thought that the Smithsonian…would have something like this. Something that was free, especially. Because a lot of stuff like this is paid. And it's a resource that covers I think literally every possible topic you could think of in school. And I'm glad I'm able to participate in it because it's helping me a lot as a teacher.

Like Will, Frida explains, "It is absolutely baffling to me that this is a free program but no one knows about it…we're not that far from it, and I don't know how every teacher isn't using it because of that."

Although SI does have some partnerships with school districts in the D.C. area and beyond, along with providing in-person professional development sessions on SLL, it would be beneficial to advertise SLL to more teachers, especially in the DMV region. This initiative would be a massive financial and logistical undertaking, but it would aid in their mission of having more classrooms incorporating and benefiting from the SLL platform. The SI Office of Educational Technology could offer virtual professional development beyond the beginning help guides housed on SLL. Logically, this project could begin with a local expansion in the D.C. area, then further expansion in the broader DMV area. The Office of Educational Technology may consider partnering with local (music) educational groups like Maryland Music Educators Association (MMEA) or with teacher education programs at area universities. A full proposal for this expansion is beyond the scope of this study, but making more teachers aware of and trained to use SLL would aid the program's goals.

Future Lessons

Student Curation

Each participant was asked if they would use SLL for any lessons in the future. Both Frida and Will reacted positively and intend to use SLL in varied ways. They particularly detailed notions of possible student curation activities. Frida explains:

> I'll definitely use the program [SLL] moving forward. I haven't really decided how yet, but the collection is just so massive…surely they have objects for any genre you can think of. And my kids really enjoyed exploring the collection…I may have my higher grade levels, like 4th and 5th grade, make their own collections based on music they're interested in and present them for the class. I really think they would engage with that because it's relevant to their interests.

Likewise, Will has plans for future music appreciation classes utilizing the SLL program. He states:

> I definitely will use it going forward. I usually do a project at the end of every unit. And with YouTube restrictions being really cranked up in my district, this is a great tool for the students to use, instead of what they have been doing…they have more direct access to, I think, a wider variety of information and material to pull from…my goal is to also figure out how to weave it into my lessons more. So it's not like a lesson and then a separate presentation using the program. That's my next goal is to incorporate it a little more seamlessly.

Frida and Will both explored ideas of having students use SLL to curate "collections" based on their musical interests, an exciting finding for this study. These reflections demonstrate the

potential for object-based learning and the SLL platform, providing a space for music educators to embrace museum education concepts that enhance their lessons' relevancy and engagement.

Uncertainty

Unlike Will and Frida, Shea demonstrated reluctance to use SLL for future lessons in her classrooms. She explains:

> I do think the presentations I did were pretty good, and the students seemed to enjoy them, but the program just is not for me, I don't think. Like I said before, I may pull objects from the program for these kinds of lessons, but I don't know if I'll learn the program [SLL] entirely. It just takes a lot of time and I could be using that time for other things, you know?

Like many teachers faced with new technologies in the music education classroom (Bauer & Dammers, 2016; Gall, 2013), Shea is hesitant to incorporate a new program into her lessons, especially as she has only been teaching for three years and may feel the need to stick closer to a traditional curriculum. Shea's reluctance could be due to their perceived "clunkiness" of the SLL platform or their limited extra time to devote to learning and implementing new technologies. Regardless, Shea utilized SLL effectively for her two lessons in this study.

Future Research

Additional research on music teachers' usage of SLL or other museums could benefit the music education and museum education fields. Continuing this study, I could recruit teachers from various parts of the United States instead of just those on the East Coast. Further, a survey study on teachers' use of SLL could provide evidence of more diverse implementations of the program in music classrooms. A full-scale program evaluation study using quantitative and qualitative methods could also describe more successes or challenges music teachers face when

learning SLL or other museum educational materials. Finally, research on students who use SLL under a music teacher's guidance could demonstrate how students interact directly and perceive relevancy with an object-based learning museum platform.

Conclusion

In this study, I present the perceptions and implementations of three music teachers using the SLL platform. Each participant had unique experiences with the platform, including successes and challenges. These findings present implications for SI's future usage and advertisement of SLL and how music educators utilize museum education platforms. Like any music teacher implementing new technology in their classroom, each participant implemented and perceived the SLL program uniquely and shared some common experiences. Despite any struggles with the SLL program, Frida, Shea, and Will created lessons that were unique, culturally relevant for students, and centered on object-based learning.

Chapter 7: "See You at the Crossroads" - Conclusion and Moving Forward

Introduction and Overview of Chapter

Through the three studies in this dissertation, I drew a throughline between the past, present, and future of *Musical Crossroads* at the National Museum of African American History and Culture (NMAAHC). As detailed in Chapters 1 and 2, although music exhibits are more frequently being developed in museums in the United States and internationally, *Musical Crossroads* is the only permanent music exhibit housed in a Smithsonian Institution (SI) museum as of this writing, making it a unique space to conduct this research. Additionally, even though the broader public views museums as places of learning (Crowley et al., 2014; Dudzinska-Przesmitzki & Grenier, 2008; Falk et al., 1998; Hooper-Greenhill, 1992, 1999; Sobel & Jipson, 2016), there is a shortage of research examining the intersections between music education and museum education. The three interrelated studies included in this document contend that *Musical Crossroads* is a rich site of music and learning, and each study explored this notion from different perspectives of individuals in the museum ecosystem.

In this concluding chapter, I provide a brief overview of each study, including research questions and general findings. Following this overview, I describe how these studies connect to form a unique contribution to music and museum education research. Additionally, I provide recommendations for future connections between music education and museum education fields, including possibilities for future research. To conclude the chapter, I reflect on my experiences conducting these studies and the future of *Musical Crossroads*.

Study 1: Creating *Musical Crossroads*

In the first study, detailed in Chapters 3 and 4, I conducted a narrative inquiry that details the creation and maintenance of *Musical Crossroads* (the *past*). I completed several oral history

interviews with three NMAAHC staff members, including music curator Dr. Dwandalyn Reece, curator Dr. Kevin Strait, and research assistant Ms. Hannah Grantham. In crafting the narrative, I traced the evolution of *Musical Crossroads*' creation through several key themes, including: (a) educational, professional, and musical backgrounds of participants; (b) the themes and objectives of *Musical Crossroads*; (c) the curation and collection process; (d) tensions in the development process; and, (e) the role of education in *Musical Crossroads*. These varied perspectives highlight how *Musical Crossroads* lies at the intersection of music education, museum education, and museum curation. I developed these research questions to guide this study:

1. What were the educational, professional, and musical backgrounds of individuals who developed *Musical Crossroads*?
2. What are the main themes present in *Musical Crossroads*?
    a. What is the layout of the exhibit?
3. What was the curation and collection process for *Musical Crossroads*?
4. What tensions arose between stakeholders in the *Musical Crossroads* development process?
5. What is the role of education in *Musical Crossroads*?

Participant Backgrounds

The three participants of this narrative inquiry had varied educational and professional backgrounds in music and museums. Dr. Dwandalyn Reece, the primary participant, obtained a Ph.D. in performance studies and worked at several music and non-music museums across the United States before assuming her position at NMAAHC. The two secondary participants, Dr. Kevin Strait and Ms. Hannah Grantham, had similar backgrounds in American studies and music

museums before joining the *Musical Crossroads* team. These backgrounds proved consequential in their work on developing and maintaining *Musical Crossroads*.

Exhibit Themes

Dr. Dwandalyn Reece developed five themes that permeated the entire *Musical Crossroads* exhibit:

1. The African roots of African American music.
2. Hybridization and the intermingling of musical styles and innovations, performance practices, cultural values and beliefs, and social behaviors.
3. Individual and collective expressions of agency and cultural identity as strategies of resistance and self-actualization.
4. The role mass media and the entertainment industries have had in extending the influence of African American music on American culture.
5. The music's global impact.

Dr. Reece (2016) wanted visitors to "engage with music within a social and historical context that illustrates the centrality of music to the African American experience and American cultural expression" (p. 1) and to "gain new perspectives in the way African American music is perceived" (p. 2). These five themes also guided the exhibition development team throughout the curation and collection process.

Curation and Collection

Curating and building a collection for *Musical Crossroads* initially took several years and is still ongoing after NMAAHC opened to the public. I identified three themes that framed the curation process: (a) the role of storytelling; (b) working with musical legends; and, (c) present and future collecting. The most crucial of these themes is the role of storytelling. Dr. Reece

states, “All of these things are the material culture of African American music…if an object allows you to tell a story, then it’s worth having. And if that’s a story you want your collection to tell…then it’s worth having.” Each visitor to *Musical Crossroads* decides how deeply they want to explore an object’s story, highlighting elements of informal learning (Taylor & Neill, 2008) that are paramount to the exhibit’s success.

The Role of Education

Musical Crossroads has a clear focus on informal learning opportunities for visitors and how material culture influences those learning experiences. Even though music or museum educators had minimal involvement in the exhibit’s development, Dr. Reece still focused on music education and musical literacy when developing *Musical Crossroads*. She states, “It is a different type of learning [informal learning] and a different type of space, and much more informal and much more subtle. Sometimes it’s quite obvious. But it also, it always is visitor’s choice.” The exhibit space, along with abundant educational programming offered by NMAAHC, allows a wide range of visitors to engage with African American musical cultures with a focus on informal learning and music education.

Limitations

In this study, I could only relay the narratives of museum staff members who were willing and able to participate. I contacted 11 different individuals who were previous or current NMAAHC and *Musical Crossroads* staff and garnered three participants. Some NMAAHC staff members who helped develop *Musical Crossroads* no longer work at NMAAHC or could not participate. Therefore, the narrative inquiry only contains the perspectives of the three participants, and their experiences are not universally applicable to other staff members.

Study 2: Visitor Experiences at *Musical Crossroads*

In the second study (the *present*), presented in Chapter 5, I surveyed *Musical Crossroads* visitors (n = 422) to examine their experiences and to determine if visitors were meeting the experiential and educational goals set by NMAAHC staff as detailed in Study 1. Survey items included questions on visitors' overall experience in the exhibit, how extensively they interacted with various exhibit elements, how much they learned about the exhibit themes developed by NMAAHC staff, and demographic items. These research questions guided this study:

1. What are the demographics of *Musical Crossroads* visitors?
    a. Do demographics influence how visitors experience the exhibit?
2. What forms of music learning are museum visitors experiencing in *Musical Crossroads*?
3. Are museum visitors meeting the educational and experiential goals set forth by NMAAHC staff?

Demographics

Visitors who completed the survey were consistent with the demographics of previous SI Smithsonian Institution Office of Policy and Analysis, 2012) and NMAAHC (Dorman, personal communication, 2023) surveys. Of the visitors surveyed, 44.79% were male, 51.90% were female, and 3.32% were non-binary/third gender. Nearly half (49.05%) identified as Black, 33.89% as white, 12.80% as Asian, 3.55% as Latinx, and 0.71% as American Indian/Native American. Most respondents (54.27%) were visiting NMAAHC for the first time. Survey results indicated a higher proportion of Black respondents than in previous SI studies (Smithsonian Institution, 2015), likely due to NMAAHC's popularity influencing a more diverse visitor demographic.

Visitor Experiences

Survey respondents had a generally positive overall experience visiting *Musical Crossroads*, with almost all (86.40%) indicating Superior, the highest ranking. Most visitors found that "seeing rare, valuable, or uncommon items related to African American musicians" (85.78%) and "gaining information" (75.12%) were especially satisfying components of their visit. Respondents also thought that *Musical Crossroads* "represented a diverse array of identities and musical genres" with 82.23% indicating Very Diverse.

Visitor Interaction

In an item on what exhibit elements visitors interacted with, the highest number of respondents selected "looked at the artifacts" (72.51%) and "read artifact texts" (51.46%). Visitors also interacted frequently with the exhibit's "Neighborhood Record Store" interactive space (60.0%). A similar item asked what elements visitors thought could improve the space. The most selected responses were "more information about current African American musicians" (54.50%) and "more objects" (34.36%). These survey items illustrate that visitors were having typical informal learning experiences in a musical museum space, especially viewing objects and interacting with digital elements.

Concepts and Themes

Two survey items asked visitors if they learned about concepts and themes developed by NMAAHC staff as outlined in Study 1. Each item response was selected by at least three-quarters of respondents, with the highest being "African American music innovates musical styles and performance practices" (95.97%) and "African American musicians use music to express their identity" (92.89%). These results indicate that visitors learn about these key themes

through various exhibit components and explore broader musical concepts beyond just looking at artifacts.

Limitations

While these survey results reflect how visitors interacted with and reported learning from *Musical Crossroads*, the findings do not demonstrate visitor emotions or individual meaning-making experiences, and do not measure learning. Also, due to the relatively low response rate (10.4%), these results are not generalizable to every *Musical Crossroads* visitor. However, I did calculate that a sample size of 376 (Gill et al., 2010) was needed for a 95% confidence level, 50% population variability, and a ±5% margin of error, so that threshold was met.

Study 3: Music Teachers' Perceptions of Smithsonian Learning Lab

For the third and final study (the *future*), as detailed in Chapter 6, I completed a multiple case study of three music teachers who used the Smithsonian Learning Lab (SLL) to conduct two lessons related to African American musical cultures. SLL is an online educational platform created by the SI Office of Educational Technology (OET) that allows users to access millions of artifacts and other materials from all museums across the SI complex. Describing the purpose of SLL, the OET (n.d.) writes, "By encouraging users to create and share personalized collections of Smithsonian assets and user-generated resources, the Learning Lab aspires to build a global community of learners who are passionate about adding to and bringing to light new knowledge, ideas, and insight" (n.p.).

The purpose of this multiple case study was to ascertain music teachers' perceptions and implementations of SLL in their classrooms incorporating items from NMAAHC's music collections. Three participants attended a one-hour professional development session on using the program and then designed two lesson plans that utilized the SLL platform. The scope and

content of each lesson were left entirely up to each participant. I then held three 30- to 60-minute interviews with each participant: before the first lesson, after the first lesson and before the second lesson, and after the second lesson. I utilized the following research questions for this study:

1. What are the experiences of music teachers who use SI Learning Labs in their classrooms?
2. How do music teachers who teach various specialties and grade levels incorporate NMAAHC and *Musical Crossroads* materials in their classrooms?
3. How do music teachers perceive and practice culturally relevant pedagogy and object-based learning while using SLL?

Participant Experiences with SLL

Study participants Frida, Shea, and Will had varied experiences using the SLL platform. Each participant was initially nervous about using a new technology, as is common with most classroom teachers (Ertmer et al., 2012). Frida and Will ultimately had positive experiences with the platform. Frida states, "Initially, the program seemed kind of clunky…once I started treating it as a supplementary program…I was less stressed…overall I think it's an amazing resource, especially since it's free." Will concurred, saying, "It's pretty straightforward…it's just like cut and dry…that's my kind of resource."

Alternatively, Shea had issues with the SLL program. She explains, "It was overwhelming…you have to know a specific person or else you get an endless list of items…I ended up just using images from the program and adding them to my own PowerPoint." These findings align with literature on new technology use in classrooms (Agnew, 2009; Ertmer et al., 2012), especially studies on SLL specifically (Jia & Guo, 2023; Zinger et al., 2017). Some

teachers pick up new programs quickly while others find them cumbersome and are reluctant to change.

Varied Grade Levels and Classes

Each participant teaches different grade levels and sub-categories of music classes. Frida is an elementary school general music teacher, Shea is a middle school band and orchestra teacher, and Will is a high school band and music appreciation teacher. Frida incorporated SLL into her lessons most of all participants and was the only participant who had students use the program for an assignment. Frida used SLL to teach two lessons on the evolution of Hip-Hop, ultimately tasking students with creating a Hip-Hop group promotional package inspired by items in NMAAHC's collection. This embracing of SLL could be due to Frida's comfort with the program or her not feeling a "time crunch" of teaching instrumental ensembles like Shea and Will.

Shea conducted two lessons on Black composers and musicians, including legendary artists like Scott Joplin and John Coltrane. She thought it was "important for the students to learn about…Black musicians that my underrepresented students might see themselves in." Shea also assessed students on these presentations with a short quiz after each lesson. Due to the time pressures of teaching a large ensemble class and difficulties using SLL, Shea did not use the SLL program as much as other participants for their lessons. However, Shea is the only participant who taught large ensemble classes for this study, so her usage of SLL may reflect other large ensemble teachers' implementations of SLL if this study was replicated in the future.

Will taught two lessons, one on Rock & Roll and one on Hip-Hop, for his music appreciation classes. Although Will did not use SLL for any form of assessment like Shea and Frida, he used the program as an enhancement tool, which increased his students' engagement

with the lessons. Will also had the most positive comments about using SLL of the three participants and plans to use the program more in the future.

Culturally Relevant Pedagogy and Object-Based Learning

The three participants in this study demonstrated varied components of culturally relevant pedagogy and object-based learning during their lessons using SLL. Frida's two lessons enhanced overall relevancy for her students, stating, "I think it blew the kids' minds that things used by Hip-Hop artists belong in a museum…that was really exciting for them…for them to have a project that embraces Hip-Hop…I think that really meant a lot for them." Frida also demonstrated elements of object-based learning by utilizing musical artifacts found on SLL in her presentations and by having her students use NMAAHC objects for inspiration. Her students experienced "active engagement with museum collections within a student-centred framework" (Chatterjee et al., 2016, p. 7), especially in the second lesson where students explored SLL independently.

Shea's lessons also included components of culturally relevant pedagogy and object-based learning. Reflecting on her lessons, she says, "I don't think they learned about many Black composers in their elementary music classes…kids were really excited to see musicians playing instruments…in a genre that wasn't classical…And I think seeing Black musicians as well." In both of Shea's lessons, students learned about Black musicians who challenged pre-existing notions of who can perform music and what music they can perform. Shea also used objects from SLL along with performance videos, drawing a connection between musical performances and musical objects for her students.

Finally, Will crafted two lessons containing culturally relevant pedagogy and object-based learning principles. He states, "It was cool for them to see, like actual real stuff that these

artists used…I talked about how objects…how these things impacted their music…the students liked seeing the car and the clothes because it's not something they really thought about." Will's students showed increased engagement in the lessons when analyzing musical objects used by artists they knew and enjoyed. Additionally, Will allowed his students to interact deeply with multiple musical objects, aligned with Jia and Gou's (2023) assertion that SLL lets teachers "apply museum pedagogical strategies directly to object-based instructional activities, encouraging meticulous observation and critical reflection on cultural and artistic works" (n.p.). Will plans to increase his use of SLL in future lessons, including projects where students can "curate" their own "collections" on the SLL platform.

Limitations

Although this study contains multiple teachers of various specialties and grade levels, their experiences and uses of the SLL program are not generalizable to other music teachers. While this study has interesting complications and considerations for music teachers' usage of SLL, these three individual experiences are not identical to any other music teacher who may use the program in the future. The three participants in this study even have some contradictory experiences in both their perceptions and implementations of the SLL program. Another limitation was the inability to have the participants work with and learn from each other due to scheduling issues. Some participants who had issues using the program may have found solace in commiserating with other participants and not just the researcher.

Connections, Contributions, and Future Research

Connecting the Studies

Through these three interrelated studies, I have drawn a throughline between the past, present, and potential future of *Musical Crossroads* and for music and museum education

connections more broadly. In the first study, I crafted a narrative on the creation of *Musical Crossroads* based on the lived experiences of NMAAHC staff, representing the *past* of the exhibit and how it came to life. These findings directly influenced the second study, which surveyed *Musical Crossroads* visitors. I created survey items primarily based on findings from Study 1, including questions on how visitors interacted with the exhibit, what musical genres they were drawn to, and what they learned about during their visit. This survey study represents *Musical Crossroads*'s *present*, an examination of how visitors are meeting the goals of the exhibit as developed by NMAAHC staff.

Finally, the third study evaluated music teachers' perceptions and implementations of the SLL platform, which NMAAHC has embraced through various programming for current teachers. Although not a direct reflection of an onsite experience at *Musical Crossroads*, this study shows a logical next step, the *future*, for the music and museum education fields. Providing music teachers with a free digital platform to incorporate objects from the world's largest museum complex into their classrooms yields exciting possibilities for how music and museum education can intertwine. Additionally, many other museums with music exhibits offer free educational resources. This study serves as an initial evaluation of how music teachers can utilize these programs regardless of proximity to those museums.

Revisiting the Theoretical Framework

In Chapter 1, I introduced a theoretical framework that connects music and museum education research and practice (see Figure 1.1). Music and museum education share common pedagogies, especially the concepts of informal learning, culturally relevant pedagogy, and research-practitioner partnerships. In each of the three studies, I showcased various combinations of these common elements. In Study 1, the narratives of Dr. Reece and NMAAHC staff highlight

how informal learning and culturally relevant pedagogy are integral to the creation of *Musical Crossroads* and to the ongoing visitor experience. Study 2 measures that visitor experience, focusing on the informal learning opportunities and cultural relevancy present in *Musical Crossroads*. Finally, in Study 3, I examine how a potential research-practitioner partnership between a music and museum education researcher and a practicing music teacher could result in novel uses of museum resources in various music classrooms.

The intersections between informal learning, culturally relevant pedagogy, and RPP in music education and museum education research present a unique space for expanding both fields and improving the music educational experiences of museum visitors and other stakeholders. This theoretical framework served as the foundation for each of the three studies and was crucial in framing this initial foray into music and museum education research.

Contributions to Music and Museum Education and Future Research

Music education at the intersection of museum education is a rich combination that offers exciting potential for both fields to advance. The three studies contained in this dissertation provide an initial starting point in addressing the lack of literature on this intersection. Each of these studies highlights the use of varying research methods and provide potential pathways for future research on connecting music and museum education.

In Chapters 3 and 4, I present a narrative detailing the experiences of three NMAAHC staff members on the development and maintenance of *Musical Crossroads*. Narrative inquiry is an increasingly popular method in music (McCarthy, 2007; Stauffer, 2020) and museum education research (Carter, 2018; West, 2012). In music education, these studies typically involve examinations of music teachers (Hartman et al., 2020; Richardson, 2006) and students (McConnell, 2019), while in museum education, researchers provide narratives of curators

(Kerby & Baguley, 2010) and museum educators (Spiers, 2022). While there is literature on music exhibits in museums (Baker et al., 2016; Fairchild, 2017; Leonard, 2010), this study examines the perspectives of three museum staff members who actively worked on a permanent music exhibit with a focus on music education. Although music or museum educators had minimal involvement in creating *Musical Crossroads*, I filtered the participants' stories through a music education lens and demonstrated how musical learning was a priority among exhibit developers. This focus on musical learning firmly situates this study at the crux of music and museum education scholarship.

Future research based on this study could involve further qualitative study of individuals who developed or currently maintain music exhibits in museums. Many small and large museums in the United States and internationally are explicitly dedicated to music, like the Rock and Roll Hall of Fame, the National Museum of African American Music, the Grammy Museum, and others. Unearthing the varying processes of creating music learning spaces in these institutions may complement or contradict the experiences of participants in this study. Additionally, research on the experiences of museum educators who specifically worked on music exhibits could produce new perspectives on this topic, as their goals likely differ from curators and design staff.

In Chapter 5, I conducted a survey study of current *Musical Crossroads* visitors. Survey methods are especially prevalent in museum education and visitor studies research (Davidson et al., 2010; McManus, 1987, 1988; Pekarik et al., 1999), though few studies survey visitors of music exhibits specifically (Smithsonian Institution Office of Policy and Analysis, 2011, 2012). Using key themes expressed by the participants of Study 1, I created a visitor survey containing foundations in music and museum education pedagogies. Visitors were asked how they

interacted with the exhibit, what parts of the exhibit they enjoyed the most, and what concepts or themes they learned about during the visit. By including these items that asked about visitors' educational experiences in *Musical Crossroads*, I ensured that the survey was relevant and novel to music and museum education research.

Like Study 1, future research based on this survey could involve similar studies at other music exhibits or museums, like those mentioned previously. It would be fascinating to compare the results of this study to those completed at different museums and if visitors had similar or different experiences. Additionally, researchers could complete future qualitative studies on *Musical Crossroads* visitors, allowing participants to share detailed thoughts and reactions to the exhibit compared to the survey results.

Finally, in Chapter 6, I completed a multiple case study of music teachers implementing SLL in their classrooms. Multiple case studies are prevalent in music education research, especially in classroom and community music instruction (Giebelhausen & Kruse, 2017; Menard, 2015; Sutela et al., 2020; Vasil, 2019). Further, research on new classroom technologies is present in music education (Bauer et al., 2003; Wise et al., 2011) and museum education (Kali et al., 2014; Huffman et al., 1998). More research is needed on the use of museum technology, specifically SLL, in music classrooms. This study expands on previous research on music and museum education technology in classrooms and examines new tools that music educators can incorporate into their teaching.

Future research based on Study 3 could include replication and expansion, specifically in completing a similar study with more participants. Although no participant experience will be universal, garnering feedback on the user experience and implementations of SLL or other museum resources in music classrooms would be beneficial. Similar studies could also utilize

varying methods to examine this issue further, including surveys, experiments, or mixed methods research.

Recommendations

Based on these studies, I have determined several recommendations for SI/NMAAHC and the music and museum education fields. In Study 1, Dr. Dwandalyn Reece expressed that there was minimal involvement from museum educators in the development of *Musical Crossroads*, despite the team's focus on musical literacy. Moving forward, especially as *Musical Crossroads* may have a large-scale renovation in the coming years, it would be pertinent for NMAAHC or the SI Music team to hire a museum educator with a music education background. This person(s) could ensure that the current *Musical Crossroads*, any future iterations of the exhibit, and music-based programming at NMAAHC are grounded in music education pedagogy. Additionally, a music educator could aid other SI museums with music exhibits or programming, benefitting the entire SI complex. Finally, an on-staff music educator could be tasked with creating more music-specific SLL "collections," making the program and SI collections more accessible to working music teachers who are new to using museum resources in their classrooms.

As music and museum education fields progress, I would encourage more research on the connections between music and museums. In Study 3, the three participants used a museum-based technology to craft lessons steeped in culturally relevant pedagogy and object-based learning. This finding reveals that museum resources have the potential to positively transform music classrooms, fostering increased student engagement and feelings of representation. Music education researchers can also learn a great deal from museum settings. As the concepts of informal learning and culturally relevant pedagogy gain more popularity in music education

research and practice, examining the practices of museum educators can shed new light on ways to develop meaningful and relevant experiences for music teachers and students. Music teacher educators especially can introduce preservice music teachers to museum resources that they can use in their future classrooms. In summary, the connection between music and museum education research and practice is relatively new, and these recommendations serve as a starting point in developing this relationship further.

Final Reflection – At the Crossroads

On my final day of conducting surveys at *Musical Crossroads*, I decided to take a trek through the entire museum. It had been months since I visited the history galleries on the lower levels, as most of my time at NMAAHC since starting this research had been spent at *Musical Crossroads*. On the main level of NMAAHC, the entrance hall, there is a constant flow of visitors. Families chatting about their time in Washington, D.C., couples bringing their children to a museum for the first time, or individuals browsing the well-stocked museum shop. It is still a museum, so the visitors are not loudly talking, but there is a constant noise that is expected at the entrance to any large museum. As I descend the stairs to the history galleries below, an always-surprising quiet sweeps over me. The first history gallery, which documents the origins of the trans-Atlantic slave trade, is dark, and features sounds of crashing waves. No matter how many times I visit this gallery, the silence compared to the space one level above is always profound. Concurrently, the *Musical Crossroads* space at the top of the museum is a cavalcade of noise. While the exhibit is a celebration of African American music and musicians, it also narrates the pain and struggles that these artists faced when creating their own unique musical cultures.

This anecdote serves as a small reflection of this work's profound impact on me. I have met many individuals during my research at NMAAHC, including security guards, curators,

research assistants, visitor services staff, docents, and tour guides, among others. I asked each person I met, “What is your favorite part of the museum?” There are always many answers, from the history galleries to the sports exhibit to the museum shop. Some asked me the question back, and I steadfastly replied, “*Musical Crossroads*.” I visited NMAAHC for the first time in June 2017. Although I had always loved museums, NMAAHC was different. The power of the scale, scope, and craft of NMAAHC was powerful, and I returned home eager to find out how I could talk about the music exhibit in my classroom. Now, the museum serves as the site of this research and hopefully the beginning of more rich connections between music and museum education.

The stories told in this dissertation illustrate NMAAHC and *Musical Crossroads* as a vibrant space brimming with opportunities for music teaching and learning. Through a comprehensive exploration of *Musical Crossroads*'s past, present, and potential future, these studies add a valuable layer to our understanding of how museums can be potent (music) educational spaces.

Finally, as I reflect on this research, *Musical Crossroads* emerges as a beacon, demonstrating how the fusion of music and museum education can create an immersive and transformative experience for visitors. The objects in the exhibit harmonize to tell stories of musical resilience and triumph, inviting visitors to learn about and reflect on this rich cultural medium. Bolstered by a team of dedicated individuals who believe in the transformative power of musical storytelling, *Musical Crossroads* has a bright and promising future.

Appendix A

IRB Documents

1. UMD IRB Non-Human Subject Research Determination Form for Study 1
2. UMD IRB Approval Letter for Study 2
3. SI IRB Approval Letter for Study 2
4. UMD IRB Approval Letter for Study 3

UMD IRB Non-Human Subjects Determination Form

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INSTITUTIONAL REVIEW BOARD

1204 Marie Mount Hall
College Park, MD 20742-5125
TEL 301.405.4212
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irb@umd.edu
www.umresearch.umd.edu/IRB

DATE:	June 23, 2023
TO:	Christian Folk
FROM:	University of Maryland College Park (UMCP) IRB
PROJECT TITLE:	[2071166-1] Experiential and Educational Goals of "Musical Crossroads" at NMAAHC
SUBMISSION TYPE:	New Project
ACTION:	DETERMINATION OF NOT HUMAN SUBJECT RESEARCH
DECISION DATE:	June 23, 2023

Thank you for your submission of New Project materials for this project. The University of Maryland College Park (UMCP) IRB has determined this project does not meet the definition of human subject research under the purview of the IRB according to federal regulations.

We will retain a copy of this correspondence within our records.

If you have any questions, please contact the IRB Office at 301-405-4212 or irb@umd.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Maryland College Park (UMCP) IRB's records.

UMD IRB Approval Letter for Study 2

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DATE:	July 18, 2023
TO:	Christian Folk
FROM:	University of Maryland College Park (UMCP) IRB
PROJECT TITLE:	[2077411-1] Visitor Experiences at Musical Crossroads
SUBMISSION TYPE:	New Project
ACTION:	DETERMINATION OF EXEMPT STATUS
DECISION DATE:	July 18, 2023
REVIEW CATEGORY:	Exemption category # 45CFR46.104(d)(2)(i-ii)

Thank you for your submission of New Project materials for this project. The University of Maryland College Park (UMCP) IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

We will retain a copy of this correspondence within our records.

If you have any questions, please contact the IRB Office at 301-405-4212 or irb@umd.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Maryland College Park (UMCP) IRB's records.

SI IRB Approval Letter for Study 2

MEMORANDUM

TO: **Christian Folk**
SUBJECT: **Research Protocol Involving Human Subjects**
DETERMINATION DATE: **July 6, 2023**
TITLE: **Music Teaching and Learning at NMAAHC**

PROTOCOL NUMBER: HS23030

This is to advise you that the Institutional Review Board for Human Subjects Research has determined that your research protocol received June 27, 2023 is exempt research under paragraph 2a of the Exemption section of Smithsonian Directive 606. Provided there are no changes to your research project or key personnel, you do not need to submit your project for continuing review and you do not need to submit progress reports to the IRB.

Personally Identifiable Information: Collection, use, storage or dissemination of personally identifiable information, as defined in Smithsonian Directive 118, is subject to review and approval by the Smithsonian Privacy Office, prior to initiation of the project.

Changes or Amendments: If you plan to make changes in your protocol, please submit these changes immediately to the IRB for further review, using HSR-04, Amendment to Approved Protocol form. Please submit proposed personnel changes by email request, including training certifications. The proposed changes may not be initiated without IRB review and approval, except where necessary to eliminate apparent immediate hazards to research subjects. The currently approved project personnel are Christian Folk and Dwandalyn Reece. Please note that all personnel must provide current Human Subject training certification, completed within the last 24 months, to be approved for new protocols, modifications and continuing renewals.

Adverse Events: Any injuries or other unanticipated problems involving risks to research subjects or others resulting from this study must be reported promptly to the IRB (ResearchCompliance@si.edu). If the problem is serious, approval may be withdrawn pending further review by the committee.

Completion of Study and Record Retention: You will receive an annual protocol check-in notification, to ask about your project status and whether the study is still ongoing. Please notify the IRB Office as soon as the research has been completed. Study records, including full protocols and any signed consent forms (originals) for each subject, must be kept in a secured location by the investigator for 3 years following the study's completion.

If you have any questions, please contact the IRB Office by phone or email at the address below. All forms referred to herein are available from the Research Compliance Officer.

Smithsonian Institution Research Compliance Office
Telephone 202.633.7118 FAX 202.312.1981
ResearchCompliance@si.edu

UMD IRB Approval Letter for Study 3

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DATE:	August 3, 2023
TO:	Christian Folk
FROM:	University of Maryland College Park (UMCP) IRB
PROJECT TITLE:	[2082737-1] Music Teachers' Perceptions of Smithsonian's Learning Labs
SUBMISSION TYPE:	New Project
ACTION:	APPROVED
APPROVAL DATE:	August 3, 2023
REVIEW TYPE:	Expedited Review
REVIEW CATEGORY:	Expedited review category #7.

Thank you for your submission of New Project materials for this project. The University of Maryland College Park (UMCP) IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

Prior to final approval of this project scientific review was completed by the IRB Member reviewer.

This submission has received Expedited Review based on the applicable federal regulations.

This project has been determined to be a MINIMAL RISK project.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Unless a consent waiver or alteration has been approved, Federal regulations require that each participant receives a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please use the appropriate Amendment forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others (UPIRSOs) and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please use the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should also be followed. All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

Please note that all research records must be retained for a minimum of seven years after the completion of the project.

If you have any questions, please contact the IRB Office at 301-405-4212 or irb@umd.edu. Please include your project title and reference number in all correspondence with this committee.

Appendix B

Data Collection Instruments

1. Sample Interview Protocol for Study 1
2. Survey Instrument for Study 2
3. Sample Interview Protocol for Study 3

Sample Interview Protocol for Study 1

For this interview protocol, I follow Lareau's (2021) framework for developing an interview guide. They state, "interview guides are open-ended questions that help you reveal what you want to learn in the study…there should be six or so main questions with numerous small questions (or probes) to elicit additional detail" (p. 74). Lareau also recommends identifying several key themes of the study and listing them at the beginning of the interview guide.

Research Project

This study is a narrative inquiry examining the creation of the *Musical Crossroads* exhibit at NMAAHC. The main method of inquiry for this study is a series of interviews with the lead music curator of NMAAHC, Dr. Dwandalyn Reece, and shorter interviews with other individuals involved in creating *Musical Crossroads*. I frame this narrative inquiry through the concepts of informal learning and culturally relevant pedagogy, determining how curators and other individuals at NMAAHC developed experiential and educational goals for museum visitors.

Interview Guide

Key Themes (for interview #1)

1. **Background and experience**
2. **Beginnings at NMAAHC**
3. Curating *Musical Crossroads*
4. Collaboration
5. Experiential and educational goals
6. Programming (past, present, and future)

This interview guide will only include themes 1 and 2 to adhere to the 60-90 minute interview time.

Background and experience

1. Tell me about your life and educational experiences before you began working at NMAAHC, as you are comfortable
    a. **Probes:**
        i. What were your early experiences with music? Music education? Musicology?
        ii. What was your experience in musicology graduate programs?
        iii. Tell me about your professional experiences before NMAAHC
        iv. Did you have any interest in museum work during your early professional career?

Beginnings at NMAAHC

1. Can you take me through the early stages of how you came to work at NMAAHC?
    a. Did you begin working for the SI before NMAAHC or was NMAAHC your first position?
    b. Were you recruited? Did you apply for a certain position?
2. What initial work did you complete in curating *Musical Crossroads*?
    a. Was there already a large music collection?
    b. Did you have to solicit donations of items?
3. What timeline were you working under when you began?
    a. How many staff members/departments worked with you?
    b. How long did you have to curate *Musical Crossroads* before the museum opened?

c. Were you given a set of parameters for curation or were more decisions left up to your professional judgement?

d. (More in-depth curation questions in next interview)

Survey Instrument for Study 2

Start of Block: Consent

This research is being conducted by Christian Folk, a doctoral student in music education at the University of Maryland, College Park. We are inviting you to participate in this research project because you are a visitor to the Musical Crossroads exhibit at The National Museum of African American History and Culture. The purpose of this research project is to determine your learning experiences within this exhibit. You must be 18 years or older at the time you are taking the survey.

This survey focuses on your experiences with various components of the exhibit. The survey also includes questions about your demographic information. This survey will take approximately 5 to 10 minutes to complete. There are no known significant risks involved with being a participant in this study. You may skip any questions you do not wish to answer or end your participation at any time. No personally identifiable information will be obtained in the survey. You may elect to email a copy of your survey responses to yourself at the end of the survey, but your email address will not be collected or stored.

There are no direct benefits from participating in this research. However, possible benefits include contributing to and advancing knowledge on the impact of this exhibit. Any potential loss of confidentiality will be minimized by storing data in a password-protected computer in password-protected folders. All survey data will be stored in these protected folders. I will be the only individual with access to this data. If I write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law. No identifiable information will be collected during this study.

You will not be compensated for participation in this study. Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or

if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator:
Christian Folk
2110 Clarice Smith Performing Arts Center, College Park, MD 20742
cfolk1@umd.edu
803-240-1082

If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:
University of Maryland College Park Institutional Review Board Office
1204 Marie Mount Hall College Park, Maryland, 20742
E-mail: irb@umd.edu
Telephone: 301-405-0678
IRB Number: 2077411-1
For more information regarding participant rights, please visit:
https://research.umd.edu/research-resources/research-compliance/institutional-review-board-irb/research-participants This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.

If you understand the statements above and freely consent to participate in this study, please check the box below. By checking the box, you are consenting to take part in this study as outlined above.

☐ I consent to participating in this study.

End of Block: Consent

Start of Block: Museum Experience

Is this your first visit to the National Museum of African American History and Culture (NMAAHC)?

Yes

No

I'm not sure

Is this your first visit to the "Musical Crossroads" exhibit?

- Yes
- No
- I'm not sure

Did you come to NMAAHC today specifically to see the "Musical Crossroads" exhibition?

- Yes
- No
- I'm not sure

Please rate your overall experience with the "Musical Crossroads" exhibit:

- Poor
- Fair
- Good
- Excellent
- Superior

Which experience(s) did you find especially satisfying in this exhibition?

- [ ] Being moved by the musical experiences of African American musicians
- [ ] Connecting with the emotional experiences of African American musicians
- [ ] Enriching my understanding of African American music and musicians
- [ ] Gaining information
- [ ] Recalling memories
- [ ] Reflecting on the meaning of what I saw
- [ ] Seeing rare, valuable, or uncommon items related to African American musicians
- [ ] Feeling a connection to African American musical culture/history

How much of the following did you do in this exhibit?

	None	Very Little	Some	Most/All
Used the museum's mobile app				
Read artifact texts				
Looked at the photos				
Looked at the artifacts				
Interacted with the "In the Studio" display				
Interacted with the "Neighborhood Record Store"				

Which sections of the exhibit based on musical genres did you encounter during your visit?

- [ ] Classical
- [ ] Sacred
- [ ] Jazz
- [ ] Stage and Screen
- [ ] Funk
- [ ] Go-Go
- [ ] Hip Hop
- [ ] Rock and Roll
- [ ] R&B/Soul
- [ ] Blues/Folk/Country
- [ ] Roots

Are there any genres of music that you will explore further after your visit based on what you learned in the exhibit?

- [ ] Classical
- [ ] Sacred
- [ ] Jazz
- [ ] Stage and Screen
- [ ] Funk
- [ ] Go-Go
- [ ] Hip Hop
- [ ] Rock and Roll
- [ ] R&B/Soul
- [ ] Blues/Folk/Country
- [ ] Roots

Please indicate which of these ideas you took away from this exhibition (mark one or more):

- ☐ African American musicians had robust involvement in popular American music
- ☐ Early African American musicians opened doors for present day African American musicians
- ☐ Social change set the background for African Americans to make important contributions to music
- ☐ Music has the ability to transcend ethnicity
- ☐ African American musicians made key contributions to popular music genres from 1800 to today
- ☐ Some African American musicians use popular music genres to express their identity
- ☐ Other: _____

Which of these concepts did you learn about through your visit to the exhibition?

- [ ] The African Roots of African American music
- [ ] How African American music innovates musical styles and performance practices
- [ ] African American music being used as expressions of cultural identity and resistance
- [ ] The role media and entertainment industries have influenced African American musical cultures
- [ ] African American music's global impacts

Did you feel that the musicians and artifacts on display represented a diverse array of identities and musical genres?

- Not at all
- A little
- Somewhat
- Very

Which of the following would have improved the exhibition for you?

- [ ] More objects
- [ ] More photographs
- [ ] Larger photographs
- [ ] More hands-on displays
- [ ] More stories about the musicians' personal lives
- [ ] More information about current African American musicians
- [ ] Other: _____
- [ ] No changes needed

What is the most interesting thing you learned during your visit to "Musical Crossroads"?

_____

Do you have any other comments regarding your experience visiting the "Musical Crossroads" exhibit?

_____

End of Block: Museum Experience

Start of Block: Demographics

The following information is for descriptive purposes only. It will not be used to individually identify you in any way. You may omit any answers you do not wish to provide.

What is your age?

_____

Please identify your gender:

Male

Female

Non-binary / third gender

Other (please identify): _____

Please identify your race and/or ethnicity (select all that apply):

☐ American Indian or Alaska Native

☐ Asian

☐ Black/African American

☐ Latinx/Hispanic

☐ Native Hawaiian or Other Pacific Islander

☐ White

☐ Other (please identify)

_____

Please identify your highest level of education:

- No schooling completed
- Pre-Kindergarten to 8th Grade
- Some high school, no diploma
- High school graduate, diploma, or equivalent (for example: GED)
- Some college credit, no degree
- Trade/technical/vocational training
- Associate's degree
- Bachelor's degree
- Master's degree
- Professional degree
- Doctorate degree

With whom are you visiting? (mark one or more)

- ☐ I am alone
- ☐ Other adult(s)
- ☐ Child(ren) under 18

End of Block: Demographics

Start of Block: Email Responses

If you would like a copy of the consent form and your responses to this survey, please enter your email address below. Your email address will not be collected or saved.

_____

End of Block: Email Responses

Sample Interview Protocol for Study 3

Learning Labs Interview #1 Questions

1. What grades do you teach and what music subject area(s) do you teach? (band, strings, general music, choir, etc.)?

2. What is your age?

3. What is your race/ethnicity?

4. How long have you been teaching?

5. What excites you about using Learning Labs in your classroom?

6. What concerns you about using Learning Labs?

7. What interests you in teaching lessons about African American music in your classroom?

8. What topics about African American music will you teach in the upcoming lessons?

9. Do you have any initial ideas about what objects you might use from Learning Labs?

Learning Lab Interview #2 Questions

1. What went well during your first lesson?

2. What, if any, did not go well during your first lesson?

3. What topic did you focus on in your lesson?

4. What was it like using the Learning Labs program to teach the lesson?

5. How did your students react during the lesson?

6. Did you find using Learning Labs beneficial?

7. What will you change as you go into your second lesson? What topics will you teach in the next lesson?

8. Do you have any other thoughts or feedback on the first lesson or on Learning Labs?

Learning Lab Interview #3 Questions

1. What went well during your second lesson?

2. What, if any, did not go well during your second lesson?

3. What topic did you focus on in your lesson?

4. What was it like using the Learning Labs program to teach the lesson?

5. How did your students react during the lesson?

6. Did you find using Learning Labs beneficial?

7. Do you have any other thoughts or feedback on the first lesson or on Learning Labs?

Appendix C

Training Presentation for Study 3

SMITHSONIAN LEARNING LABS

CHRISTIAN FOLK

GETTING STARTED

- What is Smithsonian Learning Lab?
- Creating an account

RESOURCES

- What are resources in SLL?
  - Photos/artworks/specimens
  - Video, audio recordings
  - Texts/PDFs
  - Websites
  - Lesson plans
  - Instructional strategies

COLLECTIONS

- Collections are combined resources
- Tools
  - Favorite
  - Share
  - Alert
  - Generate
  - Print

DISCOVER

- Searching for resources and collections
- Inquiry strategies
- Open Access resources

CREATE

- Creating a collections
- Adapting an existing collection
- Making a new collection
- Searching
  - Narrowing down terms
- Interactives
- Upload your own resources

SHARING

- Publishing your collection
- Printing/exporting
- Embedding
- Track student engagement
- Creating assignments

LET'S BRAINSTORM!

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