The Self-Taught Professional Listener:

Understanding the Journey of Radio DJs for Music Educators

Giuliana Conti

A dissertation

submitted in partial fulfillment of the

requirements for the degree of

Doctor of Philosophy

University of Washington

2024

Reading Committee:

Patricia Shehan Campbell, Chair

Shannon Dudley

Christopher Roberts

Christina Sunardi

Program Authorized to Offer Degree:

Music Education

University of Washington

Abstract

The Self-Taught Professional Listener:

Understanding the Journey of Radio DJs for Music Educators

Giuliana Conti

Chair of the Supervisory Committee:

Patricia Shehan Campbell

Music Education

There are many approaches to teaching and learning music, of which music listening is often underemphasized in music classrooms, despite the accessibility of equipment and services by teachers and students. The potential is there for teachers to connect their students to the broader landscape of music of diverse genres, styles, and cultures, and to support the discovery by students of music to suit their interests and needs. Music listening is an essential component of music learning, whether on its own or associated with performance or creative invention. It is also a means of self-exploration wherein the awareness by students of the world of music can take them deeply into themselves, and to their own self-regulation, as well as to broaden their reach to others and for social integration. Music listening can be an easily integrated component of music learning into all music classrooms as a way of understanding music's varied structures,

sonorities, and messages and those who operate as professional music listeners and curators, including radio DJs, may offer valuable techniques.

The purpose of this study was to explore the evolution of 24 radio DJs who were *freeform*, in that they rely on their personal knowledge and expertise across genres and cultures to program music of their choosing for their shows. All were employed at an internationally renowned radio station with a mission of musical discovery. With music educators in mind who seek to develop listening as a critical component within a curriculum aimed at shaping keen listeners, this research explores formal and informal means by which DJs have honed their interests in listening and ways in which they curate and communicate to listeners. As critical listeners and professional curators, the work of radio DJs can at times be akin to musically educating their listening audiences. This research focused on understanding the nature and scope of musical listening and learning experiences by radio DJs during their childhoods and adolescent years, with the intent of revealing circumstances that have led to their knowledge and skill set development which they rely on for their professional work.

Findings reveal patterns between the agency and relevance the DJs sought out as children and adolescents, through their pursuit of music interactions that met these needs. Formal music learning experiences, encompassing school music education and private lessons, were not likely to meet these needs by virtue of prescriptive repertoire, inability to choose their instruments, and lack of alignment with their personal musical interests. Ultimately, DJs opted for music experiences outside of school and became self-taught in instruments of their choosing and/or avid music listening consumption. The four categories that facilitated the self-taught professional development of the music listening skills of radio DJs included positive experiences with music, developing musical interests, exerting agency over their musical choices, and access to necessary

elements like time, technology, and independence that opened musical doors for them. The core rationale of music listening in the childhoods and adolescences of radio DJs was for their self-entertainment, musical discovery and curiosity, group socialization, sense of control over their own lives, enhanced overall well-being, and emotional self-regulation. The main influences that drove their development as professional listeners were directly connected to the skills they employ on their shows as professional radio DJs today, including how they choose music across sequences of songs, how they transition songs, who they program for, and how they attend to listener requests. Implications for music educators include a more thorough-going effort to incorporate music listening into the school curriculum in ways that encompass student interests and identities as well as the provision of class time for student exploration of music from the known to the new, across a wide span of styles and artists with the potential to delight, inspire, and provide comfort and strength.

Contents

Chapter 1

I'd sit alone and watch your light

My only friend through teenage nights

And everything I had to know

I heard it on my radio

- Queen, Radio Ga Ga, 1984

Queen's lyrics to Radio Ga Ga rang truer than ever as I walked to my first in-person conversation with a real, live radio DJ—an interaction I could never have imagined as a little girl who was transfixed by the superstars I idolized through the airwaves. I met Frank at a hip café in Wallingford, an artistic Seattle neighborhood; he was draped in rich fabrics and textures, an eclectic aesthetic which spoke to his sharp and curious personality. He was quick to share his experiences, and he invited a level of engagement characteristic of someone who spends a lot of time listening while not wasting conversation on shallow topics. Frank was wholeheartedly willing to talk at length about his love of music. The warmth of his voice permeated in person just like it did in his Tuesday night tag: "You're listening to World Popular Music with Frank here on KEXP 90.3, Seattle's radio station where the music matters."

My interest was not only in his radio program, which traverses world cultures across multiple decades, but in the path that had led him to his professional work in radio broadcasting. Why was he a DJ? When did he start in radio? Who influenced him along his development? Furthermore, as a music educator I wondered whether his school music education factored into his career in music. Questions scaffolded upward and outward regarding his experiences growing

up in Poland and then the United States, with refugees, immigrants, and the musical manifestation of diverse communities omnipresent in his environments. His voice is soft and casual on air, portraying his humility and deep knowledge of music. This man is an encyclopedia of names, places, people, and events, and after years of listening to his show weekly, I could not wait to hear about his musical journey.

The most compelling characteristic about Frank was his assertion that music education had not really existed for him. He remembered learning to play the recorder in middle school, but that was it. Instead, his understanding of and relationship with music resulted more from growing up in a culturally diverse merchant marine community in Gdansk, Poland with an intrinsic motivation and curiosity toward all music. He elaborated:

> As far as musical education, Poland is a very ancient country with a strong folkloric heritage, so there was a lot of that. Accordion, violin, et cetera. I never really glommed onto anything and didn't really have the touch for it. And then my parents split up really young. I didn't really have a chance to pick one thing.

Frank's early experience was further nurtured by his social relationships that developed for him upon moving to Boston. In contrast, his formal American public school music education, beginning at age 9, was to him, forgettable.

Instead, he spoke fondly of listening to music and attending live performances throughout his adolescence. He shared that in Poland

> There were huge cultural exchanges amongst socialist countries. So, you have artists come from Vietnam, from Mozambique, from Angola, from Laos, from Cuba… there was automatically an openness to new ideas and concepts because you come in with the power of purpose. I also grew up in a port town, and you'd have merchant Marines

> coming through all the time, and then there would be records that was, you know, a bit of the history of world music. That's how world music gets heard for the first time, you'd have merchant Marines landing in all over West Africa, with phonographs playing stuff, and you'd have guitarists listening outside the rooms trying to learn the music.

Frank recalls his captivation of music through the radio and records he listened to at home, and as an only child alone in his room "the sounds from all of the other countries that I'd get a chance to hear super early in the cultural exchanges that were happening were really significant and part of why, in many ways, I'm promoting listening to the music I know now." Today, tens of thousands of listeners around the world tune into his World Popular Music KEXP radio show every week to listen to his expertise manifest through three hours of songs and musical discovery. His childhood and adolescent music explorations serve as a foundation for the skills and knowledge needed to fulfill his role as music tastemaker, on-air educator, and freeform radio DJ where he has full autonomy to program music of his choosing during his show (Easton, 2020).

Background of the Study

Frank is one of 24 freeform radio DJs interviewed in this research of professional listeners, all of them on the staff of Seattle's internationally renowned KEXP radio station and community-based non-profit organization. What started as a class project during doctoral coursework, interviewing two DJs from the station for a seminar in Applied Ethnomusicology, turned into this multi-year study in which the life experiences of these music listening experts were explored, especially the early musical pathways that led them to their current role as freeform radio DJs who curate music for and with their listeners.

Part of the drive to understand these DJs, whose professional work is to provide curated music listening experiences for broad audiences, was personal interest as a music educator in the role of music listening throughout the lives of children and youth in school music programs and beyond school where many of them are avid consumers of music for most of their waking hours. There are many approaches to teaching and learning music, of which music listening is often underemphasized in music classrooms, despite the accessibility of equipment and services by teachers and students. The potential is there for teachers to connect their students to the broader landscape of music of diverse genres, styles, and cultures, and to support the discovery by students of music to suit their interests and needs (Campbell, 2005; 2018).

Much of the focus of music education is on the development of vocal and instrumental skills that bring students into opportunities to perform in school ensembles and to develop musicianship that presents opportunities for musical expression. Music educators strive to develop the artistic features of their students to engage in performance, as well as in creative activity, and understand that listening and responding to live and recorded music is another channel of valuable experience in school music classes (Campbell, 2018). They know to work towards access by all learners to equitable music learning that offers them a broad array of musical experiences from local and global cultures (Campbell, 2021; Fitzpatrick, 2012). Still, music listening is under-emphasized in many music programs, even though listening is a source for learning and a means of self-exploration wherein the awareness by students of the world of music can take them deeply into themselves, and to their own self-regulation, as well as to broaden their reach to others and for social integration (Garrido, du Toit, Meade, 2022; Groarke, Hogan, 2019; Lamont, 2017).

Statement of the Problem

This research began as a search for a population of experts who might reveal insights into music listening skill development and its relatability to music listening in music education. Initial questions included how radio programs intent on serving music to (radio) listeners are curated, who curates these radio programs, what the trajectories are of freeform radio DJs whose work involves them as listeners and curators of listening for others, and what experiences as children led them into music (with particular attention to listening). Music listening is foundational to music education because it is at the essence of learning the aural art form. It can be facilitated live or guided remotely, and it is administrable through multiple technologies both in and out of the classroom.

As a component of music education, listening experiences can offer opportunities for students to experience not only their own personal musical identities but also the palette of musical possibilities that are initially unfamiliar to them (Campbell, 2018). Students can experience listening, too, as enhancing tangible outcomes for their overall well-being (Abril & Gault, 2022; Lamont, 2021a), especially through familiar and novel musical exposure (Iusca, 2013). School music programs are considered largely responsible for cultivating many of the musicians we hear across the country and in our local communities (Campbell, 2018). With an intent of developing lifelong relationships with music for students, music education can encompass not only performance and creative activity but also lessons in music listening that becomes more meaningful through carefully sequenced experiences that music teachers can provide.

Music education has the potential to attend to music lovers and learners across the spectrum, so that students with less interest in playing an instrument or singing in choir can still

be supported, and their learning can still be facilitated, by school music educators. This can look like educators giving students choices, agency, and opportunities to pursue their own musical interests (as listeners, creators, co-creators, writers about music, technicians, and engineers, or as singers and players), or educators becoming more aware of and being informed by the music that students listen to outside of school. There is equity in music education when music teachers are aware, can accept, and can foster various musical pathways in school which connect to students' musical lives outside of school and the world around them.

This is especially necessary as the world moves beyond the COVID-19 lockdown and long-lasting traumatic effects on students as well as teachers, families, and surrounding communities (Philips & Cain, 2020; Cowie & Myers, 2020; Miksza, Parkes, Russell, & Bauer, 2022; Dahm, Flesher, Cantarelli Vita, & Campbell, 2022). Music listening has the potential to be a major force in the collective healing journey (Lamont, 2021a; Kong & Wong, 2022; Vidas, Larwood, Nelson, & Dingle, 2021), most notably where students whose music education in school and in private lessons on instruments may have been interrupted or discontinued, or where the general need for music as a social and emotional resource is needed now more than ever (Hansen, 2021, Granot et al. 2021).

However, as music listening may not be a common component of the traditional music classroom, and when it does appear, the standard of listening continues to be rooted in a Western-classical paradigm that no longer represents the interests of younger generations (Rinsema, 2018), the need for student-relevant listening integration in the classroom becomes increasingly important for a diverse student population. For music teachers to reimagine the role of guided music listening and discovery in their classroom, one helpful avenue for learning new educational strategies is to examine the strategies of DJs, as professional listeners, who

specialize in the selection and programming of music from various musical genres, styles, and cultures for listening audiences.

Freeform radio DJs, who are radio professionals given free license by their stations to program music of their choosing live on air (as opposed to traditional DJs who operate with algorithms in the selection of music to be programmed), are an untapped resource for music education. Their work, and their journeys into radio, may shine light on listening in school music programs as well as for students who are drawn to listening outside school. There appears to be no research relevant to music education on radio DJs as professional listeners, music consumers, and programmers of public listening worthy of example to music educators. There is a need for such research, in order to provide insights for music teachers who wish to expand their music teaching practices for more all-encompassing, dynamic, and student-centered learning in their classrooms through relevant and accessible music listening education.

Purpose of the Study and Research Questions

The purpose of this research was to explore the evolution of freeform radio DJs as professional music listeners and curators for listening audiences. As critical listeners and curators of listening programs, the work of radio DJs can at times be akin to musically educating their listening audiences. This research focused on understanding the nature and scope of musical listening and learning experiences by radio DJs during their childhoods and adolescent years, with the intent of revealing circumstances that have led to their becoming avid music listeners that drew them into professional work as freeform radio DJs at an internationally renowned public radio station.

This research explores musical as well as nonmusical influences that contributed to the development of DJs as listeners to music from childhood onward, and their expansion of

listening into the curatorial skills that DJs employ in their radio programming. The articulation by radio professionals of their musical experiences as children and adolescents may serve as a framework for a school music curriculum in which listening is a prominent component. With music educators in mind who seek to raise up keen listeners, this research delves into formal and informal means by which DJs have honed their interests in listening and ways in which they curate and communicate music to listeners.

Music educators can actively seek strategies that will aid students in honing their ability to understand music as art, as having personal and collective meaning, as providing the means for feeling deeply about life's many joys and challenges (Campbell, 2018). The results of this research may well benefit music educators and their students to know new techniques for deep listening, following on the pathways taken by radio DJs such as Frank (who was introduced in this chapter's opening), including opportunities to offer students more agency and variety in their music learning experiences, as will be further discussed in Chapter 6. The field of music education can also gain from understanding the trajectories of radio DJs as listeners from knowledge of the formal and informal experiences with music as children and adolescents at school, at home, and out in the community.

Four questions guided this research:

1. What were the formal music learning experiences of freeform radio DJs as children and adolescents?
2. What were the informal musical learning experiences of freeform radio DJs as children and adolescents?
3. What motivations or experiences most shaped their pathways to becoming freeform radio DJs?

4. How did their early music learning experiences, through childhood and adolescence, influence their current approaches as freeform radio DJs with curation and audience development?

The first two questions focus on the experiences of the freeform radio DJs from their childhoods forward. The intent is to juxtapose their formal music education experiences with other musical experiences they knew to understand how and why they developed musical breadth, depth, and skills in school, at home, and elsewhere in their lives. The third question serves as a connection between the histories and current practices of DJs to understand what motivated them to follow on to their professional pursuit of radio work with its particular demands for musical knowledge and curating skill. The last question returns to music education practice with attention to ways in which informally learned music listening practices can link with that of student-centered musical interests and diverse teaching practices. By analyzing and providing a model for the life experiences and choices of these DJs, implications and insights can be drawn for music educators incorporating music listening into their classrooms.

Relevance to the Field

Research in music education, music perception and music cognition suggests that listening is a lifelong endeavor, and a topic of interest for its sociological and psychological outcomes throughout the lifespan (Chowdhury, Latulipe, & Young, 2021, Dotov, Bosnyak, & Trainor, 2021; Gao, MacDonald, & Wilson, 2022; Groarke & Hogan, 2018; Hargreaves & Lamont, 2017; Laukka, 2007; Macdonald, 2021; Welch, Biasutti, MacRitchie, McPherson, & Himonides, 2020). Music listening can be characterized as an individual pursuit, or an activity experienced in a collective shared environment. It can occur in the presence of live music made

by performing musicians and as pre-recorded sound through a myriad of technology access points (Lehmann, Sloboda, & Woody, 2007).

Hargreaves and North (1997) break the act of listening to music into two modes of engagement, the first of which is passive listening where music is playing in the background and is not the focus of attention, an experience that accompanies various functions such as house-cleaning, cooking, driving, and shopping. In these instances, music is often an unacknowledged part of the environment. Conversely, listening can be characterized as active when a person's primary focus is on the music, whether with attention to lyrics, melodic or rhythmic features, instrumentation, or music's elicited feelings.

The National Core Arts Standards in Music (2014) names four main categories—creating, performing, responding, and connecting—of student involvement, and criteria and standards to be met musically by each grade level and across different music tracks like general music, ensembles, music technology, and composition. Music responding and connecting are both central to the act of listening as learning, with overall essential questions for students to think about how individuals choose music for specific social, personal, and musical experiences. The responding standards category most directly aligns with music listening in the music classroom with the standard for kindergarten starting with demonstrating why students prefer some music selections over others given personal experiences (ibid.). In eighth grade, students are expected to be able to select music (live or recorded) and demonstrate the connections to personal interests or experiences and for a specific purpose (ibid.). The standard for connecting is a likewise opportunity for teachers to connect students' out-of-school music listening lives into the music classroom through an understanding of home performing, responding, and creating are all driven by personal music choices. The intended long-term learning outcome for these

responding and connecting standards, through music listening, is for students to learn that individuals choose music based on their own interests and experiences, for different understandings and purposes that can but do not have to be instrumentally oriented.

Music educators have supported the use of music listening in the classroom with tools to enable teachers to expand the repertoire and pedagogical techniques used to guide students into ever-deepening listening experiences. A framework for listening, beginning with attentive listening, then engaged listening, and then enactive listening, was developed by Campbell as critical components of the five-dimension sequence in the method known as World Music Pedagogy (2004, 2018). Gault's Listen Up!: Fostering Musicianship Through Active Listening combines musical, aural, visual, and kinesthetic ways of learning to support students' active listening skills and connection with music (2016). Both approaches to listening can be utilized in instrumental, choral, and general music settings, and for application to a wide and diverse repertoire of art music, folk/traditional music, and popular music.

Despite policy statements that articulate the importance of listening in the musical education of children and youth in schools, there is a continued emphasis by music educators on the development of performance skills for singing and playing instruments (and orchestral and band instruments, at that), often to the exclusion of attention to developing ways to listen (Campbell, 2018). Likewise, the music which students are entrained to perform is often exclusively oriented towards Western art music (Rinsema, 2018). All too frequently, music educators may perpetuate long-standing attention to school music traditions that do not extend to the interests and learning modes of all students. Little time and effort are expended on the wider world of music that can be accessed by listening, nor on ways that pedagogical avenues can lead

to a combination of deep listening alongside performance and creative activity (Abril & Gault, 2016).

While there are assertions of seeking out the personal musical interests of students, and of their musical lives outside school (Green, 2008), music educators tend not to orient their curriculum towards the multiple musical interests of a wide diversity of students. There are performance goals to be met, standard repertoire to be learned, and group aims to be achieved (Spruce, 2015). Handheld technology access has enabled students to become more independent in music discovery and consumption, although with an increase in available music and music platforms, students are often less likely to know how to navigate the volume of opportunity ahead of them (Krause & North, 2014). The greater the variety of music listening available to students, the more these students require guidance in order to pursue an understanding of particular genres that can be offered to them by their music teachers. Were teachers able to guide students, they might then explore and discover music that could channel them to meeting their social and emotional needs in school and out of school. The musical vastness that is out there for students can be challenging for them to confidently navigate, while that music teaching and learning models can be an asset for their teachers to acquire to support and facilitate student growth (Dale, 2023).

Beyond school music education programs for children and youth, there are a host of entities, including freeform radio stations and streaming services that are sources of music listening with the potential to entice, enculturate, and even educate young people musically. Freeform radio DJs program global, local, and national music that ranges from the currently popular genres to the historical centuries-old gems, meeting the mission of the radio station, working through music of their own discovery and experience, and responding to requests of

their listeners from around the world (Easton, 2020). Radio DJs can, through their programming, engender community-wide followings and long-lasting relationships with their listeners that are similar to the goals of many music educators.

Because freeform DJs are “free” to play music which spans time, cultures, and interests of various populations of listeners, without the confines or algorithms of commercial stations, they are a notable model for music educators. Many who may feel restricted by available pedagogical material, uncertain of the musical interests of their students, unclear as to inventive and enticing ways to teach listening, or overwhelmed by the limitless music listening options that are out there. DJs are committed to music listening wherein they program music for their audiences and are typically intent to direct themselves to an overarching listener-based purpose and structure. Learning to listen is a gradual process, and one that evolves when time and attention are given to nurturing it, providing an environment for listening, and suggesting features on which to focus. Freeform radio DJs are in the business of filling the ears of listeners with music that will hold appeal and enticement, and thus their trajectories as music professionals are noteworthy. Knowledge of their musical involvement in school and informally outside of school may help in shaping a pathway for students in schools to discover music for its sonic features, aesthetic elements, non-academic outcomes, and personal and sociocultural meanings.

Organization of Chapters

The six chapters ahead will address the nature and scope of the musical education and experiences of freeform radio DJs, to determine ways in which these impassioned and committed listeners have evolved their craft as curators who select music for the pleasure, enticement, intrigue, and education of their listening audiences.

Chapter Two reviews research and pedagogical practices on music listening in school music programs. Included is a review of scholarship on the benefits of music listening across the lifespan, the inclusion of discovery-based music listening in music education practice, and a discussion of how radio transcends these challenges.

Chapter Three details the process and methods for investigating the musical lives and professional behaviors of the DJs interviewed in this study. The qualitative methodology for this study, Constructivist Grounded Theory, is described as well as the setting and participants of the study.

Chapter Four reveals the findings of this study by offering responses to the first two research questions, and then contextualizing those findings within the major themes that emerged through the study analysis. Subsequently, Chapter five centers around research questions three and four of this study which connect the DJs' development of expertise and most influential childhood musical experiences with their professions as freeform radio DJs.

In Chapter Six, a discussion of the research findings is offered with special care to the connection between these DJs' musical lives and the role of music education in the musical lives of today's students. The emergent theory and model are then presented to offer a visual display of the self-taught journey for the DJs to become professional listeners through positive musical experiences, developing their musical interests, and having access to the necessary variables which allow them to exercise agency over their own musical lives. Implications for the practical pedagogical work of music educators is then discussed with recommendations for future research within the realm of teaching and learning to listen.

Chapter 2: Review of Literature

You gave them all those old time stars

Through wars of worlds invaded by Mars

You made 'em laugh, you made 'em cry

You made us feel like we could fly (radio)

- Queen, Radio Ga Ga

Music listening is the conscious attention to a sound source, as contrasted with hearing as a passive processing of ambient noises in an environment (Lehman, Sloboda, & Woody, 2007). One can be listening to music through direct and concentrated attention where listening is the only task at hand. Listening can also occur while engaging in a primary activity such as driving and talking as music plays in the background when the listener is still registering the music cognitively. Listening occurs in musical situations, too, when one is performing vocally or on an instrument. Since humans have produced music across evolution as far back as 40,000 years ago, humans have consequently also listened to music as creating music is simultaneously hearing it (Cross, 2016), with the mechanisms for music listening rapidly expanding through technological advancements over the last century.

This chapter reviews the landscape of music listening and music education research. It begins with a description of psychological, social, and cognitive processes of music listening. Music listening is then broken down into formal and informal music learning settings. Attention is given to the listening within music education policy and practices, the role of listening in music education, and roadblocks to the incorporation of music listening in classrooms. Research

on music listening in informal settings outside of school is unpacked through a discussion of how radio meets current educational challenges with music listening, and plausible ways in which music educators may benefit from attention to professional curators of listening.

Music Listening: Perspectives from Neurophysiology, Perception, and Cognition

Research on music listening has entailed questions of music's initial perception and developing cognition for decades (Boer & Fischer, 2012; Hargreaves & Lamont, 2017, Hargreaves & North, 1997; Greenberg, Matz, Schwartz, & Fricke, 2021; Lamont, 2017; Lehmann, Sloboda, & Woody, 2007; Miranda & Claes, 2009; Schafer & Eerola, 2020; Sloboda, O'Neill, & Ivaldi, 2001). Music perception, the ability to detect which sounds belong together and originate from the same source in a given environment, and cognition, developing knowledge and understanding of musical systems and structures through the listening experience, begins as early as eight weeks into the gestational period of human development when the inner ear begins to form (Lehmann, Sloboda, & Woody, 2007). As infants develop into toddlers, children, and adolescents, their development of listening skills related to the musical structures that govern their social environments continue to shape their understanding of music and emotions, social norms, tonal systems, and applications throughout daily life (ibid.).

Music listening can be passive or active depending on the level of involvement and attention of the listener. Music listening has also been shown to elicit emotional, neurological, and physiological responses and outcomes that can affect a person temporarily or alter them developmentally for the duration of their lifespan (Reybrouck, 2020; Reybrouck, Podlipniak, & Welch, 2021). Notable neurological outcomes of music listening include the capacity to reduce cortisol levels—the neurochemical associated with stress—while promoting the production of oxytocin, the hormone and neurotransmitter connected to positive social interactions and

belonging, as well as emotional regulation (Tervaniemi, Makkonen, & Nie, 2021; Harvey, 2020). Similarly, music has been shown to alter the autonomic nervous system, which connects the brain and spinal cords with the organs, all of which control circulation, digestion, hormones, the reproductive systems, vision, and respiration (Ellis & Thayer, 2010). Music listening has been linked to the reduction of chronic pain (Mitchell, MacDonald, Knussen, & Serpell, 2007) and increased responsiveness of the immune system (Fancourt, Ockelford, & Belai, 2014).

Psychological and social outcomes of these neurophysiological effects includes stress reduction (Linnemann, Ditzen, Strahler, Doerr, & Nater, 2015; Linnemann, Strahler, & Nater, 2016), wellbeing (MacDonald, 2021; nav Goethem & Sloboda, 2011; Krause, North, & Davidson, 2019), identity construction (MacDonald, 2021; MacDonald & Saarikallio, 2022), resilience (Gupta & Singh, 2020), empathy (Schafer, Saarikallio, & Eerola, 2020), mood regulation (van Goethem & Sloboda, 2011; Reybrouck, Podlipniak, & Welch, 2020), and reduced loneliness through social surrogacy, the temporary substitution of a social connection through the inanimate music being listened to, but with comparable psychosocial outcomes like understanding others, group identity, nostalgia, cultural reinforcement, and optimism (Schafer & Eerola, 2018: Schafer, Saarikallio, Eerola, 2020).

Aside from active and passive listening differences, equally relevant distinctions around music listening includes what people listen to and why. Research on music listening habits across the life stages shows children up to around age 10 are largely open-minded musically, subsequently dropping in musical open-mindedness until ages 18-25 with another peak at which point musical open-mindedness drops steadily for the rest of the life span (LeBlanc, Sims, Siivola, & Obert, 1996; Hargreaves & North, 1997; Hargreaves & Lamont, 2017). This shows early school years as the greatest opportunity to reach students' interests and expand their

awareness and understanding of music listening, at which point around ages 11-13 the importance then becomes championing their now more established and rigid musical interests in the classroom. Developmentally, the most significant neurophysiological and psychological outcomes from music listening occur from utero to the early twenties (Kuntsche, Le Mevel, & Berson, 2016; Lehmann, Sloboda, & Woody, 2007).

Miranda and Claes (2009) argue that the study of adolescent music listening "remains neglected by mainstream developmental psychology" (p. 215), but that music listening is important for adolescents in steadying their psychological adaptive functions like self-actualization, emotion regulation, individual and cultural identity, and peer socialization and integration. These qualities are integral to student academic success and personal development into adulthood as functional members of society. Even if music listening occurs in isolation, the function of music listening is invariably social and cultural in nature; Listeners make choices and are informed by the environments within which they are situated (MacDonald & Saarikallio, 2022). Consequently, their relationship to the music they listen to, and the reason they listen to music, is inextricably linked to their sociocultural surroundings.

Psychosocial musical connections and listening behaviors follow young people into adulthood and continue to shape their interaction with the musical and social world around them, especially when deep personal relationships with music can be forged through listening (Hargreaves & Lamont, 2017). Musical enculturation is one such way where music facilitates the "process of learning a culture in all its uniqueness and particularity" (Poole, 1994), which includes the music communities within which avid listeners become deeply entrenched. Even passive background music can affect social and psychological outcomes mentioned earlier which are inherent in music listening, as well as affect musical interest and disinterests (Hargreaves &

North, 1997). Individual listeners exercise and develop musical taste—the types of music they enjoy listening to—during each auditory musical interaction throughout their lifespan, while certain factors are more salient in these developments than others (ibid.). Factors that can define the listener and their taste include age, gender, cultural background, personality, lifestyle, experiences, education, languages spoken, social class, social status, and religiosity (Ter Bogt, Mulder, Raaijmakers, & Gabhainn, 2011). The intersection of these factors contributes to the musical choices and opinions of the listener while also informing the efforts of others (like educators and those in the music industry) who work to influence listeners' tastes.

Research on listening choices has shown that music taste is a strong indicator of a person's identity and social affiliations (MacDonald, 2021; Sloboda & O'Neill, 2001) as well as their prosocial tendencies and cross-cultural understanding (Boer, 2009). Reasons for music listening follow similar patterns to taste development as they are socially and psychologically motivated (Boer & Fischer, 2012). Morinville, Miranda, and Gaudreau (2013) define motivation for music listening as the "normative form of autonomy that can include the reasons for which [people] decide to listen to music in everyday life" (p. 385). Previous researchers have uncovered that the main reasons for listening to music includes affecting mood and emotional self-regulation, well-being, identity formation, cultural integration, and for the purpose of developing social belonging (Boer et al., 2012; Schafer & Sedlmeier, 2009; Lehmann, Sloboda, & Woody, 2007; Tarrant, North, & Hargreaves, 2000; Sloboda, O'Neill, & Ivaldi, 2001). Combined with the aforementioned outcomes of music listening psychologically, socially, cognitively, and neurophysiologically, Reybrouck, Podlipniak, and Welch (2022) argue that music listening motivations and decision-making is an evolutionary development which serves a very real need for human survival through emotional strategies and investments in music listening. This

highlights the necessity for music in many people's everyday lives, and its importance in music education meant to teach the whole child.

Music Listening in Formal Music Education Settings

Formal music learning occurs in structured environments like schools which involve a hired teacher, one or more students, formal assessment, an expectation for practice or homework, and expected growth over time (Green, 2008). Reasons for listening, processes of listening, and outcomes from listening to music, are key realms of consideration for music education in that an understanding of what motivates youth to choose to listen to music can help educators find ways to design learning that will engage students in music holistically while also supporting curricular objectives and healthy development (Espeland, 2011). Nurturing students' musical interests can also deepen the relationship between student and teacher, as well as the students' life-long engagement as music consumers (Silverman, 2013). While much of the focus in music education programs is on the performance of music vocally and on instruments, music educators can also work through listening experiences toward the development of students' open-mindedness, self-awareness, identity development, social cohesion, and understanding of others (Lehmann, Sloboda, & Woody, 2007).

Hargreaves, MacDonald, and Miell (2012) argue that musical identities within the scope of listening can also affect the development of musical skills and instrumental learning in music as listening shapes how people understand what it means to be a musician. This is supported by Christopher Small's concept of Musicking (1998) as an active verb of participating in and through music, which includes as a fundamental tenet, the act of listening. Music listening is supported less directly by Dewey's push for the importance of understanding experiences in and

out of school as a crucial component of progressive education (1903), which is a necessary right for all students.

Not all school music is attentive to the individual needs of students, musically and non-musically, which is a criticism of music education, when a lack of relatability and musical variety can create barriers for students starting or staying in music programs (Fitzpatrick, 2012; Abril & Gault, 2022). Boal-Palheiros and Hargreaves (2001) argue that the cultural dissonance between students' home listening and their experiences in school music deserve greater attention from music educators, especially as technological advancement and musical omnipresence in people's lives increases. As students are more able to develop their own personal listening habits and taste they may move farther away from the standard music education curriculum. If the education community does not attend to that gap, it may potentially render them disinterested in what their school might have to offer.

Music listening, however, is an underestimated component of American music education. It is a minor presence in general music settings, especially in elementary schools (Campbell and Scott-Kassner, 2018) but becomes even more minimized as notational literacy builds in the upper elementary school and on into secondary school ensembles. Across the school music curriculum, notational literacy is prized as a principal goal, particularly in that it lends itself to the performance of music from scores that are a feature of long-standing choral and instrumental ensembles (Campbell, 2018). As performance is the cornerstone of music education in the United States, whether students learn to play an instrument, sing, or participate in an ensemble, students are encouraged to actively engage in the calculated production of sound (Benedict, Schmidt, Spruce, & Woodford, 2015). Listening, then, frequently becomes a footnote, a second (or third) thought, and not so consequential a component of the music curriculum.

Vocal and instrumental performance are key aspects of music education, and are long understood as instilling discipline, fostering teamwork, and helping develop fine motor and aural skills (Campbell, 2018). Opportunities abound in many elementary, middle and high schools for students to learn to sing and play instruments, paving the way for them to showcase their talents and gain confidence in their abilities alone, with others, or in front of an audience. Ensembles that are historically significant in American music education programs, and which are still common today, include orchestras, choirs, and wind bands, with jazz bands and marching bands at the secondary level (Powell, Dylan Smith, West, & Kratus, 2019). Additional ensembles that have emerged in the last several decades include mariachi (Sheehy, 2016; Soto, 2018), guitar (Pethel, 2019), steel band (Williams, 2008), and zimarimbas (Campbell, 2018). The emergence of popular music in schools has also given rise to the modern band method of music teaching in schools (Powell, 2021). These newer approaches to music teaching offer students a foray into national and international musical practices. However, the three ensembles that dominate music education curriculum—orchestra, choir, and wind band—remain at the forefront of student's music education options and experiences, all three of which are also notation-based and -dependent (Powell, Dylan Smith, West, & Kratus, 2019).

Music literacy is a principle aim of American music education, involving students in learning to read, write, and interpret musical notation (Broomhead, 2019). It equips students with the ability to decipher sheet music, understand musical symbols and terminology, and communicate their ideas effectively within the language of Western music notation. This literacy component of music education supplies students with tools for a deeper understanding of the performance of Western art music and school music repertoire that is derived from it (ibid.). Despite its prominence in music education, notational literacy channels students into learning to

perform fixed-in-notation compositions without recourse to creative musical expression through improvisational processes (Kivijärvi & Väkevä, 2020), or to many of the world's musical practices that are based in oral-aural processes of transmission and learning (Kertz-Welzel, 2018).

Still, notational literacy remains an important fixture of formal music education programs in elementary and secondary schools. Patricia Shehan Campbell argues that in music education practice, "notation, rather than listening, continues to be the end-all and be-all of music lessons and sessions for children, and listening dangles out there as an appendage and a footnote to teaching technique. While notation is a useful aid for enhancing memory and (sometimes) accelerating learning, it cannot replace the power of listening" (2018, p. 110). Jeanneret and DeGraffenreid (2012), both music educators with ample experience in developing notational literacy in students in secondary school music programs, encourage teachers to shift away from notation and to feature music listening experiences in their classrooms for honoring their students' interests in oral traditions, including popular music and music of the world's cultures.

Music listening is an accessible tool that is sometimes evident in classrooms and ensembles, and which appears at times within standard pedagogies such as Kodaly (Houlahan & Tacka, 2015), Orff (Johnson, 2013), Dalcroze Eurhythmics (Juntunen, 2016), and Gordon's Music Learning Theory (Shuler, 2021), and within ensemble rehearsals (Bell, 2018). World Music Pedagogy is more fully geared than other pedagogies to listening, in which three of its five dimensions require particular attention to learning by listening (Campbell, 2004, 2018; Campbell & Lum, 2019). However, despite the many statements in support of music listening, it remains underutilized in the K-12 music education sphere (Campbell, 2018).

According to Keith Swanwick, British educationist, the fundamental challenge to music educators is developing the capacity of students to listen and respond to music in the richest possible way, rather than simply overhearing it (2012). developmentally, the school age years are fundamental in students' listening, emotional, academic, and motor development (Hargreaves, North, & Tarrant, 2006), which leaves music educators perfectly situated for applying music listening for optimal student growth during this important phase of their development. This leaves educators with the responsibility of closing the gap between students who develop an acquaintance with music and those who pursue a more ideal, deeper relationship with listening. Swanwick suggests this is done through a reexamination of musical experiences at large, especially those that exist outside the music classroom, which are largely responsible for the development of students' listening identities (2012).-When music education programs are largely ensemble-driven, students may be underserved relative to knowing music more broadly (and deeply) via listening opportunities.

Informal Music Learning and Out-of-School Music Listening

Research has indicated that out-of-school music experiences are the greatest source of the development by students of their musical taste (Kratus, 2017; Schurig, Busch, & Strauss, 2012). Beyond school, young people learn informally, outside the realm of structured educational entities and teachers (Narita & Green, 2015). British music education scholar Lucy Green differentiates informal types of engagement from formal school music, positing that with informal music learning "there is no imperative to practice unless [students] feel like practicing, no teacher or parent telling them they must do it, no homework, no tests or exams, no coursework" (2008, p. 9). This type of musical engagement most common among popular musicians who consequently report high levels of enjoyment in music making and who have

cultivated a deep passion and thirst for music listening that leads to a wide breadth of musical knowledge and interests. The dynamics of informal music learning underscore flexibility and agency, which are more likely to engender student satisfaction than formal in-school learning. One of the hallmarks of informal music learning is being self-taught, or autodidactic. An autodidact is someone who prefers to teach themselves a new skill or topic by learning in informal settings for the delight and independence of self-discovery, especially in contrast to ways in which they know they do not like learning (Solomon, 2003). research on self-taught musicians, many of them who learn music from YouTube or other online sources, has indicated the need for teachers to think about whether the revision of curricular content might reflect what music their student musicians are drawn to learning outside school settings. Perhaps, students can find fulfillment through school music programs that enhance what they seek to learn beyond school (Solomon, 2005).

Musical identities are strongly rooted in students' out-of-school music listening, especially with genres like pop and rock (Ter Bogt, Mulder, Raaijmakers, & Gabhainn, 2011), in which listening experiences are strongly connected to social and emotional well-being (Garrido, du Toit, & Meade, 2022; Groarke & Hogan, 2018; Griffin, 2011). Students often listen to music out-of-school for enjoyment, as a component of their social connections, or to strengthen their personal and cultural identities (Ter Bogt, Mulder, Raaijmakers, & Gabhainn, 2011). Home is a primary place for out-of-school listening (Ilari, 2016; Campbell & Scott-Kassner, 2018). Family music listening habits have been shown to be passed down through generations (Chowdhury, Latulipe, & Young, 2021) with social and familial bonds strengthened through collective listening and music engagement (Gao, MacDonald, & Wilson, 2022). There are various developmental age ranges wherein young people are more or less likely to be open to new music

(Hargreaves and Lamont, 2017). School-age youth are most likely to be influenced by the music taste of their peers and social media, while simultaneously being the most open to new music than during any other stage of life (ibid.). Technology has made music listening more accessible for students outside of school to control their listening behaviors and as a result younger generations are learning to navigate the largest music collection that has ever existed. This can result in an expansive and curious approach to music listening that surpasses the musical taste and awareness of most adults (McFerran, Derrington, & Saarikallio, 2019).

Of particular note in recent history, when it comes to out-of-school listening habits, is the COVID lockdown wherein young people's in- and out-of-school lives merged for several years and isolation engendered increased music listening practices (Lamont, 2021a). The full social and psychological effects of isolation and the academic interruption for young people is still not entirely understood, but researchers have uncovered a connection between the use of music listening by young people during lockdown and their reported increased subjective wellbeing as a result (Vidas, Larwood, Nelson, & Dingle, 2021; Lee, Nam, & Olivo, 2022; Lamont, 2021a). Similar findings emerged for adults as well (Feneberg, Stijovic, Forbes, et al., 2023; Ziv, 2018; Groarke, MacCormac, McKenna-Plumley, & Wisener, 2022; Feneberg et al., 2023). Music listening is being referred to by scholars as an ideal medium through which to foster well-being for students now that they have returned to school (Lamont, 2021a; Rosenberg, Greenberg, & Lamb, 2021). One of the reasons music listening became such a source for support during the COVID-19 lockdown is the widespread accessibility of individualized music listening technology.

Radio Education of Music Listeners: Then and Now

Before the advent of handheld music listening technology, radios were a prominent source for music listening and learning across North America. A brief history of radio by Michael Gregory (2016) shows its use as an educational medium starting at the turn of the 20th century. Radio was invented in the late 1895 by Italian inventor Guglielmo Marconi (Luthra, 2009). Radio education was at its peak in the 1920s with more than 200 educational radio stations across the United States and Canada with intentions to serve rural communities and standardize educational content across state lines (Gregory, 2016). Of note is the NBC Music Appreciation Hour, produced from 1928-1942 and hosted by Walter Damrosch, orchestral conductor, who programmed classical music for different age groups. His radio programs were accompanied by instructor manuals and student notebooks to assist student listeners in expanding their musical understanding and listening skills (Howe, 2003).

Keeler (2016) and Bianchi (2008) describe the use of radio in schools from the 1920s as a popular "remote education mechanism" with programs that were designed specifically for classrooms (and children at home). These programs, including the NBC Music Appreciation Hour, contributed to the general core education of students. Radio programs may be viewed as the first MOOC (Massive Open Online Course), a form of distance education commonly experienced today online either pre-recorded or live (Dousay, 2018).

By the 1940s, with budget cuts during wartime, radio programs had decreased in numbers, and only 35 stations were still offering educational programs. (Luthra, 2009). When the FCC authorized the commercial release of the Television in 1941, TV emerged as the newest source of entertainment. The Ed Sullivan Show, a lavish family-oriented music variety show, premiered in 1948. Meanwhile, vinyl records were becoming a more accessible at-home listening

option. Radio education decreased in the following decades, with community radio stations becoming more locally based sources for social engagement and cultural education (ibid.).

Examples of more modern uses of radio education include the use of radio broadcasting for education of the visually impaired within schools for the blind across the U.S. (Shifflet, 2013), the Youth Amplified radio show which uses critical pedagogy to encourage student reflection on socio-political issues and engage them in critical consciousness through talk radio show (Cooper, 2016), and the Youth Internet Radio Network which promotes community capacity building through local youth who learn about their communities and current events that affect their education system, political environment, and capacity for change-making (Hartley, Hearn, Tacchi, & Foth, 2003). Radio programs around the world have demonstrated airwaves as educational channels. Other examples have connected the use of radio with classroom learning and the promotion of tangible skills like content-based learning around literacy and social studies, as well as intangible 21st century skills like cultural competence and community building (Feraria, 2018; Potter & Naidoo, 2006, 2009; Vargas & Erba, 2017; Madamombe, 2005; Torodova, 2015).

The Music Listening Expertise of Freeform DJs

A brief foray into the history of radio has shown its function to educate geographically distant populations, foster prosocial behavior in listeners, and promote openness to difference while cultivating community belonging. Campbell argues that “The power of music is in its palpable capacity to build bridges between people, to build social connections, to grow a genuine curiosity for ‘the Other,’ and to advance a veritable respect for the people whose music it is—both the music-makers and all those who identify with it” (2018, pp. 110-111). Radio has been a vehicle for this transmission process now for over a century.

As was the case for Walter Damrosch with the NBC Music Appreciation Hour, the hosts of radio shows can be as important as what is shared over the airwaves. Starting with radio hosts, announcers, presenters, and producers in the early days of radio shows, newer variations of the responsibility emerged in the 1960's named Disc Jockeys (DJs) who are radio show hosts that control the music shared on-air. They originally used vinyl records and physical discs to artistically transition between songs, sometimes blended multiple songs into a new unheard mashup (Theodosiadou, 2018). Freeform radio DJs are distinguished for their full autonomy to program whatever music they want across genres and for personal or listener-requested reasons (Easton, 2020). Freeform radio DJs are known for their personalized, eclectic, and self-reflective interactions and music programming on air. Their relationship with listeners is considered more intimate than other forms of media because listeners are personally reaching out to the DJs (as opposed to the television which is one-directional and consumed by the viewer without bi-directional interaction), which requires DJs to communicate with them in a thoughtful and thankful manner to maintain their listenership (Theodosiadou, 2018).

DJs become experts in certain music genres and styles, becoming bridge-builders in the relationship they develop between the listener and the music. As curators of music making decisions in the moment, live and on the airwaves, DJs become musical intermediators who select, evaluate, promote, and distribute songs and artists for listeners. In essence, DJs communicate cultural values through their decision-making and can build trust with (especially through other forms of communication like email or phone communication), and influence over their audiences, through musical skills and techniques which set them apart from standard listeners (Jansson & Hiracs, 2018).

Scant research has covered this acquisition of skills and musical knowledge by DJs, especially regarding freeform radio where each DJ has autonomy over their programming (Easton, 2017). Easton (2020) found that Freeform radio DJs often developed their interest in music listening at young ages and continuously honed their skills in music knowledge and variety, regularly expanding their familiarity of artists across geographic, temporal, and musical spaces to program new and emerging music for their listeners. While Easton provides a recent look into freeform radio DJ decision-making and programming, their research does not provide insight into what can be garnered for educators or whether formal or informal music learning environments were more or less responsible for their skill and knowledge development.

Understanding how DJs develop their expertise and what experiences contributed to this professional direction could provide implications for educators (and students) who wish to develop similar abilities (Tobias, 2015). DJs can be a model for developing the aural and analytical skills of students for a diversity of musical styles with qualities and expectations described by Tobias (2015) as the following:

> DJs need to be able to connect with whoever is present by quickly gauging the interests and response of those engaging with the music being played. This way of connecting with people listening to and moving to the music relies on aural and analytical skills that also take into account musical knowledge and understanding of social and cultural contexts. DJs can be excellent at understanding how a broad range of music may be connected. While one can draw on factual information about music, excellent DJs can also hear these relationships. The ability to mix between and even layer music together requires additional aural skills and analysis that might be missing from typical music programs. (p. 9)

Tobias also argues that there needs to be logic of some design that blends one song into the next, and that song into the next, and so forth, through a personal theme, a musical idea, a genre, artist, musical feature, or inspiration (ibid.). At a broader scale, these skills can be thought of as musical cartography, where musical relationships are discerned, how musical discovery is structured, how music connects across time and geography, as well as how music playlists or songs fit the social and cultural context of the audience (ibid.).

Being a trained musician and being a DJ are not mutually exclusive, and an examination of DJs who are not necessarily formally trained musicians can uncover techniques of expertise development regarding discovery-based music listening and curation. Furthermore, research in musical expertise development indicates a trend of ten years learning a musical skill with regular practice, regardless of measures of intelligence, genes, or socioeconomic background (Brown, Zattore, & Penhune, 2015; Ruthsatz, Detterman, Griscom, & Cirullo, 2008; Ericsson, Prietula, & Cokely, 2007). This indicates the capacity for freeform radio DJs to be qualified experts in music listening and curation given years of avid music consumption, radio programming skill development, and other related endeavors like live DJing at music clubs and writing about music or publishing playlists online. Much is left to learn about how music listening specialists like DJs develop their skills and knowledge, especially in the absence of formal instrumental or vocal training which could point to novel methods for developing music listening and curating expertise.

From the Airwaves to the Classroom

Music listening can evoke powerful emotions at the moment of the auditory act, at every stage of life, from childhood through adulthood and to the end of life. It engages our cognitive processes and resonates through the body, sometimes resulting in outward physical responses

such as crying, laughing, or goosebumps, while internally it can alter the nervous system response and neurochemicals produced by the brain. As much as music listening is a regularly present ingredient in everyday life for many people, as well as a multi-billion-dollar industry (International Federation of the Phonographic Industry, 2023 Report), it is not necessarily a featured learning medium in music education programs where young people have a higher chance at acquiring important listening skills and where music standards require listening and responding to music throughout K-12 education (The National Core Standards for Education in Music, 2014).

Music education in the United States has evolved over the years into a discipline that fosters musical skill development primarily through performance, literacy, and creative practice, less so through listening (Bowman & Frega, 2012). Listening-based music education can nurture well-rounded musicians who not only excel in playing instruments or singing but also possess a deep understanding of music, history, creativity, and the capacity for music to be a meaningful life-long endeavor (Jeanneret & DeGraffenreid, 2012). Roger Mantie, a Canadian music educator, argues for the importance of leisure and recreation throughout the lifespan which must be core to how music education supports students' music skill and knowledge development, especially through listening (2022). Understanding how musical identities and interactions outside the school are built and exercised can help educators better understand and re-envision the role of music education within classrooms so that the problems of disconnect from music in school are better resolved, as is exemplified through the strong out-of-school informal relationship most students have with music listening, compared to formal in-school ensemble-based programs (Miranda & Claes, 2009; Hargreaves & Marshall, 2003).

If music listening habits reflect a person's sociocultural identity, and out-of-school experiences are crucial to consider for equitable and quality education (Iusca, 2013), then teachers who wish to expand their students' understanding of themselves and others can integrate music listening for these purposes as well as to promote musical competencies.

Chapter 3: Research Method and Context

So don't become some background noise

A backdrop for the girls and boys

Who just don't know, or just don't care

And just complain when you're not there

- Queen, Radio Ga Ga

This chapter provides an account of the research method employed as well as the context in which this research occurred. To delve into the musical journeys of radio DJs from childhood through adolescence and comprehend their evolution into professional music curators and taste-shapers, qualitative research techniques were utilized. The single radio station in which the freeform radio DJs were employed is described for its distinctive features. The individual DJs are introduced as interviewees in a series of extended conversations about their musical experiences in school and on the outside, and on the content of their radio programs.

Research Method

Grounded Theory is a research method that was formally introduced in the 1960's by Glaser and Strauss (1967), with intent to provide theoretical understandings of phenomena that would necessitate the use of word-based insights rather than the provision of a hypothesis and the employment of techniques that would land on numeric data. Grounded Theory research requires specific approaches to coding information gathered through interviews and observations and is notable for the need to proceed through multiple rounds of reviewing transcriptions and fieldnotes in order to organize and assign conceptual terms to what people say and do. Themes

appear as statements, behaviors are grouped into categories, relationships and patterns emerge and are then used to respond to the original research questions often through a visual model and a novel theory that explains the outcome of investigation (ibid.). Glaser and Strauss emphasized methodical techniques that could lead to replicable, objective, and generalizable outcomes. This research embraces a contemporary brand of Grounded Theory.

Constructivist Grounded Theory

Constructivist Grounded Theory (CGT) is a modern extension of traditional Grounded Theory in that instead of a positivist approach to qualitative research wherein objectivity is championed, CGT acknowledges the existence of positionality and biases from the researcher throughout the research process (Charmaz, 2016). This research method ensures that the researcher is therefore constantly juxtaposing their own positionality, the interviewees, and the collected information in an effort to build a theory that most accurately represents the stories and data, with the flexibility of interpretation by the researcher (Charmaz, 2014). Charmaz and Belgrave (2015) provide the following general structure and guidelines for the CGT method:

> Constructivist grounded theory (1) gives priority to the studied phenomenon rather than techniques of studying it; (2) takes reflexivity and research relationships into account; (3) assumes that both data and analyses are social constructions; (4) studies how interviewees create meanings and actions; (5) seeks an insider's view to the extent possible; and (6) acknowledges that analyses are contextually situated in time, place, culture, and situation. In this view, researchers and their interviewees produce data through interaction and therefore construct the meanings, actions, and situations that researchers observe and define. (2015, pp. 3-4)

CGT is built upon principles of equity, justice, and transformation. The intent of the present research is to understand the early development of keen listening by curators of music for radio listeners, so to consider how whether (and how) music educators might embrace the experiences for application into a curriculum that gives rise to music listening skills. Through the employment of the structure and guidelines of Constructivist Grounded Theory, the research leads to analysis of insights that are both reflexive and attentive to critical inquiry (Charmaz, 2016).

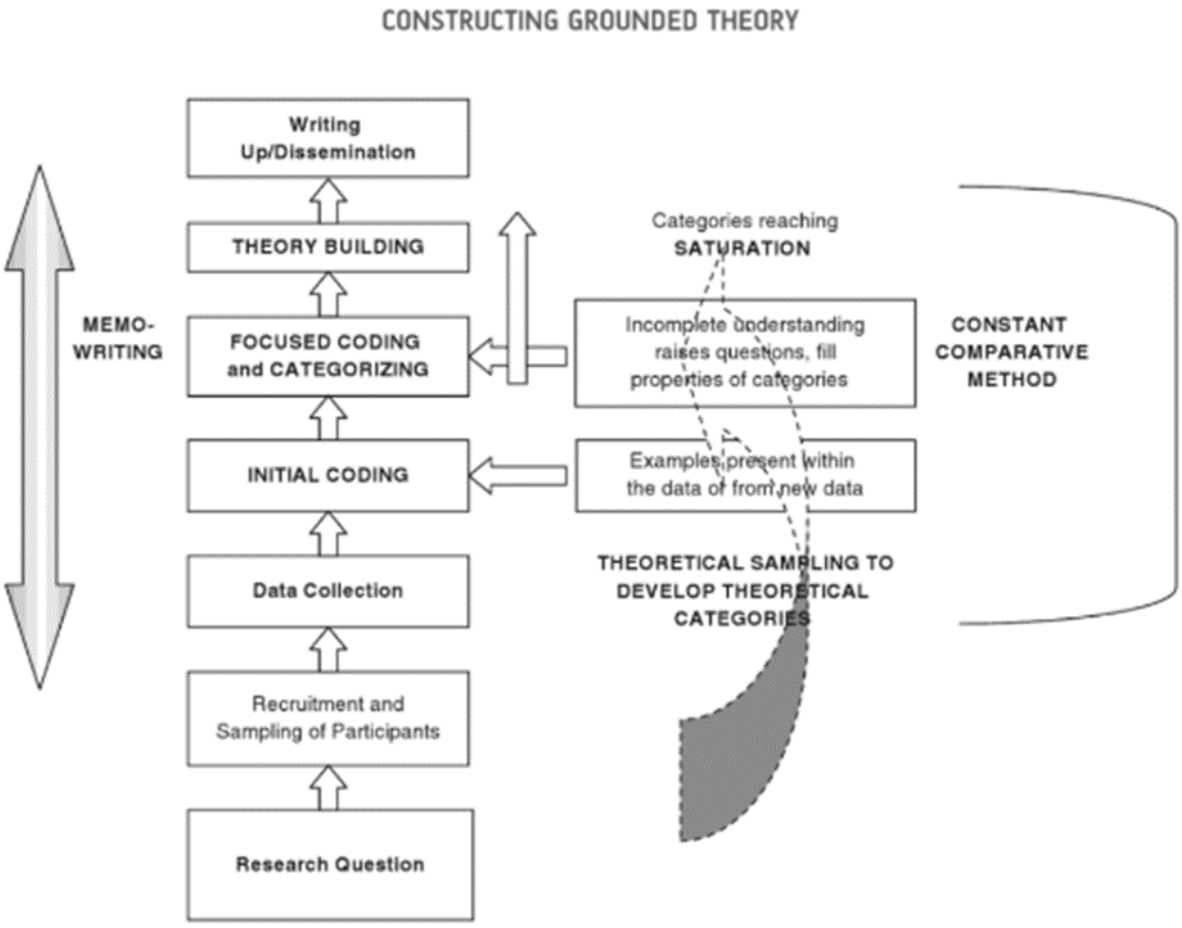
Techniques and Procedures

At the core of constructivist grounded theory research practices is the importance of researcher reflexivity, which is the understanding that data is not purely objective but instead a collection of personal narratives of the participants. these narratives are informed by the social constructs they live in, and these perspectives are situated in time, place, and culture (Charmaz, 2016). The analytical process is interpreted by the researcher who enters the study with personal life experiences that likely inform their understanding and interactions with the data collected, while those who are interviewed are similarly situated within specific environments with lives that are unique and complex. Subjectivity in CGT is assumed to exist at all levels of the data collection and analysis and practices like memoing and constant comparative analysis work to center the subjectivity of the participants rather the researcher at all parts of the process (Charmaz, 2006).

Figure 1 (Tweed & Charmaz, 2011, p. 133) provides a visual representation of the process of data collection, analysis, and the writing process within the scope of Constructivist Grounded Theory that were followed for this study.

Figure 1:

A visual representation of a grounded theory (Tweed & Charmaz, 2011, p. 133)



The analysis process of CGT begins with the four research questions (see page 14). After recruiting participants and conducting the series of interviews (as well as any necessary supplemental data), there are/were four stages of analyses that are concurrent and repetitive, and which culminate in a process model and theory to represent the main findings according to the initial research questions. The research method required reading through each line of text, noting relevant statements within the scope of the research questions. Active reflections on these statements gave rise to a search for topic and thematic patterns as well as connections that emerge between topics and themes, throughout which the interviewer's personal thoughts were

acknowledged as potentially influencing salient findings (Charmaz, 2016). The following procedures, illustrated in Figure 1, were undertaken in the analytical process of this study.

Memos and Constant Comparison

A hallmark of CGT research is the concurrent collection and interpretation of data (Giles, Lacey, & Muir-Cochrane, 2016). Once interviewees were recruited from among the radio station roster of DJs, the research process began with memos as ongoing written reflections throughout the analysis process to allowed for tracking of personal biases, thoughts, memories, questions, beliefs, and assumptions (Charmaz, 2014). This is important because central to CGT is the understanding that information and theory is undergoing construction rather than a result of scientific 'truth' that is eventually uncovered (Creswell, 2015). Memos allowed transparency throughout the data generation and analysis process, with constant awareness of personal thoughts in conjunction with the data to ensure that the emergence of findings were core to the information collected and to the words of the interviewees (Charmaz, 2014; Mills, Bonner, & Francis, 2006; Charmaz, 2016).

Initial Coding, Focused Coding and Categorizing

The analysis process began with initial coding, wherein notable responses from the interviewees were labeled with "codes" that align with keywords or phrases which best represented what was meaningful in the data according to the research questions (Saldaña, 2021). As interviews were collected and re-read, inductive reasoning, which is to draw large generalizations from connections found directly in the interview transcripts, led to an abductive stage where memos and codes were compared to uncover potential patterns and relationships that required further understanding in the next data review or collection stage (Charmaz & Belgrave, 2015). For example, codes that first emerged during initial rounds of analysis for this study

included specific cities and neighborhoods in which the DJs grew up, aspects of their school music education experience, genres of music they grew up listening to, ways in which they sought out music listening beyond school, and personal and professional trajectories that led them to their work as DJs.

As more interviews were gathered, the depth of understanding increased through concurrent ongoing analysis, leading to the emergence of new categories that encapsulated clusters of codes and revealed substantial patterns in how interviewees responded to the questions. In this research, codes about childhood music experiences such as private music lessons, attending live shows, and listening to music alone in their room, were developed into categories like musical agency, available technology and resources, in-school music experiences, and musically influential people. The codes and categories changed and evolved over the course of the analysis through structured re-reading of the interview transcripts, handwritten notes, color coded highlighted and marked up transcripts, and the use of index card mind-mapping (Giles, Lacey, & Muir-Cochrane, 2016).

The next stage, focused coding, compared categories and transcripts to find support for definitions and themes that appeared to belong to a process or relationship related to the initial research questions (Charmaz, 2014). For this study, the transition by DJs from school-age to their early 20's appeared to be a formative process with regard to learning how-to-DJ professionally or finding work in the music industry in some capacity. The categories pertaining to the transition from childhood and youth in musical environments to becoming DJs at KEXP, as well as experiences with school and out-of-school music, became more distinct through successive rounds of coding in the interview transcripts. This process ultimately revealed shared

trajectories among DJs who evolved from being immersed in musical environments themselves to creating such environments for others.

Theory Building

The last step in the Constructivist Grounded Theory research analysis for this study was the development of a theory and model (presented in Chapter 6) which illustrates and describes the processes being investigated through the study purpose and research questions (Charmaz, 2016). Categories that emerged during the focused coding rounds and constant comparisons were investigated again in the interview transcripts and the theory was complete when data was no longer needed because saturation had been reached when no new themes emerged from new data collections.

For this study, the process of theory development included countless rounds of drawing, white boarding, revisiting transcripts, mind mapping, designing, sketching, and visualizing the major themes into a sensical model which showed the major elements common across interviewees and how they interacted to address the research questions that generated the original data collection. This process required regular revisiting of the codes, categories, and themes. The resulting model, presented in Chapter 6, represents the process by which DJs in this research developed their music listening habits, familiarity with wide genres of music and deep connections to artists, and to find ways to express ideas about the music and musicians for other listeners through the KEXP airwaves.

Context

This research is situated within a community-based radio station in Seattle, Washington, located in the metropolitan region known as the Pacific Northwest. The radio professionals who were interviewed were employed by the radio station, KEXP, which transmits music over the

airwaves in that location (and more widely in the world through the radio's internet and phone app). The organizational mission of KEXP is to "enrich listeners' lives by championing musical discovery to help build a connected and compassionate world that embraces curiosity and a shared love of music" (About KEXP. n.d.). KEXP's 45 DJs program music from across decades of recorded music and around the globe in programs that run in 3–5-hour time blocks. This time length of the radio shows then allows each DJ the creative freedom to program what they want and what listeners request. Since 1972, the station had built a strong international following over many decades because of its dual aim of offering music of new artists (identified both by DJs and listeners) and providing a broader selection of music from various world cultures (Kiley, 2022).

Context: Radio Station History

KEXP Radio was established in 1972 as KCMU, a college rock radio station founded by students at the University of Washington. The call letters KCMU referred to the station's original location in the University Communications Building (CMU). The station changed its name to KEXP in 2001. Scott, KEXP board member and DJ alum of 22 years, and frequently referred to by station DJs and administrators as the radio's "godfather," recalled the early years of the Radio station (when he himself was a student) during his first year as station manager in 1982.

> The university decided not to support the station anymore, so they had to sink or swim. And I was the first time they hired anybody…I had a 20 hour a week job as the station manager and that was a really critical year for the station because we did our first ever fundraiser, an FCC renewal for the license, we increased the power from 10-watts mono to 180-watt stereo…The station was very different back then, it was basically emerging

> from being a little tiny college station to a listener-supported station, but still 90% of the people who worked there were all students.

In the late 1990s, Paul Allen, co-founder of Microsoft, invested funds in the college radio station, which was then converted into a professional station that was relocated from the university campus to downtown Seattle. Allen was also then engaged in the design of a new museum in Seattle 2001 known as the Experience Music Project ("EXP", from "EXPerience"), and decided that there should be a connection from the museum to the radio station, thus the call letters KEXP. The station has been operated as a 501(c)3 nonprofit arts organization called Friends of KEXP. The station celebrated 50 years of music sharing in 2022 (KEXP's 50th Anniversary – Independent Together. n.d.).

The international following that KEXP amassed on its conversion to a professional radio station is in large part due to the expertise of the individual DJs who work there, many of whom have become known for the musical genres they feature within their program. Program genres on KEXP radio include punk rock, blues, American folk roots, Wo'pop (world popular music), Latin American music, Afrobeats, and local artists from the Pacific Northwest. The 45 DJs who host radio shows at the station are considered freeform DJs, in that they are empowered by KEXP to program their shows with minimal top-down administrator-dictated requirements for their program content. There is also no algorithm, that is, no use of a computer program common at other radio stations to determine the songs to be played at particular times through the day based on commercial popularity. KEXP freeform DJs select the songs to be aired; they may also choose selections based upon requests by listeners.

Context: Radio Personnel

The freeform nature of DJing at KEXP is more pronounced for the genre-specific shows where DJs are seen as experts in particular genres and are at liberty to design the music playlist entirely on their own. Michael, one of the Punk Rock DJs, described the station's curation requirements as "you can do what you want but don't crash the car." This means that DJs can play music they believe is important for people to hear, emanating from their personal and professional musical values, so long as it does not obstruct FCC guidelines on political statements, or feature foul language before 10pm (A full set of rules specific to daytime radio broadcasting govern what is said and left unsaid by KEXP DJs.).

Tables 1 and 2 provide the weekly schedule of KEXP DJs and their shows on weekdays and weekends. This schedule has remained essentially the same prior to and following the date of the extracted information on July 27th, 2020. Table 1 shows the weekday schedule which highlights variety shows like The Morning, Midday, Afternoon, and Drive Time shows which offer listeners consistent schedules during regular business hours and commuting times in the local Seattle area. "Variety shows" are known for their more eclectic and wide-ranging set of music genres. After 7pm shows become more genre-based and thematic, known for their musical deep dives into specific corners of music. At 10pm regulations around language and content appropriateness lessen and DJs have further freedom to satisfy listener requests on-air and play music with explicit lyrics that would otherwise not be allowed during the day.

Table 1:

KEXP Radio Weekday Show Schedule at the Time of Interviews (July 27, 2020)

Time	Monday	Tuesday	Wednesday	Thursday	Friday
5am-7am	Early: Rock, Eclectic, Variety Mix				

7am-10am	The Morning Show: Rock, Eclectic, Variety Mix				
10am-1pm	The Midday Show: Rock, Eclectic, Variety Mix				
1pm-4pm	The Afternoon Show: Rock, Eclectic, Variety Mix				
4pm-7pm	Drive Time: Rock, Eclectic, Variety Mix				
7pm-10pm	El Sonido: Latin, World	Wo' Pop: Electronic, World	The Roadhouse: Blues, Country, Roots	Swingin' Doors: Blues, Country, Roots	Friday Night: Electronic, Soul, R&B, Hip-Hop, Rock
10pm-1am	Variety Mix: Rock, Eclectic, Variety Mix	Variety Mix: Rock, Eclectic, Variety Mix	Variety Mix: Rock, Eclectic, Variety Mix	Variety Mix: Rock, Eclectic, Variety Mix	Street Sounds Rotating Hosts Hip-Hop
1am-3am	Variety Mix: Rock, Eclectic, Variety Mix	Variety Mix: Rock, Eclectic, Variety Mix	Variety Mix: Rock, Eclectic, Variety Mix	Variety Mix: Rock, Eclectic, Variety Mix	Overnight Afrobeats: Rock, Eclectic, Variety Mix
3am-6am					Variety Mix: Rock, Eclectic, Variety Mix

Table 2 shows 20 variety shows (including the weekday shows like Early, Drive Time, and the Morning, Midday, and Afternoon shows) and 21 shows with themes specific to certain genres (blues, reggae, Soul), types of musicians (local, Latin Diaspora), and focuses (teens, live music, and public affairs). There are 46 distinct DJs listed who host the shows either at the same time or in rotation week-to-week, and there are an invariable number of guest DJs who are featured during certain radio hours or as substitutes for those in the regular rotation.

Table 2

KEXP Radio Weekend Show Schedule at the Time of Interviews July 27, 2020

Time	Saturday	Time	Sunday

6am-7am	90.Teen: Variety Mix	6am-9am	Pacific Notions: Neoclassical, Ambient
7am-7:30am	Live On KEXP: Live, Variety Mix	9am-12pm	Preachin' The Blues: Blues, Country, Roots
7:30am-9am	Sound & Vision: Public Affairs	12pm-3pm	Variety Mix: Rock, Eclectic, Variety Mix
9am-12pm	Positive Vibrations: Reggae, World	3pm-6pm	Variety Mix: Rock, Eclectic, Variety Mix
12pm-3pm	Variety Mix: Rock, Eclectic, Variety Mix	6pm-9pm	Sunday Soul: Soul, R&B, Funk, Hip-Hop
3pm-6pm	Variety Mix: Rock, Eclectic, Variety Mix	9pm-12am	Expansions: Electronic
6pm-9pm	Audioasis: Rock, Eclectic, Pacific Northwest	12am-1am	Midnight In a Perfect World: Eclectic, DJ, Variety Mix
9pm-12am	Sonic Reducer: Punk, Rock	1am-2am	Mechanical Breakdown: Wave, Synth, Post Punk, EDM
12am-2am	Seek And Destroy: Metal, Rock	2am-3am	Variety Mix: Rock, Eclectic, Variety Mix
2am-6am	Variety Mix: Rock, Eclectic, Variety Mix	3am-5am	Jazz Theatre: Jazz

Context: The Local and Global Significance of KEXP

KEXP Radio transmits locally to around 200,000 listeners a week and streams live online to roughly 100,000 weekly listeners (Kiley, 2022). Listeners can also access archived shows and information on local events, blog postings, and community programming. The station offers an app as well with streaming and archive capabilities, so that listeners can add music directly from their app to their personal playlists in other music apps like Apple Music and Spotify. KEXP's YouTube channel has amassed over 3 million subscribers, 17,000+ videos, and 1.6 billion views

since 2006. 75% of the KEXP YouTube viewers and listeners are located outside the United States, most of whom live in Mexico and South America.

KEXP Radio is a local and international phenomenon revered for their mission of musical discovery and the connection of listeners to musical practices from a wide variety of cultures, featured genres include Reggae, Rock, music of the Latin diaspora, and K-pop. Many KEXP DJs have worked at the station since the 1980s, while new DJs came on board, drawn by KEXP's renowned reputation as innovative radio. KEXP recently received the largest donation to a public radio station of $10 million, with most of their funding being given in small amounts by listeners everywhere (Brodeur, 2018). They are listener-driven to their core, and their following is a testament to the success of their slogan, "KEXP: Where the music matters." For listeners this ensures that any time they tune into the station they know they will experience music only (not news, talk, or political radio), that they can request music directly from the person on air, and that their listening experience is curated by the talented and vetted DJs who have helped build and maintain the station's identity as music discovery- and listener-driven.

Research Participants: Radio Personnel

Twenty-four interviewees were recruited from among KEXP personnel, including 20 currently active DJs and 4 station administrators with past DJ and music industry experience. All participants are identified via pseudonyms. KEXP CEO Will gave permission to interview the various staff and DJs who were sought based on genre-specific shows, and then through a snowball method of connections and recommendations by DJs to other DJs (Cresswell, 2014). Table 3 offers the list of interviewees in this research, the location of where they grew up, their age, race, gender identity, years at KEXP Radio, and radio show or role at the station. Some preferred that their full names be used, while others offered only their first names. In total, 24

DJs were interviewed, four of whom hold administrative roles at the station (like CEO and Chief Programming Officer), and all of whom have a history in music and radio. Eight of the DJs identify as female with the remaining 16 identifying as male. Two DJs openly identified as queer, six DJs identified as Black, and three DJs were born and raised outside the United States. Lastly, 12 of the 24 DJs interviewed in this study grew up in Washington state, eight of whom grew up within 20 miles of the station.

Table 3:

Participant Demographic and Professional Detail

DJ	Grew Up	Age	Race	Gender	At KEXP	Radio Show or Role
Imani	Mendoza, West Argentina	30s	White	Female	Since 2018	Latin music and culture from South, Central and North America, as well as Spain and the rest of the globe
Michael	Anchorage AK	50s	White	Male	Since 2003	Local, national, international punk and hardcore
Adam	Seattle WA	30s	White	Male	Since 2008	Chief Programming Officer - in control of overall programming vision and audience development, how they serve the mission of KEXP, and how KEXP is represented through its staff
Frank	Poland, Boston MA	50s	White	Male	Since 1993	Modern Global Music that encompasses all current musical genres while being deeply engaged in the sounds and ideas of each city or region
Sam	Bainbridge WA	30s	White	Male	Since 2005	Neo-classical and ambient music, with explorations into downtempo, new age, post-rock, and other atmospheric styles. Trip-hop, chill, ambient, drum and bass, house, dub, electronica, jazz, sometimes world music, sometimes rock
Dom	Chicago Il	60s	Black	Male	Since 1988	Weekday new music Trip-hop, chill, ambient, drum and bass, house, dub, electronica, jazz, sometimes world music, sometimes rock Variety Mix - Edgy mix of alternative rock, hip hop, electronic, roots & blues, world, jazz and more.

Nick	Anacortes WA	60s	White	Male	Since Early 90s	Country sounds and styles, from honky tonk and western swing to alternative country and bluegrass
Elijah	Small town Oregon	40s	White	Male	Since 2003	Local, national, and international punk and hardcore
Anna	Michigan	30s	White	Female	Since 2019	Interviews, artistry, commentary, insight and conversation to tell broader stories through music and illustrate why music and art matter.
Amelia	Seattle WA	30s	Black	Female	Since 2018	Local Pacific Northwest music New and timeless hip-hop, soul, jazz, rock, funk, alternative, and world music with a special focus on independent artists
David	Seattle WA, Las Vegas NV	40s	Black	Male	2006, 2016-2023	New and timeless hip-hop, soul, jazz, rock, funk, alternative, and world music with a special focus on independent artists
Liam	Bellingham WA	50s	White	Male	Since 2000	Roots program emphasizing the blues and other traditional styles of American music, the roots of today's popular music and culture
Emma	San Jose CA, Pittsburg PA	30s	White	Female	Since 2014	Local, national, international punk and hardcore
Oliver	Seattle WA, Minneapolis MN	70s	White	Male	Since 1999	New and old jazz in a way that breaks stereotypes of what jazz is
Ryan	Los Angeles CA, Bellingham WA	60s	White	Male	Since 1994	Downhome, uptown and gospel sounds of rhythm and blues music, the focus is always on the most soulful, gritty, heartfelt and creative artists and material
Scott	Rural NY	60s	White	Male	Since 1981	Board of Directors member since 2014. Former variety, reggae, hip-hop, and world music DJ.
Nicole	Issaquah, WA	40s	White	Female	Since 2018	Chief of Staff. Executive Assistant to the KEXP CEO at the time of interview
Mason	Central District Seattle WA	late 30s	Black	Male	Since 2020	Afrobeats and African pop music
James	Seattle WA	50s	Black	Male	Since	Afrobeat, disco, dub, funk, jazz, gospel,

					1994	house, noise, pop, punk, prog, post-, rock, rap, reggae, shoegaze, salsa, soul, and techno
Amber	California	50s	White	Female	Since 1998	Propulsive, dance-worthy sets of beats, rock, global and soul - an upbeat mix of genders, genres, and backgrounds
Kayla	Rockford Il, Seattle WA	30s	White	Female	Since 2008	Variety Mix - an edgy mix of alternative rock, hip hop, electronic, roots & blues, world, jazz and more. DJ Manager in 2016, then Associate Programming Director, and most recently Programming Group Director in 2022
Eugene	Military, moved every year	30's	Black	Male	2018-2021	Hip-Hop, variety mix
Julia	Rural N. Dakota	40s	White	Female	2013-2022	Associate Director of Community Engagement, formerly oversaw education and community programs
Will	Germany	50s	White	Male	1987-2022	President and CEO of KEXP

Interviews

Semi-structured interviews of the 24 Radio professionals were conducted in an 18-month period between 2019 and 2020. (See Appendix A for interview questions.) Questions were prepared, yet further questions frequently arose in the process of interviewing, which came about spontaneously in order to seek clarifications and to allow an expansion of ideas and memories from the DJs. These interviews at times took on the tone of conversations that emerged through a more organic line of inquiry. DJs themselves were invited to add information, to develop the description of an experience or event, or to ask questions. In this way, there developed mutual meaning-making between the interviewees and the researcher (Charmaz, 2016). This process has been described within CGT procedures as data generation rather than data collecting, so to clarify that both interviewer and interviewee are equally involved in conversation and co-

construction of meaning as discussions evolve (Mills, Bonner, and Francis, 2006). As such, interviews were conducted in person, through video conferencing, and over the phone. Interviews were at least an hour's length, although four interviews stretched to 3 and even 4 hours due to the participants' engagement in the questions, and their offerings of many details to the interview question responses. A total of 42 hours of audio- and/or video-recorded interviews were collected which provided sufficient insights for analysis and saturation while also allowing the interviewees additional commentary time. All interviews were transcribed for analysis, and recordings or transcripts were shared with interviewed DJs.

Ethical Considerations and Limitations

One limitation to the study that impacted data collection was the emergence of COVID-19 and immediate lockdown that happened at the start of interview process in early 2020.Most interviews had to be conducted online or over the phone and the effect of COVID lockdown on KEXP operations considerably limited DJ availability. While permissions were granted by the radio station to interview the DJs, knowing their time was valuable and that they were direct representatives of the station were reason to carefully conserve time spent at the station and with the DJs.

Additionally, as the research method entailed the experience of the researcher, and the relationships of the researcher to the interviewees and the context of their employment as freeform radio DJs, it is relevant to mention earlier experience with KEXP Radio. For eight years, I have listened regularly and have donated to the cause of the station. Memoing allowed me to reflect on my relationship with the station as I continued my data collection and analysis, so that my description, analysis, and interpretation was not at risk of confirmation bias. My greatest challenge was in contextualizing my personal favoritism for the radio station and the

positive experiences I've encountered with the station and its programming and recognizing that the station was not necessarily delivering the same extent of positivity to others. My own positionality and favor toward the station at the onset of this study remained at the forefront of my mind throughout my analysis.

Grounded in the Interviews

The research method employed for this study was Constructivist Grounded Theory, facilitating a nuanced exploration of the subjective experiences provided through semi-structured interviews with the select DJs. As the DJ lives are long and complex, semi-structured interviews were helpful in allowing the DJs to reflect on their decades of experiences in and out of music, through formal and informal learning environments, to get to the core of what made them listening professionals today. Techniques and procedures used in the study included multiple types of coding, the use of memos, analytical steps for theory development, and constant comparison of data throughout the data collection and analysis process.

The context of the KEXP radio station set the stage for a diverse and representative study sample, along with the demographic profile for each DJ spanning various ages, races, genders, and musical areas of focus. With the station's internationally renowned following and notoriety for musical discovery and variety, the DJs chosen for this study show the level of professionalism and competence in deep music genre knowledge that is needed for their unique positions. This research incorporated a robust analysis leading to the development of a theoretical framework that is presented in Chapter 6 to accompany a discussion of the research findings provided in the next two chapters. With an empirical approach to uncovering the processes of learning and experiencing at the core of the DJs musical lives, music educators can

glean implications for their own practices to encourage student music listening discovery and rich music listening lives inside the classroom.

Chapter 4: Becoming DJs

You had your time, you had the power

You've yet to have your finest hour

Radio (radio) Radio, what's new?

Radio, someone still loves you

- *Queen, Radio Ga Ga*

The intent of this research was to explore the evolution of freeform radio DJs as professional music listeners and programmers who curate music for listening audiences. Of particular note for the field of music education are the DJs' learning pathways in school music programs and beyond school in informal circumstances through which they were drawn to music as a listening enterprise. This chapter focuses on the initial two research questions for this study, the first of which addressed the formal music learning experiences of the DJs throughout their childhood and adolescences, and the second which examined the informal music learning experiences during the same developmental years. The findings, illustrated by the experiences and motivations of the 24 DJs' younger selves, showcase patterns of musical behavior and salient common musical experiences inside and outside the music classroom. From these youth experiences, the DJs cultivated skills as specialists in programming music listening experiences for others.

Through this chapter, an understanding may be gained of how these radio professionals developed keen music listening skills in their personal, social, academic, and emotional lives, the results of which are of import to music educators and the students for whom they are responsible.

By reviewing the experiences and reflections of these radio DJs in their childhood and youth, music educators may recognize how some students are drawn to music as listeners and consumers, sharing music with others, and venturing into independent music collecting. Further, teachers may consider the patterns of DJs' instrumental persistence, which demonstrate their need for deeper personal meaning-making and musical discovery, as ways to nurture thoughtful listening in their students.

Recollections of Formal Music Learning Experiences

As discussed in Chapter 2, formal music learning occurs in structured environments. It involves a hired teacher, one or more students, formal assessment, an expectation for practice or homework, and expected growth over time (Green, 2008). Analysis of the DJ interviews reveal two main forms of early engagement in formal music learning: in-school music ensembles or classes and out-of-school private instruction. One sub-theme included whether the school music environments were instrumental, choral, or a general music class. Tables 3 and 4 include a numerical summary of this data, indicating that 18 of the DJs experienced school music of some kind; within that, half were instrumentalists, followed by 7 choristers and 6 DJs in general music classes. Twelve DJs participated in private instrumental lessons.

Also relevant to formalized education in these DJs' youth is whether their experiences were satisfactory or unsatisfactory, as detailed in Table 3, and how this satisfaction impacted how long they persisted with this instruction, as seen in Table 4. Some patterns of recollection included whether they willfully discontinued their learning before the programs themselves ended (due to graduation or moving, for example), especially those who quit within a three-week to one-year period of starting their formal music learning journey because these examples further illustrate satisfaction or dissatisfaction with formalized music instruction as it was presented to

them. Finally, many DJs discussed whether they felt forced into ~~the~~ activity or study of a specific instrument by a parent or teacher. Some disclosed their participation in a formal music learning experience due to the compulsory nature of it (as opposed to their opportunity to do so as an independent choice arising from their agency in determining what they would learn). Codes that emerged from this data are also represented in Table 3 as the labels "satisfied/dissatisfied," "short term/quit" and "compulsory."

Table 3

DJ Satisfaction in Formal Music Learning Experiences Throughout Childhood and Adolescence

Type of Formal Music Learning	**Total**	**Satisfied**	**Dissatisfied**
School Music Experiences	**18**	**9**	**12**
Instrumental School Music	9	1	7
Choral School Music	7	5	2
General School Music	6	3	3
Private Music Lessons	12	2	10

Table 4

DJ Formal Music Learning Experiences for DJs Throughout Childhood and Adolescence

Type of Formal Music Learning	**Total**	**Short Term**	**Quit**	**Compulsory**
School Music Experiences	**18**	**5**	**7**	**13**
Instrumental School Music	9	2	7	6
Choral School Music	7	0	1	4
General School Music	6	3	1	5
Private Music Lessons	12	4	11	5

In reviewing Tables 3 and 4, it is important to note that many DJs participated in more than one type of formal music learning experience as children and adolescents; because of this overlap, the totals in the table do not always add up to the number of DJs studied (24). Furthermore, not every DJ had a strong satisfactory or unsatisfactory reflection of their school

music programs, so those with neutral responses were left out of the satisfactory and unsatisfactory column counts. Examples of this ambivalence include comments like those made by Punk Rock DJ Elijah: “I remember middle school, I’m sure we had a music teacher, but I can’t remember it,” and KEXP Programming Director Adam, who reflected, “I think we had a music class that I barely remember.” Taken together, Table 3 summarizes the experiences of formalized learning for the DJs in school or in private lessons.

Overall, some DJs recalled satisfactory experiences in school music and private lessons, while others recalled struggles with formal musical study. Several themes emerged from the interview data that shed light on the nature of formal music learning by DJs in their developmental years. These include three related phenomena: level of *satisfaction* and *persistence* in music learning over time, which were largely determined by the degree of *agency* the DJs felt as they reflected on their overall musical learning experiences. By further comparing the details of their recollections around in-school and out-of-school formal music learning experiences, we can pinpoint the reasons why some DJs did not feel their interests and musical needs mattered in the scope of the music program. The following section dissects the recollections of eighteen DJs who participated in school music programs, including instrumental, choral, and general music courses. The section that follows similarly unpacks recollections of musical experiences in non-school formalized music instruction (i.e. private lessons.)

Formal Music Learning in School

Due to an ultimate goal of wanting to provide insight for school music teachers, school music environments were the main setting and focus of interview questions targeting the first research question. Namely, did the DJs experience school music education, what do they remember about it, how do they remember feeling about it, what were examples of lessons they

covered during school music, and what did they think of their teacher? According to the 18 DJs who participated in school music programs, *satisfactory* experiences mostly occurred in choir and discovery-based settings like general music class which offered the young DJs opportunities to make musical decisions. *Unsatisfactory* experiences were more common across DJs who described strict learning contexts and a lack of *agency* as decisions were made by teachers or parents regarding which instrument and repertoire to study, and how the young DJs should commit themselves to practice. Only one of the DJs in this study experienced listening as a part of their school music program, which further supports the assertion that listening engagement is underutilized in formal music education settings, as discussed in the review of literature (Chapter 2).

Satisfaction

The highest ratio of DJs who enjoyed their school music experiences were those who participated in the school choir. Five of the seven DJs who were in a school choir spoke positively of their draw to choirs as opportunities to sing with others and to feel socially connected through the music they made with their blended voices. They spoke of making friends in their choir experience and feeling like a participating member of a solid community. Anna shared, “I got pretty involved in music starting in like middle school joining choirs and a barbershop quartet with three of my best friends” and while Amelia spent a shorter time in choir, she expressed that she “enjoyed the choir thing because I did like to sing.” The DJs who had experienced choir in school continued to sing in some capacity after high school graduation, showing that their positive music learning experiences in choir contributed to their continued musical lives outside of school.

Six DJs reflected upon general music classes, half who enjoyed their experience, and the other half who did not. These formal music learning experiences were mostly compulsory and also less memorable due to their younger ages at the time of the experiences. Satisfactory learning experiences with elementary general music teachers included musical exploration or other "fun" activities. Gabrial, host of an early morning variety show focused on independent artists, mentioned songs he learned from his music teacher on Marimba in elementary school. He shared: "I remember loving [marimba]. She taught us how to play simple things that I still remember actually, and it definitely wasn't a daily class. I feel like she just came a few times, but it stuck with me." Anna, host of the radio station's only interview-based talk show, remembers playing "fun musical games". Amber described a general music teacher who introduced Gospel music to students, which she described as having changed how she felt about herself as a traumatized child with a chaotic home life. She found strength in the Gospel music and lyrics, learning through the music that she was not damaged and was instead "good enough" as a person. She added that the Gospel music "made it safe for me to see my heart and to feel a little better." Dom, the host of multiple KEXP shows, described a school field trip to the Opera as "a life-changing event" because he had never experienced such an emotional response to the visual and aural sensations that emanated from the stage. While the trip was not associated with a music class, it remained his most palpable school music memory, even beyond his years of singing in the school choir. Amber and Dom were the only DJs who reported music listening activities within their formal music learning environments.

A prevalent experience for the three DJs who did not remember General Music classes so fondly was learning to play the recorder. Emma, one of the Punk Rock DJs, disclosed that "in elementary school, the only music option we had was literally the sound recorder. Pretty much

everyone went through the same music class, and it was like, maybe we did a little singing, rhythm sticks, and the recorder. We all had to play My Heart Will Go On on the recorder. So obviously that was a very important negative relationship with that song" implying their dislike of the recorder negatively affected their opinion of a very popular song at the time. This developed "negative relationship with that song" persists even today, affecting their listening choices.

Of the nine DJs who learned to play instruments in school, only one DJ, Mason, described their experience as satisfactory. After taking drum lessons in middle school "because I wanted to live in like jazz rhythms and stuff," he joined a high school band class "where we got together and jammed and learn songs together." He had been interested in jazz drumming since he was little because his dad was in love with the style, so it was meaningful to him to follow that interest. The band he created in high school ended up playing professionally and stayed together for six to seven more years. However, this level of both satisfaction and persistence was unique among all the DJs' school experiences.

Persistence

Of those DJs who had learned to play instruments within the school music program and felt dissatisfied with the experience, most expressed that their learning was not geared to their interests or learning styles. They sought more instant gratification through quick musical growth and self-confidence than traditional school bands and orchestras provided. Some examples of activities they preferred included learning to play popular music (which students helps persist through the challenge of practicing because they enjoy the music), or learning guitar starting with power chords, which are easy to play and can provide immediate gratification by replicating favorite bands or songs. Instead, in the school music experiences they related there was a sense

of overwhelm with the learning process because they worried they would never feel competent enough with their instruments to feel successful musically. Amber shared “music that's good has an artistic response like any art, you know, and I kind of always knew that I was never going to be that good and so I think in that way [hearing great music] had the opposite effect because I wanted to do things that I was good at.” For Amber, the slow learning process of school music could not satisfy her need to grow quickly and feel capable of the greatness she heard from recorded musicians she idolized.

Other reasons for not persisting in school music programs included busy schedules in which DJs prioritized other activities—both academic and social. While some reported they were disinterested in the instrument assigned to them by teachers (or chosen for them by their parents) that did not align with their personal choice. Persistence was often an outcome of agency, which conversely meant that as they had less agency, the DJs were more inclined to discontinue their formal music learning experiences. Will reflected “I took three years of trumpet, only because there were no slots available for drums. I wanted to learn percussion, but whatever system they used to decide instruments, my first choice was not available. So, trumpet was the second one. Now I wasn't a very good musician. I could bang out a song and perform something, but performance and composition were never a passion of mine.”

A few DJs, including Will, were also deterred partly by their music teacher. Will’s story deepened as he shared more about his school music contexts, showing the power and influence of teachers' role in life-long messaging about music and musicianship. He added,

> “I remember those three years. I was learning trumpet. There was no real blood flowing through that experience. It was an awful teacher who was just emotionally immature and who would throw pencils at us. And it was like a wrap-the-knuckles kind of approach to

> learning your scales. It didn't dissuade me from having music play a large role in my life, but I'll say that at the same time as I look back on it, that's sort of a lost opportunity. I would have much rather had somebody who was more of a mentor who shared a love of music and guided me in terms of exploration and enabled me to develop taste and things like that."

Will quit after three years because his dissatisfaction with the trumpet learning experience was greater than the optimism he felt about his musical future with that instrument, all of which was compounded by the prescriptive nature of his learning environment.

Another of the three Punk Rock DJs, Elijah, who also earned a Ph.D. in Early Childhood and Special Education, had strong feelings about his school music studies. He described his elementary school music teacher as a "vile, hateful man" adding "I remember my mom saying to me recently. It's amazing that you and your brother grew up liking music as much as you did" given the seemingly charged memory. And without sharing more, he was quick to change subjects to positive memories of learning guitar and drums on his own outside of school. Dissatisfaction with school music for these various reasons ultimately led seven of the eighteen DJs to quit their instruments before the natural end of a program (like graduation or moving), because to them, continuing was not worth the frustration.

Agency

Quitting was ultimately a form of exercising agency over their personal lives at an age when much of their daily lives and schedules were dictated to them, by virtue of being school-age. Therefore, the only choice they had in a learning environment without agency was to stop the formal learning experiences altogether. The opposite sensation of musical helplessness or frustration in class can be seen in children and adolescents who are unable to experience any

formalized music instruction, and who remain haunted by the musical potential they never got to exercise. Kayla, an administrative manager and variety show DJ at the station, offered different insights into barriers formal school music programs can present. Starting at the age of ten, her family moved frequently throughout her middle and high school years. When she was finally of age to join the band program at one school, another move interrupted her experience. Due to transferring schools multiple times, she was unable to keep up with the different school music programs and stay involved. She shared:

> Well, I moved too much to be able to join band, which is something I have regrets about to this day…a lot of people were like 'I just know how to play the violin because I played it at school for ten years' but I didn't have that opportunity. I was never in school long enough to be able to establish [myself], and then by the time I got to high school they don't take beginners, which I find offensive now that I think about it. Like, why wouldn't you have a beginner's band for kids who didn't know that they had an interest in music until later?

This quote speaks to a lasting impression not experiencing school music can leave on a person who wished to participate but ultimately had no control over the school music learning opportunities available to them. Kayla's story also highlights inherent structural barriers that could keep students out of music learning if they are unable to start learning an instrument in common beginning band and orchestra years like 4th and 5th grade. Kayla's story highlights a need for music classes with minimal or no prerequisites (like general music, music technology, or music appreciation) to be offered through high school, which could also be prime avenues for more instruction in music listening. Lastly, the lack of agency and satisfaction students experience in a school music program, which hinders or truncates their persistence, result in the

same outcome of students leaving the program as does the absence of musical agency students experience not having a program at all. Analysis of the school music experiences for these DJs highlighted a balance needed that honors student choice, thereby increasing student satisfaction, and as a result, ensuring greater levels of persistence for students in these programs. Otherwise, school music programs may be subject to the same outcomes of students graduating from K-12 without positive musical outcomes.

Formal Music Learning in Private Instruction

The other type of formal music learning in childhood or adolescence reported by the DJs were private lessons which occurred outside of school hours and in non-school settings. Private lessons were similarly regimented to school music programs in that they were often led by teachers, students were to follow directions with choices made predominantly by the teacher and were driven by an expectation of practice through scaffolded lessons toward goals also determined by the teacher. The themes of low agency leading to low satisfaction and lack of persistence were similarly present in these formal music learning experiences.

Twelve out of the 24 DJs experienced private lessons, five of whom were forced by their parents into music lessons, and eleven who ultimately ceased their commitment to lessons by choice for similar reasons to those who quit school music programs. Sentiments about private music lessons were largely unsatisfactory, with only two people sharing satisfactory reflections on the experience because they liked their teachers' positivity. Four DJs who took private lessons quit soon after starting (between one month and a year), making their private music learning experience short-term. "Quitting" was a term used by DJs to signify a personal choice to discontinue the learning process before the agreed-upon or expected timeline they created with their teacher or parents.

Satisfaction, and Agency

The most common source of dissatisfaction for DJs regarding private lessons was a "Simon Says dynamic" described by Sam, and a general dissatisfaction with not being able to exercise agency over their own learning experience. Like most DJs in private lessons, Sam started young because his parents wanted him to experience learning an instrument.

> "My parents weren't huge music passionate music fans that went to concerts all that often or anything, but they did want me, my twin sister, and my older brother to play instruments. So, we all started playing the piano basically at a young age. I did play the piano from ages 5 through 16. I think in early high school I played the piano fairly seriously, like weekly lessons, did some competitions in middle school, won some prize money for getting second place in a competition in seventh grade, which is probably easily my piano playing highlight."

Sam further described the private lesson dynamic by saying, "My piano teacher was more like 'I'm going to play the song so you can hear how it sounds, we're going to go over certain sections, and you can practice that for this week' and I think it was definitely more like Simon says or something. Prescriptive. It wasn't a really creative teaching style I don't think." He confessed that he was dedicated enough to say, "This is how the song should sound; I'm going to play it as well as possible" by practicing to mirror or imitate his teacher's demonstration, which eventually led to Sam knowing how each piece should sound but not feeling satisfied by the musical outcome. And while this type of music lesson sounds like it is founded in music listening, the purpose of the listening is not for personal understanding and growth, or from personal interest, but in avoidance of failure or disappointment by his teacher.

Persistence

Sam ultimately stopped playing piano in high school for other priorities that took his attention in other directions. “I just got really busy. I was playing sports in high school, and academic stuff, had a girlfriend, and piano kind of started to become less of a priority and focus. But I also played trumpet in the middle school band in sixth through eighth grade. All my music-playing experience ended early in high school as far as playing instruments.” When asked more specifically why, after eleven years of playing piano and three years of trumpet, he felt dissatisfied enough to stop entirely, he added “I enjoyed both of them, but I never felt like I excelled at either…I think it's that feeling you have when you're like, ‘oh I'm doing this well, and it sounds good’ verses ‘I don't feel confident about this’” He shared that he wanted to learn composition, improvisation, or songwriting, which were never a part of his piano studies or school music programs. And even though he loved his piano teacher, in the end, the piano felt like an isolating instrument. Despite a long allegiance to the piano, Sam eventually told his parents he was done.

DJ Sam’s reflection on his eleven years of piano lessons exemplifies the shared stories of the DJs who also took lessons and chose not to persist. Many characterized the structure of private lessons as isolated music learning without agency over either song choice or, in many cases, the instrument in the first place. Nicole shared a similar story about discontinuing piano lessons when she was 15 after her mom “forced me through 10 years of piano lessons.” Her mom gave her the option to stop given Nicole’s commitment, but not passion, for piano. At that time in high school, even though Nicole was also in choir, her greater interests were softball and friends. Nicole added that “sometimes it was not cool to be in the music room”, and piano lessons could not keep up with the appeal during her adolescence of more socially relevant

engagements. Furthermore, like Sam, Nicole became oriented to a dynamic with little effort put toward practicing. “I finally got to the point where I could play show tunes. I'm tired of doing classical music. So, the day before I had to go to my piano lesson, I just worked really hard, which wasn't that hard, and then I went and did fine because I heard the song ahead of time.” However, Nicole and many of the DJs who discontinued school music or private lessons expressed regret for not being persistent enough to stick through the challenges of instrumental learning, given the time and energy they had already invested.

Formal Learning Patterns

Findings for this study’s first research question about the DJs’ formal music learning experiences point to a connection between their dissatisfaction with school music and private lessons and their unmet musical needs by virtue of lacking agency in the experiences. As a result, the DJs' satisfaction with these musical opportunities lessened, to the extent that their persistence in formal music engagement was tested, leading many to cease participation in their formal learning program for good. Internally, formal music learning seemed to prompt DJs to question what they wanted out of music. For several DJs, such as Will, prescriptive music learning was, in retrospect, still an opportunity to become musically independent. His reflection about quitting trumpet and the “lost opportunity” of his musical interests compared to the delivery of music instruction points to the intersection of student agency, satisfaction, and persistence driving personalized musical lives. His next words “I would have much rather had somebody who was more of a mentor who shared a love of music” shows what kind of instruction would have counteracted his dissatisfaction and eventual discontinuation of trumpet. Furthermore, his revelation that a teacher who would have guided his musical exploration and taste development aligns with his eventual role as freeform DJ where he provides such services to the greater

public. For Will and the other DJs who were dissatisfied with and/or quit music instruction entirely, they subsequently cultivated agency through engaging independently in other musical ventures like music listening, working at a record shop, or volunteering at a local radio show.

Recollections of Informal Learning Experiences

DJs remembered much about their informal musical learning experiences outside school and the school-like rigor of their private instrumental lessons. Informal music learning practices encompass the autodidactic manner of teaching oneself about music, such as figuring out chords on the family piano or guitar, and the enculturating way musical skills and knowledge are "picked up" from friends, family, and community. DJs mentioned joining friends in a band and learning from them, including exchanging records, cassette tapes, and CDs. Informal music learning can happen through the encouragement of family members and friends, through modeling of music-making via singing, on an instrument, or through external behaviors associated with listening (earphones on, concentrated attention to the music that may include physical movement and gestures in responding to the music). Informal music learning also includes watching musicians play live – in the kitchen or living room, on the front porch, or around a campfire (sometimes with immediate imitation or just a quiet intake of the behaviors of musicians) (Green, 2001, p. 5). All 24 DJs expressed having agency over their music listening lives. Their musical experience appeared to emerge out of their generally musical or supportive home or social environments and contrasts the lacking agency and satisfaction that was reported within formal music learning experiences. David noted:

> For me, music was lunchtime, it was the thing that my friends and I connected on, whether we were sharing tapes, whether we were sharing rhymes when I got older, beatboxing or you know beating on the table. That was music. Music was a thing we got

> in trouble for at school or we'd skip school to do, or I was skipping school to go buy tapes. It was never anything that, when I was serious about music, music in school was [serious about me]. Not at all, most of my childhood."

For David, the music and musical activities he enjoyed were not featured in school music classes, and his lunchtime expressions were not appreciated by his formal music teachers. The disconnection between his musical interests and engagements and the music curriculum were obvious to him, as he experienced the absence of a musical outlet for him and his friends.

Informal Music Learning through Listening

For those DJs who could recall music in their earliest childhood, informal music learning began when they were very young children. They remembered musical role models in their family and among their neighborhood friends, and they recalled music recordings playing in their homes and cars. This type of early musical exposure aligns with research on music in children's development, which indicates that a rich musical environment in the home is an important influence on musical taste and listening habits (Hargreaves & Lamont, 2017; Ilari, 2016; Campbell & Scott-Kassner, 2018).

Music listening within the DJs' general environments during childhood emerged as a significant source of informal music learning and influence. The presence or absence of a wide and varied span of musical styles within their childhood home environments appeared to affect the openness of DJs to a spectrum of global styles of music. DJs with a more limited musical exposure at home, whose families were inclined to listen to a single musical style (such as Country, R&B, or folk rock,) were more inclined to explore more narrow musical styles but diving deeply into that style and subgenres, sometimes to the point of passionate obsession (Virtala, 2015). Music learning through music listening was an ongoing and avid commitment

for the DJs from childhood onward, as they independently sought out music they could experience and place within a developing frame of musical understanding.

Returning to the example of Sam, alongside his eleven-year path in learning piano and trumpet, he led a parallel musical life in music listening. He reflected after the discussion about quitting piano that:

> I was obsessed with radio though. I started to listen to the radio a lot in second or third grade and I have boxes and boxes of tapes from taping songs off the radio. So that is, looking back, a very impactful thing I did pretty early on, like late Elementary School into Middle School, trying to capture whatever songs I really liked all the time, as much as possible. And that's when my CD collection started expanding…Then the internet was starting to become something everybody was using and I think there were like a couple specific albums and songs that crossed my path right at the end of high school, like literally last week of high school that totally just opened up my ears, eyes, and mind to like, oh, there's really cool music out there.

As Sam demonstrates here, for the duration of time he was learning to play the piano and then trumpet, he was developing music collection and curation skills with cassettes, CDs, and online playlists in his personal life. While music listening was not a shared experience in school music classes or private lessons, it was the most referenced comparison between what the DJs wanted out of formal music education, but did not receive, and what they cultivated in their personal lives.

Frank's description of his environment growing up (mentioned in Chapter 1) demonstrates the different layers of influence that can exist in a child's development, and which did exist for many DJs in this study. Layers of influence on Frank's musical learning included

the political climate of Poland at the time and the habits of international music-sharing in a merchant marine town of well-traveled men who brought back to their families the music they acquired on their journeys at sea. Derek also noted the isolation of being an only child, growing up with a rich local folk music heritage, and parents who ultimately divorced and then moved him to experiences in other countries beyond Poland. He spoke of the technology that advanced as he grew up, which allowed him to listen to a wide range of records at his leisure and develop friendships with peers who shared their tastes in music with him. These experiences are what he attributes to his passion for and mastery of folk, traditional, and popular music from the world's many musical cultures, which is the focus of his world-popular-music-based radio show. While this example is unique to Frank, it showcases the multiple layers of a child's environmental music experience. His story includes variables that all the DJs shared in the stories of their informal music learning experiences.

Musical Discovery

All DJs described music listening as an area in their life for which they had complete control. This agency enabled their music discovery practices at a young age. They could freely explore what was available to them, often privately with headphones or in the privacy of their bedroom and a closed door. Liam, host of the American roots music show, started buying records at the age of 7 years as he and his siblings had their own record players in their bedrooms. He added "there was a lot of [parental encouragement] like 'go to your own room and listen to whatever records you like.'" Some recalled that in their youth, their continuing passion for listening to music meant listening secretly, sometimes with a transistor radio under the pillow so other siblings in the room stayed asleep. This was the case when Dom realized that he had become a full-time listener in his early adolescence. For Elijah, it was different because he had

the agency and support from other family members to listen full blast in his home to any music he chose, whether rap, rock, punk, or other more "explicit" music. Rarely do the DJs remember having to worry about restrictions on their listening choices, especially around the types of music they chose, which could be partly responsible for the rapidly expansive relationship with music listening the DJs built across their childhoods and adolescences.

In many of the DJs' developing years, access to music listening was reliant on music listening technology becoming increasingly handheld and affordable, which allowed them, even as children, to have more freedom in selecting and sharing music with others. Music became more personalizeable, using records, cassettes, CDs, and the internet. As technology advanced from the portable cassette, to CD, and then to MP3 players, so did the DJs' capacity to listen independently outside of the home and around others. When agency over their music listening, access to technology, and musical discovery converged for the DJs as they grew up, their understanding of the musical world grew rapidly. This is showcased in Sam's story; while he quit after eleven years of piano lessons, he was simultaneously fervently collecting new music to listen to and organize into playlists of his own design. For many DJs, this musical expansion was an opportunity to use music for self-soothing from challenging moments at home or school. For others, social connections deepened through the listening experiences they shared with others (both examples will be further discussed in chapter five).

Kayla, who moved frequently during adolescence, originally grew up in rural Illinois. Until the age of ten she was one of only a few kids her age in a small town. She described her childhood as lonely and isolated. However, her dad had a side job filling and switching out music CDs for jukeboxes at local bars. She took trips to Best Buy with him to get new music for the jukeboxes, and he would store leftover CDs at their family home, giving her free reign over

hundreds of CDs ranging from pop to country, rock, and soul. She shared that when the jukebox music selections had passed their peak in popularity and were eventually less appealing to listeners, her father would tell her, “Go for it. Rummage through those boxes and take what you want.” Kayla then selected recordings that interested her and made mixtapes. Meanwhile, her older sister was buying cassettes of the latest-breaking bands, and when she tired of a song, she would hand the cassette over to Kayla to add to her collection.

Around this time, Kayla traveled with her classmates on a school field trip to a local radio station. There, she was given her own Discman, which meant she could listen to whatever CDs she wanted, whenever she wanted. Kayla started making mixtapes of the CDs her dad had given her, then CD playlists, after which her school years became a sequence of interactions with people who exposed her to turntables and many different musical genres. By that time, Kayla’s sister was working at a record store, and both her sister and her sister’s boyfriend, a musician who played in local clubs, opened her ears to new selections and styles of music. Eventually Kayla became the first female manager at her college radio station. The access she had to music listening and the agency she exercised during her music discovery journey had prepared her for a future in radio and music curation. She had learned about music informally, largely on her own through self-driven discovery and the recommendations of others. This was a stark contrast to her description of the lack of formal musical experiences in her childhood due to her family’s frequent moves. While Kayla could not readily participate in school ensembles, music listening was portable, relatable, and a way for her to feel connected to a larger network of people and cultures. She had the necessary agency to utilize music listening for her personal interests and needs, and this earlier musical discovery served as a vehicle for her further exploration into ever more music available worldwide.

Musical Autodidacticism

The most satisfactory musical experiences relayed by DJs, as they recalled their formal and informal musical encounters throughout childhood and adolescence, were autodidactic in nature. As they learned an instrument, worked on their singing, or discovered new and unfamiliar music, they did so independently and without the guidance of a teacher. Scott's transition from formal to informal music learning embodies the DJs' common motivation to cease formal music learning and attend to personal interests instead, even if it required more personal drive and dedication. He shared that despite years of school choir and classical piano lessons, he felt isolated by the piano and disinterested in choir and solo piano music. At age 15 he switched to teaching himself guitar so he could play in rock bands and learn folk music that would match his musical interests and out-of-school music listening habits more closely. In his interview, he reflected that quitting private piano lessons propelled him into a more autodidactic (self-taught) and informal, community-based music journey.

> By the time I was 13 or 14, I started playing guitar, and I think that's a turning point. And a lot of people tell you this turning point when I saw the Beatles play on his show. Looking back on it now, February 9th,1964, I remember the day, that kind of changed me, and I got more interested in more rock and pop music, and I got an electric guitar by the time I was 14. Started playing in rock bands by the time I was 15. And then quit taking my classical lessons and I totally switched over to playing guitar.

Quitting formal music programs to venture into self-taught music learning was a sentiment also shared by Nicole, Michael, Elijah, Sam, Julia, Emma, Adam, Liam, and James. All described leaving the formal music education they were experiencing and instead opting for the experience they wanted.

Despite many DJs having experienced formal music learning in school and during private lessons, few enjoyed their experience. Only four continued with the instruments they had learned formally in school or through lessons, three of which were in choir and the other on drums. Of the four DJs who indicated continuing their formally learned musicianship after high school, two remain active musicians today. Both play multiple instruments, including ones they learned formally in school and others learned autodidactically. For DJs who had studied an instrument privately, none continued playing past their school-age years. This indicates informal music learning settings may be more conducive to the DJs musical longevity over those more formal settings.

Table 4 presents the informal music learning experiences of the DJs. These experiences include honing skills on instruments and vocally by singing and rapping, and their continuation of informal learning following their school-age years. In the farthest left column lists the types of instruments that DJs described teaching themselves with their respective timelines in the second column. Eleven out of 24 total DJs taught themselves to play instruments, sing, or rap outside of formal music settings during their K-12 school years. The most common instrument was the guitar, followed by drums, then vocals and piano, which collectively make up a standard modern band and may show the relevance of these instruments to the DJs' musical interests. The same trend can be seen for the DJs who taught themselves to play music after they graduated high school, and for the total 16 DJs who have taught themselves to play music informally, all the instruments were considered important to the DJs because they were directly related to the DJs' listening interests.

Table 4

Autodidactic Instrumental Learning Throughout the DJs' Lives

Instrument	School Age	Post K-12	Total
Guitar	11	5	16
Bass	5	1	4
Drums	0	2	2
Vocals	3	0	2
Piano	2	1	3
Total	2	1	1

Adam described growing up in the 1990s, in the Seattle grunge era, at which point he was learning violin and then the piano in after-school groups. As a Nirvana fan, his desire was to produce "that Nirvana sound" on the guitar. He added that "when I was about 12 years old, I saved up my money and bought my own (guitar)." Adam said he proudly continues to play that guitar today, getting that Nirvana sound, 25 years later. Part of what made the guitar appealing to him as a self-taught instrument was the beauty of power chords. He learned to play every Nirvana song he could by ear on his own and remarked that the simplicity of the chords "allowed me to kind of get in there and actually, you know, feel like I was making progress." As he reflected, this quick success was the difference between his formal and informal instrumental learning experiences.

Other DJs spoke of being "self-taught". Ryan claimed that he learned the bass guitar on his own, alone in his bedroom while "playing along with records by myself". Amelia, Scott, Amber, Michael, and Emma attributed much of their informal learning to playing in bands with friends. Of the DJs who participated in formal music learning through school music programs and private lessons, few sustained their musicianship past their K-12 years. Those who learned instruments autodidactically were more likely to continue playing the instrument after high school and into adulthood. Table 5 shows the longevity of musicianship for DJs who learned informally and formally.

Table 5

Longevity of Instruments Learned Formally and Autodidactically

Instrument	Total
Played Music After K-12	11
Self-taught instruments	7
Instruments denied in formal K-12	1
Instruments they learned in school	3
Singing from formal choir in K-12	9
DJs Who Actively Play Music Today	2

Out of the eleven DJs who played music after their K-12 school years, four continued with what they learned in their formal school music programs or private lessons, out of 18 total DJs who learned music formally between kindergarten and 12th grade. Conversely, seven DJs decided to teach themselves the instrument they were denied learning when they were children and adolescents in formal music programs, which characterizes both a tenacity in following their musical interests and the long-term resentment that can come from musical rejection. These DJs had notably strong relationships with music that started during childhood. A strong contrast emerged between the lack of agency experienced in the DJs' formal music education compared with their personal music listening lives. Listening offered them agency and discovery whenever they wanted, and inspired persistence through teaching themselves the instrument they were originally denied or never had the opportunity to learn formally.

Informal Learning Patterns

Both the DJs' informal learning of instruments and independent music listening happened beyond school and were satisfactory for a number of reasons. As children and youth, these experiences helped the DJs define themselves socially and emotionally, and removed them from the interference of adults, top-down teaching, structured learning, an overload of critical

assessment, or an attention to music outside their interests. All informal and self-taught music learning, however, was ultimately driven by and in service to the music listening thrills and experiences the DJs enjoyed and dreamed of replicating themselves. All voluntary instrumental experiences centered around a passion for music listening and an effort to get closer to the visceral experience of music that confounded and transfixed them growing up. Ultimately, music listening was the driving force for seeking out other types of musical experiences and served as the main vehicle for informal learning about music, the world, themselves, and others throughout their childhood and adolescence, eventually resulting in a career using music listening to guide others.

Informal and Formal Music Learning Experiences

Overall, formal school music and private lessons emerged as dichotomies in the DJs' personal musical lives. Lack of agency in formal music learning environments likely exasperated the dissatisfaction they may have felt, especially in contrast to the amount of musical agency they could exert informally. Between formal and informal music learning experiences, music listening was described by the DJs as the most meaningful connection to music they experienced growing up. This included music listening alone in their room, together with friends, at live performances, in the car, and throughout their daily life as they navigated through the K-12 school years. The frequently expressed importance of music-listening experiences foreshadows the DJs' ultimate roles as curators of listening experiences for others in their lives as DJs.

Another realm where DJs could exert more control over their musical journey was through informally self-taught musicianship. Since many had voracious music-listening habits in their youth, autodidactic informal music learning and making met their need for musical interactions that matched their interests and appetites. Self- and peer-taught instruments opened

avenues for social interactions in music settings, which many found to be lacking in their formal music learning experiences.

Choir was one of the formal music learning experiences that offered satisfactory experiences for many DJs, in part because DJs enjoyed the camaraderie and social interactions of learning music with classmates. Additionally, DJs with positive school music experiences, in choir, elementary general music, or ensembles, showed patterns of being able to know what positive musicianship felt like, to learn about new musical artists that spoke to them uniquely, or to interact with a positive teacher who enacted lasting positive memories and musical drive. Conversely, instrumental learning was shown to be the most frustrating formal music learning experience because DJs were rarely able to choose what instrument they learned, some were forced into music learning, and others "quit" in favor of hobbies that better matched their interests. Between the drive to engage more socially with music and the need to have agency over the instruments, genres, and methods of learning, DJs overwhelmingly attributed their current musicality to informal music learning experiences. The common story for many DJs seems to be that a lack of agency in the formal music environment (e.g. when choosing an instrument, genre, pieces, learning style, or social versus independent nature of experience) lead to a lack of satisfaction with that activity, which then led the DJs to quit that learning experience. Then, by exercising agency in either individual or social music listening activities or through self- or peer-taught musicianship, DJs found more satisfaction. Despite the higher satisfaction, the DJs did not necessarily persist in active music-making into adulthood (however, among those that do, self-taught instruments are more likely to be continued.) However, listening *has* carried over as they now make a living advocating for and curating music listening.

For music educators, these two music learning avenues—formal and informal—offer insight into ways in which music class can engage students. This data highlights the importance of incorporating and honoring students' personal music listening interests. Furthermore, finding ways to meet students' instrumental interests could include a stronger commitment to allowing students to exercise agency in instrument or repertoire selection, or even in suggesting methods of learning. Merging students' in-school and out-of-school musical lives could resolve tensions that, for many of the DJs in this study, incentivized them to "quit" formal music programs in favor of teaching themselves the music they were interested in on their own terms. By meeting students' musical listening interests, teachers could support their students' musicianship longevity and consequently boost school music program enrollment. The equation that emerged from the interviews suggests that student agency leads to satisfaction, which drives persistence and school music programs could increase retention through targeting these student experiences. In the next chapter, the application of these findings is further explored, including how specific influences (largely from informal contexts) affect their current work as DJs.

Chapter 5

We watch the shows, we watch the stars

On videos for hours and hours

We hardly need to use our ears

How music changes through the years

- *Queen, Radio Ga Ga*

The third and fourth research questions, which are the focus of this chapter, illuminate the connection between what was discussed in Chapter 4 about the DJs' musical experiences during childhood and adolescence and the specific events, people, and technological advancements that *most* contributed to them becoming freeform radio DJs. For research question three, exploring the motivations and experiences which most shaped the DJs' pathways to becoming DJs contributes to the understanding of developing musical skillsets and knowledge. This is relevant to music education because music teachers hope to inspire life-long musicianship or music listening and ignite musical passion and intrigue.

Research question four connects the DJs' early music experiences to their current programming decisions. Starting with the curatorial intentions of the DJs, the data then highlights specific techniques they employ on their radio programs. The findings for this question help build understanding of the ways music listening skills may help music students persist through musical challenges like the slow nature of repeated practice, or regret over missed opportunities in school music. These are the lasting elements of music learning that helped the DJs remain musically involved in a professional capacity, applying the skills they

developed as children and adolescents. In this chapter, answering the final two research questions will reveal how these DJs started as listeners and ultimately became listening curators.

On the Pathway to DJ Work

While the first two research questions involve understanding the formal and informal music learning experiences that DJs had known in their childhood and adolescence, the third research question centers on the core motivations and experiences that, in the view of DJs, most shaped their pathway to becoming freeform radio DJs. Several themes emerged from the interviews, including social music sharing, influential people and events, technological advancement, creating and sharing mixtapes, and music listening to combat adversity.

Social Music Sharing

All 24 DJs discussed being influenced by other people's music recommendations, especially from friends during middle and high school years. Sharing music was a layer of friendship and connection that transcended conversation, promoting meaningful time bonding through lyrics, the mood of the music, the artists, the historical or social context of the music, and many other variables. DJs and their friends often shared new, meaningful, or unique music, usually casually, but sometimes as coordinated means of achieving popularity, respect, competition, and enjoyment. Multiple DJs played a version of one type of game that is best described by Elijah:

> Something Oliver has always said is like, that was something I was doing anyways, which was sitting in rooms with my friends doing something called the "Three Jam Rotation", where you played three songs and you were trying to play the best songs that were going to blow your friends away. Like, oh my gosh. I haven't heard this song in so long! Or what is this? I've never heard this! But [now I'm] doing it for all these strangers

> on a frequency bandwidth that anyone can hear. And that's still the way I think about it. And when I talk about music, that's how I try to talk about it to people and that's very intentional. Part of what used to be the training at KEXP is like “you're excited about something, tell it to the listeners the way you would talk to your friends about it”. Like, “I'm so excited about this band. I don't know much about them, this is where they're from, this is what I know about them, but I just, you know, I love this song. It's one of my favorites of the year.”

West’s story of the game and its relevance to his training at KEXP, above, shows the direct connection between how the DJs chose music and interacted musically with friends with the choices they make on air today.

Part of the challenge in a Three Jam Rotation game is to present the “best” song, which lies in a middle ground between nostalgic and novel, according to the taste of those listening. Dom also calls these “Listening Parties” like a game of musical “Tag” when friends “get people in a group to listen,” something he recalls doing with four of his friends. “The music is pretty powerful. It's almost like peer pressure. You might want to act out [if you don’t like the music] but other kids, that are going to be intuitive, [say] ‘hey, dude’s playing a banjo. Come on.’” Dom then implied this was a type of policing of keeping open judgment towards others’ tastes, as though they had established an unspoken rule of respect and openness to one another’s musical choices. Whatever the name, these social musical interactions were a common informal music learning influence in many of the DJs' lives growing up.

Influencers

For the most part, all DJs remembered their time at home and in the family when they could listen to the music they wanted whenever they wanted. While many appreciated

opportunities to listen alone in their rooms on their terms, other people's musical choices and recommendations of good radio stations, bands, songs, albums, and artists promoted the DJs' musical discovery, even during later solo music listening experiences. These musical influencers remained a large part of the DJs' memories around discovering new music and learning about how to build their own musical taste.

Many of the DJs named an older sibling in response to questions asking them to consider people who might have inspired their interest in music. Often, they were gender-aligned with this most significant "influencer," whereby a female DJ would name an older sister, and a male DJ would name an older brother. KEXP CEO Will called his influential older brother a "Music Sherpa." "I always think of my older brother playing that role of Music Sherpa enabling discovery, encouraging me, and prompting me, and also setting the expectation that I ought to burn calories to go out and lean in to discover music as opposed to just letting it come to me."

Liam had a similar relationship with his brother. When asked who his greatest influence in music was growing up, he responded "my brother was really instrumental. He was a big record buyer. He's my fan and he influenced me. That's really about it." Liam explained that he and his brother would both track the top forty artist lists, playing a guessing game each week and writing their predictions down in a notebook, then tuning into the radio on Sundays to see how closely they predicted the results. Liam shared, "he gave me the notebook a few years ago. I actually have the notebook. It was really one of my favorite gifts ever. And it's eight by eleven, ruled paper, with pencil. And it goes by each week's date for about three to four years. It's amazing." Liam's testament to the influence of his brother and the artifact of this notebook that chronicled musical memories of their adolescence speak to the capacity family members, and especially siblings, carry in the musical journeys of taste-making and discovery. Older siblings

were often responsible for introducing new music, training the DJs in music recording and sharing habits, and imparting an understanding that music is broad, with a whole world available to them if they look outside themselves.

Parents were similarly influential for those without siblings. Ryan's dad was a professional studio musician who regularly brought world-class artists to jam with him at home. He also took Ryan to the recording studio, where Ryan got to learn about mixing and the life of professional musicianship. Similarly, as a professional musician, Nicole's mom was the strongest role model in her house, welcoming regularly visiting musical friends. Nicole describes her house as musical and robust because of her mom, adding "we didn't have a dining room. It was a music room full of PAs and full setup for a five-piece band. Sometimes we'd have a drum kit. Sometimes we'd have musicians that she would help out, staying with us for a month. [My mom] remembers it fondly, even feeling like the music was another member of the house. [I] could hear mom's car coming down the street with the stereo blasting, and laughed as she shared that she would at times have to say "Mom, you gotta turn down the PA. I've got to go to sleep! And she's like, 'someday, you'll appreciate this.'" Nicole agreed with this sentiment, reflecting on it in her interview; Nicole deeply appreciates the influence her mom had on her own life of music listening, concluding this memory with, "It was a combination of somebody that I deeply respected, telling me that I need to listen to this. This is genius stuff."

Friends and family friends also served an influencer role for anyone without musically inclined parents or siblings. Imani, who grew up in Argentina with eight male musician friends, cultivated a dynamic where she pretended to be their manager. Through this "pretend play" she ultimately built the chops to become a professional music manager at 15, launching her into a lifelong professional music career. After he left Poland for Boston, Frank's middle school and

high school friends were his gateway into broader music styles. Emma's dad had a friend who gifted her several metal albums after recognizing her interest in the genre. Later in adolescence, Adam had friends who were DJs and became his mentors as he eventually made his way into radio. Amber remembers watching her dad's girlfriend play guitar one day and thought to herself, "I can do that," after which her internal narrative (mostly based on negative self-talk) became open to new possibilities, and she began envisioning herself as a musician. For all the DJs, there was at least one prominent person who imparted upon them a love for music and musical openness, and to whom many DJs attribute their love of music today.

Influential Events

For a few DJs, there were specific moments that opened their minds to new musical potentials and considerations. These are what Nicole called musical "aha" moments when it feels like an epiphany or lifting a veil and a new musical frontier emerges, instilling in the listener a more profound and meaningful connection with a certain artist, song, or musical experience. This was true for Julia, who went on a school field trip to see Cats live on Broadway, and shared, "I was completely blown away. And after that I was like, that's what I want to do. I want to do musical theater. I want to be in theater." Before Julia worked at KEXP in their education department and administrative sector, she toured the country as an actor, performing in musicals and continuing to develop a deep knowledge of show tunes and genres she absorbed during her childhood and adolescence.

Dom, who grew up in segregated Chicago, also had a life-changing school trip, this time to the opera. He reflected, "I had my most startling experiences in music happen around classical music." His class attended a performance of Verdi's *La Traviata*, and he described how "most of the kids and the teachers fall asleep. And for me, as soon as the lights went down, and that music

went on I remember trembling. I thought, oh my God. Oh my God." When asked why the experience stood out as a meaningful event, he added:

> I remember like it was yesterday. I remember that when the overture happens before the curtain opens, and it's just drenched in strings. And then the curtain comes up on the ballroom party. And there's a huge Chandelier and I just gasped. What the fuck? I mean, all of that. I mean from the culture that you see, from the music arrangement, the singers. And by the end of it. I remember that she was dying, as they often do, and I don't remember exactly what her lover's name was, but he rushes in just to be with her as she's dying. I remember cheering because I was *with* the story.

This live music experience showed him what other music could feel like and ignited a deep, life-long passion for classical music. It was like he woke up in the opera house and now knew that music would be a lifelong obsession. "When I first thought about DJing, I actually wanted to be a classical DJ." After which he persisted into a career where he could manifest the dreams he grew in the opera theater in eighth grade. This sort of major, meaningful moment of musical "aha!" was shared by several others, who all spoke of a singular point in time when music became something more, something otherworldly, leaving a lasting inspiration toward music and keeping them connected with music listening into adulthood.

Technological Advancement

Another factor that shaped the DJs and their trajectory toward becoming professional freeform radio DJs is the development of music listening technology. Interviewees born in and before the 1970's talked about transistor radios, record players, the emergence of cassette tapes, and the car or home radio as music listening features as they grew up. Their listening development was directly connected to the type of technology they were able to access, which

tended to be costly and relied on bulkier devices that they were unable to carry around easily. DJs born between 1980 and 1995 often spoke about mixtapes, radio, CDs, the start of online music streaming, downloading free (pirated) music, portable Walkmans, Discmans, and mp3 players, and a generally lower financial burden required to amass broad and eclectic discovery-based music collections. Because of these technological and financial trends, younger DJs benefitted from trying out and listening to larger volumes of music across wider styles with little financial risk should the music not feel interesting or lead them to different artists instead. This ability to amass music relatively easily also meant the DJs could widen their musical knowledge earlier in life and at a faster rate.

As a result, depending on the age of the DJs, their technological journey through the autodidactic process of music listening determined the type of musical experiences that shaped them. Older interviewees were more likely to have higher agency and freedom in life at an early age and attended more live shows than their younger counterparts, as was the case for Don and Ryan. Sitting and listening attentively to a full album was also more common, and liner notes were poured over to connect with and learn about artists. Oliver reflected on this fondly in his interview, stating “the whole process of looking forward to a record coming out and going to the record store, buying it, taking it home, unwrapping it, the format of the covers were larger, so you put the music on, you sit down with the liner notes, and it would be a thing. You sit with the music.”

The advantage of technology shifts for the younger generation of DJs was higher access to musical diversity and larger personal music collections. Mixtapes marked the beginning of a music-sharing system that changed social interactions through music (Burns, 2021). Sitting and listening attentively to a full album was still common practice, but now personalized mixes and

playlists were being shared, which meant that musical messages were being traded in a more meaningful and nuanced way. Certain songs and artists became connected to the friends that gave them as part of a mixtape. Anyone who has made a mixtape off the radio can attest to the time and labor required to craft the perfect mix, which then becomes a musical art piece capturing a moment in time between two people (Burns, 2021). Through mixtapes the young DJs could arrange songs in a meaningful sequence, share messages across space and time, and express themselves and their feelings. All of these activities created new musical connections that mirrored the relationship radio hosts share with their listening audiences (more on that later.)

DJs reported that the technology they used to learn about and share new music evolved over time from sharing vinyl collections and idolizing radio hosts, into cassettes and mixtapes, then computer-mediated mixed CDs, and eventually playlists. As technology advanced, music accessibility for personal exploration and other purposes grew. Therefore, the speed and capacity for music learning increased with technological accessibility.

Mixtapes and Pretend Play

One of the ways in which the DJs developed the curatorial skills they use on air today was through their involvement in "mixtape culture". As such, this way was not singular, but included creating mixtapes, trading, giving, and receiving them, these mixtapes were in fact "compilations of carefully chosen songs, often by various artists, recorded onto a cassette tape by an individual" (Burns, 2021, p.9). Cassette culture, which is the social network of people who shared music through cassettes and mixtapes, especially by underground artists, emerged in the 1970's and became a household entity in the 1980's and 90's as technological advancement increased affordability of cassette players and recorders (Burns, 2021). Cassettes provided new opportunities for personalized musical exchanges and solo curation, as individuals could afford a

tool that let them record and control individual songs in a specific order without changing records or purchasing more full albums (ibid.). Newly released songs by notable artists were often promoted exclusively over the radio until the album became available for purchase, so recording a new song from the radio onto a cassette was the first opportunity for the average music consumer to listen to that song without waiting to purchase the item. They would include the song in a mixtape that they could then share with others, which was not only an opportunity for musical networking but also a chance to demonstrate social clout (Burns, 2021).

Many of the KEXP DJs are in the age range that growing up with a cassette deck was common enough that they had their own boom box or console in their rooms and could afford blank cassettes to build playlists at their leisure. Making mixtapes was playful, and fun. Akin to painting and building forts, DJs activated their creative impulses to sculpt intentionally arranged soundscapes that represented thoughts, feelings, instincts, and relationships. Even if a mixtape was created with the least amount of thought, the composition and labor put into its construction involves a certain set of skills and commitment, resulting in a product made from multiple different parts to serve a larger purpose. This parallels the roles and intentionality DJs activate on air today when they select multiple songs in a sequence for different purposes but with intended cohesion.

Fourteen of the interviewed DJs reflected on creating and receiving mixtapes or mix CDs as an important piece in their development as musical curators. David, a DJ specializing in independent artists, and the person responsible for reviewing the stations' music recommendations sent from artists worldwide, sold his self-made mixtapes in school. He would use the money he made to buy more blank tapes, so for him, making mixtapes was entrepreneurial and satisfying to see others enjoy his mixes. David described his mom's tape

deck “became my best friend,” adding “that's when I started taping radio shows, it was the only way to ‘get’ new music. I used to save lunch money to go to the record store every Tuesday to buy a new tape.” Through access to music and technology, as well as the support of those near him, David turned music listening into a hobby and a style of creative performance and production. His interests grew as he moved into high school, where on the first day of 9th grade, he arrived with mixtapes he had made at home off the radio. David titled these mixtapes “For the People”, with cassette covers and track listings, and sold them to his classmates.

Sam shared that he always had a box of tapes that he’d recorded from the radio, which he says influenced his development as a music consumer and a sharer of music with others as a DJ. In his youth he made many mixtapes (and eventually CDs) for friends. In as early as elementary school, he was finding recordings to incorporate into mixtapes, and was later downloading music from the internet using household computers. Adam, who also recorded songs off the radio onto cassettes beginning when he was just six years old, described the sensation as being “like magic”; he was fascinated by the musical flexibility making of mixtapes gave him. Nick would make his friends a mixtape if he really missed them. He added that every time he met someone new, “it was like saying ‘oh, I'll make you a mix tape.’” As he became interested in a new girl, it was a prerequisite for him to tell her what music he liked (which might also help him figure out what music she enjoyed), and this served as a litmus test for their romantic compatibility. Anna added an additional layer of consideration within the mixtape patterns of DJs by claiming “I was definitely more of a giver” of music than a receiver. Many DJs tended to operate as music-givers, which matches the roles they hold today on-air for listeners to their radio shows.

Several DJs did not grow up with cassette technology as a household item, as their childhoods were replete with vinyl recordings. Some spoke of being alone in their bedroom,

pretending to be the DJ during commercial breaks. Amber recounted that during her challenging childhood she had her own imaginary radio show. “I pretended to be a DJ probably from age nine on. I had my own show, it was Amber Friday Night.” She played records her dad had given her on her little pink phonograph, narrating between songs and record swapping to change songs and artists like a live DJ on air. She continued reflecting on the similarities between her musical imagination then and what she does on air today.

> I definitely use it as a platform to play artists of all different backgrounds, genders, and genres. That's my mission statement and it's upbeat dance music. Even now I wouldn't probably go in and talk like a musical expert on what's happening right now. I would go in and say, you know, this is for us. This is for us to take a break. It's just for us to be happy for a minute and dance our souls so that we could get through everything. That was my mission, to be upbeat, years ago. And I think that's part of my childhood as well. My childhood was very hard, and I feel like I just don't gravitate towards sad music. I'm not into it. I really gravitate toward beautiful and inspiring and happy music.

Dom similarly pretended to be an orchestral conductor while listening to music at home by himself, as well as on his way to school, remembering that he could hear entire symphonies in his head. “I would make background music in my head, you know, walking to school.”

The imaginary play of these DJs imitated the manipulation of songs through mixtape creation in that there is a deliberate action related to music manipulation and production centered around music listening. These behaviors predate but parallel the positions they pretended to occupy then, which they now fulfill as grown-up versions of their childhood dreams of curating music on air at KEXP.

Music Listening to Combat Adversity

The final salient theme within the motivations that most shaped the study participants' paths to becoming freeform radio DJs was their use of music listening for self-regulation. The concept of self-regulation has long been identified as the capacity to control one's own social-emotional, physiological, motor, cognitive, behavioral, and motivational state and to modulate these elements of life as necessary in the face of internal or external adversities (Montroy, Bowles, Skibbe, McClelland, & Morrison, 2016). Self-regulation is a necessary skill for long-term health and wellness, usually developing by age seven. This is a similar age at which the DJs reported developing agency over their own music tastes and listening behaviors (ibid.). Self-regulation is often applied in therapeutic practices for children who experience adversity like chronic stress or trauma. Many of the DJs endured experiences such as parental divorce, poverty, racism, sexism, and abuse in their younger years and described these as challenges that followed them for decades. For the DJs in this study, music listening was sometimes used by those with adverse childhood experiences to modify their emotional state and self-soothe as necessary. An example of this is the case of Amber, who at nine years old pretended to host her own radio show to mentally escape from challenges she otherwise did not know how to process. As DJs relayed stories of using music as a coping device, several of them, including Amber, punctuated their story with the phrase, "music saved my life."

Several DJs spoke to the racism they experienced in their developmental years. Dom, who identifies as African American, reflected that he understood, even as a child, that white kids lived differently than him. "It was not the easiest time being black and where we were the third black family to move into the neighborhood. And so, we had an upbringing around a predominantly white school and teachers. I was so invisible to them that it didn't matter whether

I was excited about something or not." He explained that the ideas and emotions his classmates expressed were not the same as those he felt and would express. Meanwhile, in his home, music by black musicians was a mainstay, and listening to them brought solidarity, resilience, and empowerment to his mom, siblings, and himself.

For David, growing up in a Black neighborhood as a Black kid showed him the unfair treatment of local breakdancers and rappers by police and public officials, who villainized his community members for what he saw as innocent and artistic self-expression. He reflected, "Hip-hop in the early 80s in Columbia City was like, I didn't even know it was hip-hop. I just thought it was going outside, because breakdancing back then was so big that nigga with the cardboard on the concrete was such a regular thing." To him, it was everyday life, but as an adult, he explains his disappointment, adding, "I came to find out breakdancing had gotten so big, and Seattle has a history of being afraid of youth of color gathering. They actually passed laws and I think one is still in the books that banned breakdancing. It made it illegal." His music listening practices further included hip-hop and black artists as a form of resilience, fueling his desire to rap and freestyle at a young age.

Eugene, who moved around a lot as part of a military family, was able to stay in the same town for 3rd-6th grade and wanted to join the school band. He shared "there was a band in fifth grade, and I wanted to play the saxophone, but you had to play clarinet first so that bum me out, that I couldn't just play what I wanted. I think I was probably a defensive little kid, and I didn't realize that was happening. But I was always the only fucking black kid in my class, you know, there'd be like four of us in our school." As he continued his story about band, he shared that his isolation, as one of the only black kids in school, drove him to want to be cool and to make friends, which he hoped he would find in band class even though he didn't like the music. At

some point that year one of his friends ignited a stink bomb in the band room before class. “It smelled so bad they had to cancel the class and air it out, and the teacher was really mad and already didn't like me. It wasn’t me, but I got grouped in with those kids and we all got kicked out of band. I had to go to the principal’s and they had me picking up garbage in the parking lot for a while in recess. Like, I’m in fifth grade. I was 9 years old.” He added that even his mom did not believe him, even though before this incident in school he asserted “I never got in trouble. I had good grades!” However, while other students would continue to pull pranks and behave poorly, after the band incident and suspension, he was more likely to be blamed and given a harsher punishment. So not only did he lose the opportunity to play in band, but he was racially profiled and lost trust in his school system as a source of learning and growth.

Similarly, some of the female DJs spoke of the sexism they endured and of experiencing the world as “a second-class citizen,” as Amber describes it. Amber and Amelia both described growing up feeling limited in what they could achieve in popular music and media, missing strong female role models. Amber shared,

> most of the time I was in Pittsburgh, Pennsylvania, being raised there, and it is still to this day very misogynistic in my opinion, and women are basically second-class citizens. You're supposed to breed there. I'm pansexual. So, you know Lord knows that they were going to think of that. Then I saw [Aretha Franklin] in The Blues Brothers movie. And to see a woman lay a boundary with a man in a really strong, beautiful way with that song Think, she was a landmark for me as a woman and gender-fluid person because in my world, none of the women that I knew had a life that I wanted to have or conducted themselves in a way that that wasn't subservient.

Amber's music listening preferences were consequently female-dominated and having also struggled with other forms of childhood adversity, she started listening to metal, punk, and other intense styles of music. These styles felt cathartic and rehabilitative in the face of chaotic and difficult-to-control emotions.

Several DJs experienced challenges related to their sexuality in similar ways to those with family, race, and gender obstacles in society as they grew up. These experiences affected them strongly in personal, interpersonal, and lifelong musical ways. Many processed media through their identity lens, in which they felt alone and unwelcome, sonically and globally. Making independent musical choices that aligned with their identity and needs allowed queer DJs to self-regulate emotionally in a world that was not ready for their confidence and sense of self. In the end, many attributed music listening with helping them find belonging. Dom shared:

> In seventh grade I joined the choir. And then when I went to Bible College formed a group and did my own music, wrote songs, arranged it, and had a band for four years of college. College was horrible. Part of the problem WAS, I'm gay as a Goose. And they didn't have a clue, I started coming out what I was out of college. I mean, it was great because it was really a door to the rest of my life. But it was scarring to say the least. I got written up for dancing! And this music was, I can't begin to tell you how awesome the music was. And the music is what kept me going.

The DJs learned to manipulate their own motivations for listening to music to sustain reliable outcomes of emotional self-regulation through music. These became tools the DJs learned to manipulate for the benefit of others in similar ways. Whether it was sharing certain music with friends to help them feel good, or promoting musicians that represented personal

identities, the DJs in this study leaned heavily on their music listening experiences as kids to feel stronger, connected, and emotionally well.

Radio Enculturation

When the DJs were in their K-12 school years, many were already drawn to radio, listening not only to the music but also to the comments of DJs who would introduce a song, transition between songs, or wrap up a set of songs. Many of the interviewed DJs claimed a general obsession with radio as early as elementary school and even more so in middle and high school. By adolescence, they became enculturated into the radio macrocosm. Enculturation, as described in Chapter 2, is a "process of learning a culture in all its uniqueness and particularity" (Poole, 1994). For the young DJs, what was a notable part of the process was how much time they spent listening to the radio alone in their room, in the car with family, in the kitchen and main room during family dinner or general time together, at school with friends, in the background at the supermarket, and when following the Top 40 roster every week to track popular artists (as Liam and his brother did). Eugene shared his first memories with music and having strong feelings of joy "riding around in cars with my mom", adding that "my mom was always singing along and music would be turned up", he remembered details of the experience, including the car make, model, and color as part of these strong, meaningful memories. The radio was widely accessible for all DJs as they were growing up because it did not require purchased music and could be reached through inexpensive handheld devices.

Oliver, Jazz DJ at KEXP (and Executive Director at a premier jazz magazine and performance organization), is a notable example of a participant who experienced enculturation into radio at a young age. Having contracted Polio at age five, his proximity to music during quarantine forever changed his relationship with music and radio. He relayed:

> I spent at least a year as a crippled child. We didn't have much money at all, so our house was kind of bare bones. I was on this Army cot for a year that was between the kitchen and the living room, but it was also right next to the radio. I listened to the radio all the time and I still have song lyrics rattling around in my head from that time. We were living in the time of the polio virus that was thought to possibly be contractible. There was a hysteria about it… part of what kept me company up there was all this stuff on the radio, which I had absolutely no conscious input on. It was just a station I listened to, and I didn't say 'oh I want to listen to this, I want to listen to that.' It was just the thing that was on. So that, I think, created a pathway by which I internalized music. And that's what's special about music, in that it lives in a very special place inside of us. And we all have our little house inside that music ….and they're all a little bit different and that's what's so great about it. That's what's so cool, is that it's evocative of a thing that you still can't describe once you get it out in the light of day.

Spending a year next to a radio is enculturative in that while his illness forced him into isolation (already a notable event for one's youth), his activated personal agency regularly for that long period of time. Using the radio when and how he wanted propelled him into a passion and drive for the world of radio as a whole. This immersive experience forever changed him. Once Oliver reintegrated into his family after his Polio quarantine, his cousin introduced him to Duke Ellington records, which Oliver would then play as loudly as possible when everyone was out of the house. He remembers that "[I would] pretend I was on the radio, but I never told anybody about that radio kind of fantasy until I was 40. It was just always a secret that I had." He reflected that this was what motivated him foremost to become a DJ. When asked whether he felt this was a common drive experienced by his co-DJs at KEXP, he agreed, and he remarked that

“when you get a chance to see how much they really know about specific things, it's remarkable. It's mind-blowing.”

For Oliver and many other DJs at KEXP, growing up with radio became the seed that grew into a drive to join the radio community and transition from the audience side of the speakers to the DJ booth. Once there, they applied years of experience listening to DJs, music, and stations throughout childhood and adolescence. For those who experienced adversity throughout their youth and manifested a deep commitment to music listening, they felt liberated from the weight of trauma and confusion by channeling it into sharing music with others.

Post-Secondary Experience

All the DJs who were interviewed transitioned directly from high school into a music industry position of some kind, whether it was as a musician, music manager, radio DJ, or music journalist. Nicole shared about her experience in music lessons and through years of music listening on her own: “I got to a point where I took my understanding of music on that level and I became a band manager in supporting other artists. So that's where it pivoted.”

DJs who discussed creating mixtapes when they were younger often went on to enroll in radio broadcasting courses or to work for college radio programs. Ten DJs described working at college radio stations in some capacity. Of the thirteen who created mixtapes when they were young, seven participated in a college radio station as a volunteer or staff member or earned a degree in telecommunications and broadcasting. This was the case for Sam, who shared why, “so the whole like observing stuff, I wanted to share what was the good stuff, being a filter, I think as it always kind of played a role in my life. I do remember making mixtapes for friends in elementary school, middle school.” For Sam, the joy he got from creating and sharing mixtapes matches the joy of his current role as freeform radio DJ, which is what also motivated him to

work for the college radio station when he learned of that opportunity. Now, like many KEXP DJs who program for one show a week and work full-time elsewhere, Sam works at a "music licensing and playlist curation company, basically. We work with brands to put together their playlist for what you hear in their store."

Those who made mixtapes but did not attend college transitioned from high school into working at record stores, for music labels, or touring as band managers. Creating mixtapes may have served as a tool in developing proto-DJ skills, which were then furthered in their post-secondary school activities in voluntary or paid posts on college, community, and other local radio stations. This may indicate that the joy of creating and sharing mixtapes was a potential precursor or motivation to becoming DJs, or at least pursuing work within music and then radio. Four of the DJs interviewed described applying for or networking their way into KEXP for a DJ position by creating a mixtape to present how they would curate their show, which proved a successful strategy for all four.

Salient Music Listening Experiences

Sharing music and music technology advancements were particularly influential in shaping the path of the DJs' trajectory toward freeform radio curation, especially for younger DJs who benefitted from higher volumes of accessible music to listen to and manipulate during childhood and adolescence. Another motivating factor that shaped the trajectory for these DJs was the use of music for self-regulation through childhood adversity and sharing powerful and meaningful music with others to support the well-being of their friends and community members. All these experiences and motivations helped the DJs in this study develop the skills they use on air today as free-form radio DJs at KEXP. Music education could draw insight from these findings by increasing the variety of musical exposure for school music students while centering music

programs around musical experiences that connect students through their musical interests, incorporating music technology in class to blend their school curriculum into their personal music lives, and by guiding the music discovery process for students to share insight on the many ways music is beneficial for their wellbeing.

DJing Today: Curatorial Intentions

At the core of what makes KEXPs' freeform radio DJs notable are the decisions and intentions that shape their minute-by-minute and show-by-show execution, governed by the station's mission of listener-driven music discovery. The DJs' curatorial intentions can range from deep social and political philosophies to simpler single-day themes meant to bring joy to listeners. Several patterns emerged across the interviews regarding these intentions, including attention to the listeners for whom they programmed their shows, the historical and social significance of the music they would choose to program, and the identities of the artists they selected. Drawing back to the quote from Nick in discussion with another KEXP DJ at the station on the Three Jam Rotation (the game where friends compete to "blow each other away" with progressively cooler songs), both agreed that DJs at the station often operate on air with the same motivations that steered their music listening when they were younger. Most notable from his reflection is that "part of what used to be the training at KEXP is like 'you're excited about something, tell it to the listeners the way you would talk to your friends about it.'" The instruction was to essentially fold what shapes the DJs as music connoisseurs and sharers into how they program their shows.

Several themes emerged from discussion on how the DJs' childhood and adolescent music learning experiences developed into curatorial intentions and methods for connecting with their listeners today. These include KEXP's curatorial enrichment continuum, which guides the

DJs through the organization's curatorial expectations; whether the DJs are listener-, self-, or artist-oriented in the programming; and lastly, specific techniques they employ when managing song-to-song transitions on-air, similar to how they managed their own music listening experiences growing up.

Listener Enrichment Curriculum

Formally, KEXP radio station operates with what they call the “Listener Enrichment Continuum,” which is how DJs think about transitioning people from being a first-time listener engaging with KEXP to achieving a level of enrichment through KEXP’s programming that resonates with them deeply. KEXP’s Chief Programming Officer, Adam, defines enrichment as “how we serve the mission of KEXP and how it's representing with people” adding they care about “how we're able to reach people and how we're able to enrich their lives through the work and through the connectedness [of music].”

At some point listeners will feel enriched to the extent that they become motivated to support the station financially (KEXP is a public station). Adam added, "the [Listening Enrichment] Continuum is not about getting people to give money. It’s about that enriching feeling that we want people to have. For some people, we can ask them for support, and they'll be in a position to help support the station. We don't expect everybody to do it.” Still, DJs understand that when a listener becomes an “Amplifier” (which is the name for financial donors who also have special perks like access to special radio-sponsored events or swag) or donates money at any point, it means they were moved by their KEXP listening experience to want to give back to the station. He continued to say that while he is not at liberty to share their specific development strategy, ultimately it comes down to

> taking people along that journey by way of our programming principles, how we take them from first-time engagement to enriched. And then we roll that up and we build an actual plan for how we internally think about, talk about, plan for audience development strategy. Within that, how do we apply these principles to grow reach and to grow enrichment? And how do we leverage data to tell us where to focus, to help us define what those strategies are to grow?

This strategy includes when KEXP underwent organizational changes in 2020, with a re-evaluation of the nature and extent of equity and representation at the station. Staff started revisiting the Listener Enrichment Continuum to build a plan for audience development, including how they could best apply enrichment principles and leverage listener data like emails and streams to decide where to focus. KEXP DJs wanted to focus beyond the station's reach and enrichment so they would be able to build deeper connections with listeners across the globe. For example, Adam said KEXP is keen to develop a greater listenership in Latin America "because what we see is that on social media, our second largest following is in Mexico, and on YouTube we have more audience in Latin America than we do in the United States. And I think 6 of the top 10 countries that view our videos are (in) Latin American countries. And so that alone tells me there's something here."

As Chief Programming Officer, Adam views KEXP as a creative organization, with opportunities for "gut-instinct decision-making" by DJs who want to program music on the fly on timely themes and for particular purposes. He desires that KEXP can continue to make "room for the cool, weird, different or wild and out-of-left-field" musical selections and styles that helped build the station's reputation. This approach is gratifying to the DJs because many of them grew up weaving music from off the beaten path into their lives, balancing music they

already knew with novel forms of music and regularly sharing their musical discoveries with friends. As KEXP's listenership data growth shows, there are areas like Latin America where station administrators did not anticipate such profound connectivity. Therefore, constantly reevaluating their enrichment strategy helps ensure that the DJs continue cultivating listening audiences as far as possible, in ways that help their broad audiences feel seen, heard, and that their needs are met.

Listener-Oriented Programming

Because KEXP does not dictate programming options to them, the DJ's choices often revolved around whether the content they developed for their shows to meet the preferences of their listeners. Some chose to pay homage to specific artists (some of whom they knew personally or of whose music they'd developed deep knowledge). Others programmed for their own entertainment believing that their enthusiasm would engender enthusiastic listeners. Most DJs programmed music for their shows based on listener requests texted or emailed to the station from around the world. Kayla shared her perspective on the purpose of programming at KEXP, in which the priority is "the incorporation of community with the listeners who are interacting with you on your show, because it is for them. You are playing for the audience, not for yourself." She outlined some of her strategies and decision-making, which she hopes will best support listeners through their music discovery journey:

> I'm not being super-methodical about like 'okay, tick the box, tick the box. I do have an intention when I'm playing a band to play something else with it that complements it so that it's building context for the listener. They feel included and invited through the set of music that I'm curating. So maybe I'm playing something with it that the average KEXP

> listener would know and be familiar with and so they now feel like that song was for them as well.

When asked about why familiarity is so important when the mission of the radio station centers around musical discovery, Kayla replied:

> If you're playing an entire set of obscure, weirdo, outsider shit, you're alienating the listener. Then people are like, 'I don't know if any of this is for me, and the way that you're building is making me uncomfortable and it's too hard to listen to. I don't connect with any of this.' So, when I'm building a set and I'm wanting people to get excited about something that I'm also excited about, I try and present it to them in a way that invites them along. And in that respect, I'm teaching them to learn a new artist that they might like. I want the best possible experience for the listeners.

This interest by DJS in connecting with the listeners' familiarity and experience, to then expand what they hear through unfamiliar music, is akin to when teachers introduce students to new music by connecting with what students already know to build trust and excitement.

Even when DJs could not logistically program the music listeners requested (sometimes due to late-arriving requests after the show ended or they had already made a plan for that show), many DJs made it a point to include some of the requests in the following week's programming. DJs were intent on guiding, as "musical sherpas", their audiences' listening, introducing, and following up on song selections they featured, and transitioning between selections, artists, and genres.

Self-Oriented Programming

Conversely, a smaller yet noticeable portion of the DJs expressed that their curatorial intentions were self-oriented, in that the listening experience they care most about when curating

their show is their own. These DJs choose music and arrange their shows based on how they feel in the moment and what they want to listen to, giving themselves the best show experience they can. This was a common factor for older DJs who grew up listening to music alone in their room, unable to amass and therefore share music without financial consequence, and who were generally more introverted. Michael shared “I'm kind of a selfish person in the sense that I'm trying to entertain myself. Like, I decided I'm just gonna do for me what I want to hear, I don't know how to please other people.” These DJs see themselves as trusted experts who were hired to make musical choices because they carry years of cultivated musical professionalism, knowledge, and skills. Liam shared his connection with growing up listening to the radio and being a fan of music:

> The experience of being a listener, being a fan, I hold that dear to this day. There's a lot of value in being a fan, in being a good listener. You know, when we talk about music, naturally people want to talk about playing music and I feel like someday I'm going to get there. Maybe I'll learn an instrument one of these days and play with my children. But you know, there's value and a need for fans. And so with my show I get to curate, and I'm ultimately sharing with people what I think are the good songs, as a fan.

For example, Liam curated a show for Thanksgiving with the theme of playing multiple versions of the same song. When asked about his thinking process, he spoke about it directly:

“I prep the Audience by saying this is listener-powered radio and because of that you give me the power to play only what I want to play. That's what you want. So, with me, I will do an experiment here tonight. I'm going to play the same song. I played like ten versions in a row. But they're different.” Those DJs who programmed for themselves are also responsible for genre-

specific shows and can therefore deep-dive into a niche musical genre (as opposed to DJs with variety shows with more eclectic and musically diverse programming.)

Artist-Oriented Programming

Liam shared another reason for his programming choices as we dove into his decision-making process. He explained that he pre-programs his shows and creates the order a week in advance, all 40-43 songs. Any listener request would have to fit perfectly into the set for him to interrupt the show he already designed. He elaborated, though, with some added insight,

> I'm just going to play a bunch of new songs, and these are what I'm going to share with my audience so that they can hear them because they're not known. It's basically underground music because the people I play in the show don't have any big machines behind them. They don't have any publicist and whatnot. But this is a very small niche of stuff. The value with me is exposing these really talented people that have no audience, or a small audience, to give them a bigger audience."

Because Liam grew up with a passionate obsession for American Roots music, he programs his Roots-based show on his own, trusting his own expertise, while applying a set of ethics that balance his interest in hearing what he wants with what music also needs more spotlight.

Other DJs also predominantly cared about less-supported artists and used their programs to provide these artists more exposure, sometimes choosing to do so over showcasing their own musical preferences or that of their listeners. This was particularly true for DJs who remained practicing musicians or had experiences playing in bands and learned firsthand the challenges of an artist's life—writing the songs, practicing alone, rehearsing together, getting gigs, navigating the music business, and trying to survive as an active musician financially. For these DJs, any on-air play was viewed as an important opportunity for local artists, artists of color, women

musicians, new “breakthrough” bands, or a politically relevant person (or band) who carries an important message within their lyrics. As a highlight of their musical career, some of the DJs remembered the first time their band’s music was played on KEXP. David shared,

> As an artist, KEXP was a radio station along with KBCS. They were one of the first [stations] to really play our music regularly. With my group, Abyssinian Creole, when KEXP put us in their regular rotation, it changed how many people knew about us, how many people came to our shows. We started getting booked at different festivals because people heard it on KEXP. So, it really meant a lot to us that the Seattle station rocked with us as artists, and they would book us to perform a lot. Same with when my solo album came out a few years later. So, my relationship with KEXP was as an artist first and foremost.

For David, his position as a KEXP DJ today gives him the power to elevate others. The role of a DJ, then, could well be one of a musical gatekeeper, influencer, and supporter of particular artists. David subsequently described his decision-making as matching the significance he felt as a showcased musician on KEXP himself, years ago. He hosts a variety show of all genres, focusing on artists of color and black musicians.

> I'm pretty unapologetic in that but I also just focus on music that lifts us up. It's not a thing where I'm not going to play a White artist, because I absolutely do. But I focus on musicians from the communities that I care most about. I think about who's not getting played in the regular daytime hours and I try to bring those up. I try to focus on independent and local a lot. I try to keep a really good balance with women artists. I try to highlight queer, trans artists, all of those things matter to me. Ultimately, I want to play songs that inspire, songs that can heal.

He reflected that this philosophy was related to music's role in his life growing up. Now, he can play music for others in the same way that music lifted him up when he tuned into the radio as a child.

Overall, the audience on which DJs focused determined the type of music they programmed on air. Each explained the depth of meaning behind their choices, and all espoused that their choices were for the cause of music in some way, as though it was a living, breathing entity they were caring for and maintaining through their work. As was the case for Liam and others, there may not be one driving purpose or audience behind their programming, and there can be layers of reasoning that serve many purposes.

Often, the orientation toward personal interests, listener requests, and artist needs was connected to the purpose of music in the DJs' personal lives growing up. Michael grew up in Alaska with limited music resources and was a very independent music listener, so his programming is predominantly for his own entertainment. Liam avidly consumed music, collecting copious amounts of small, unheard-of artists, falling deeply down his own rabbit holes of musical interest. He programs according to his continuing musical interests, with a layer of artist-based purposefulness to support those who might not otherwise enjoy more widespread notoriety. Lastly, David used music as a way to connect with his community and find comfort in everyday life as a Black male who regularly experienced racism. His programming now centers on the populations he identifies with as a minoritized person, and he wants people to find comfort in his choices because, as he says in his weekly slogan, "there's medicine in the music."

Curatorial Musical Framework

Underneath the intentions that drive any of the DJs to program music for themselves, their listeners, and/or the benefit of the artists lie deeper parts of their identity that shape their

decision-making across time, whether they are aware of the patterns or not. For example, Amber shared that she feels responsible for people hearing artists on the gender spectrum, with more women artists mixed in evenly with a more traditionally played artist. Similarly, what Sam said that he loves most about his show is being able to support artists who do not get airplay on radio stations that have the reach KEXP does and that there is clout in having your music played on KEXP. He also thinks it is cool to be the messenger for their music. He programs his show so listeners can just relax and reset through the music, and he can satisfy many deep and simple intentions in his programming at once. Emma added that she sees herself as a facilitator. She is there to play music that listeners would not otherwise hear on the radio, especially in a historically very White, middle-class dominated genre like Punk. Her goal is to include more diverse groups in that genre every time she puts a show together, and she has the background knowledge to accomplish this.

Imani calls her curatorial decision process her Curatorial Musical Framework (CMF), which was similar to how a DJ might describe their personal and musical identities. Imani defines her CMF from the perspective she brings as a woman born in a very conservative province in Argentina. She adds:

> I emphasize being a woman, because of what that enabled or didn't enable me at the time to be able to realize myself as a professional. From a very early age I realized that they were environments led by men, they were musical validations within journalism that were always determined by a man. I had to grow and forge my communicational perspective when it came to generating content about music and disseminating music. I had to forge a very hard shell to survive…I [therefore] always felt the need to do justice

> and to stop creating centralist media. I always communicated independent music, independent indie-rock scene, and [major political events].

For Imani, how she grew up in the world, how the world received her, and the sociopolitical, musical, and personal experiences that make up her sense of self also inform how she chooses music for her show. She is purpose-driven and thoughtful about her choices.

Akin to the intentions of the DJs' programming decisions, the concept of a Curatorial Musical Framework encapsulates the overarching effect their identities have on how they curate their shows, especially for those DJs within minoritized communities. Imani added, "I was always a big fan of KEXP. I discovered it with my friends, but it has always been a musical exploration of my own and of my friends. My friends shaped my musical spectrum, they expanded it, they were like my teachers." In the end, Imani fills that role for others now as a DJ, and her framework ensures that her decisions are a meaningful blend of her and her listeners' best interests in action. She is the activist she always had been, only now it is through the airwaves at KEXP. As much as her childhood and adolescent experiences with her friends in Argentina shaped her intersectionality, they continue to shape how she operates as a DJ for listening audiences around the world.

DJing Today: Curation Techniques

While intentions shape the *why* in the DJs' big picture programming decisions, *how* they program these decisions are made manifes~~ts~~ through specific DJing techniques in the moment on air. Many of these techniques seem to have first surfaced earlier in their lives. These include building a "show schema", which is similar to a theme that young DJs would use in designing a mixtape for someone. Anchors are another technique that employs familiar music to keep a listener engaged in the show before playing new music because then the listener is anchored into

the experience with something they already know and enjoy. Segues help blend unfamiliar, familiar, themed, and sonically diverse songs through a theme in a way that is not musically jarring or off-balance. Finally, improv is a technique through which a DJ chooses the next songs right before they are shared on air, but in a way that still allows their show to feel cohesive to listeners and simultaneously honor listener requests without planning these songs in advance.

These techniques are connected to the DJs' listening and music-sharing habits from their childhood and adolescence and how they learned to finesse their personal music-listening experiences over time. Those who enjoy the exhilaration of falling in love with a new song tend to focus on new music in their show because this is how they have operated since they could control what they play (like Liam, who was described as an avid consumer of American Roots music and prioritizes new, small artists in his show.) In contrast, DJs who treasure the nostalgic rush of familiar music tend to focus on listener requests and personal favorites because they understand how hearing their requested song over the radio (and subsequently feel connected to a particular person, time, or place) makes listeners feel. This was the case for Michael who programs music that he loves for an audience of avid punk fans who share his musical passions.

Show Schema

Nick described his approach to organizing and developing his show as a schema, which includes consideration for blending from and into the shows before and after his. A schema also involves breaking down his show into one-hour segments, each with its own theme, because "we have three hours, you have to pace yourself!"

> During the first hour I try to play a lot of local stuff because Audioasis [All Pacific Northwest artists] is right before my show. And then sometime in the second hour I make a transition to more alternative or post-punk type things. And in the last hour, I would

> usually reserve that for hardcore because the metal show is right after our show. And I think that's true for Audioasis, is that they oftentimes would end with a local punk band too, kind of slowly ease the transition.

Nick purposefully chooses music aligned to these themes and connect across multiple songs, whether the theme is a certain content topic or a musical feature. He thinks about the role of new music in his shows, including music new to him, new to his listeners, or new to the world, and everyone is hearing it for the first time. For him, a balance between familiarity and novelty is crucial for listeners.

> I think it's nice for folks to have some familiarity. Because I played, you know, something local like The Intelligence and then jumped right into something really brutal, like some grindcore, something that might be jarring for certain listeners. At the same time, I try not to play one block of five songs that all sound the same. And one thing I've been really trying hard to do is play mile markers, artists that lots of people are going to recognize. So, if you don't know all about these new bands I'm playing, you'll recognize the Replacements, or Misfits or, you know, something a little more classic.

Nick was not alone among the DJs in considering the proximity of listener familiarity to new music so they can satisfy their fans while also offering new musical exposure and enjoying their own favorites. Amber sees this as an opportunity to play the music listeners want as well as music “they don’t know they want.” This gets to the heart of musical discovery: by being open to new music, there is more opportunity for future favorite songs and musical enjoyment. The intended outcome for listeners is the enjoyment of musical novelty and then the development of songs into familiarity and, ultimately, nostalgia. These are progressions listeners can tap into when they need to feel grounded in a previous time in their life, a certain emotion, memory, or a

significant person. Michael talked about this as a DJ always searching for and finding new music. “I love the fact that I keep finding and discovering bands. What I'm excited about is that no matter how old I get no matter how long I live there's always going to be stuff that I haven't heard out there, that when I hear it it'll be my new favorite band or at least for a day become your favorite song or whatever.”

This process emerged as an algorithm the DJs learned to apply to music for their personal needs when they were younger, and which Nick utilizes in his programming today. He added, “It's just helpful for me to be like, what am I going to play first? And more often than anything I just play the stuff I want to play the most, first.” In expressing the importance of the genre, he specializes in today, “Punk was so important to me” because he developed a passion for it as a child and now loves sharing it with his listeners as a DJ at KEXP.

Anchors and Mile Markers

For the DJs, having a show schema balances the novelty of musical selections they are professionally prepared to provide with the familiarity of songs they feel confident their listeners already know (through requests, app usage, and other online metrics). As Nick described above, part of the equation is what he called mile markers, or “artists that lots of people are going to recognize.” He also called them “anchors, life rafts, and steppingstones.” Essentially, these are familiar songs within the regular repertoire of a show that keep listeners interested and are peppered among new songs that are related in some way. These familiar songs connect the listener to the show and create enough emotional connection so that the listener is then open to new, unfamiliar music, which, over time, can become familiar songs and eventually even favorites. James described anchors as songs in a set that are generally familiar to KEXP listeners and are heavily emphasized by the listener. He claimed they make the programming more

consistent and audible, especially for the variety shows which are less structured around specific styles, cultures, or genres of music.

Balancing anchors with unfamiliar songs is similar to the purposeful construction of mixtapes, which include new and familiar music for the recipient. The description of these strategically placed song types parallels the decisions DJs described in their mixtape-building habits as children and adolescents. These types of songs and this programming strategy help keep a fresh experience for their listeners just as recording and blending new songs with favorites off the radio did for them decades ago. Those with more complex intentions for their show seek to provide a fulfilling set for their listeners that also teaches and expands listeners' overall musical open-mindedness.

The Segue

Imani described her show schema as a bridge or a huge invisible net that connects everyone to one another and all music to itself. Ryan compared sharing music and information about music to recipes and cooking, with looking for music like making a dish when you do not follow one recipe exactly and instead create the dish from your understanding of what governs many recipes for the same dish. In music, this is accomplished by developing an understanding of multiple songs and information about the songs and artists to create one whole show. This connecting piece also represents how songs are chosen from one to the next. Scott calls this the segue, which he describes as:

> The transition from one song to the next and putting things together in really logical sets of music that fit together. For me, doing an African show, there's certain ways of programming things that sometimes I think 'I got it' because I've been doing it for long enough, for 35 years now, and almost too set in stone…if I was trying to introduce you to

> the African popular music sound I would have a special ear for things that I think would attract an audience. So, you have to have a certain skill to hear things a certain way and then be able to combine those sounds together. Which segways the listener from familiar to unfamiliar music."

Scott says the segue lies at the core of how KEXP tries to fulfill its mission of musical discovery through the Listener Enrichment Program. A show or segment could be developed from a set of songs from one specific country or region, revolving around a person's birthday, a listener's personal story, a current event, or a lyrical theme. Some of it will be largely familiar to much of the listenership, and other songs are woven in to broaden listener musical exposure and discovery. Again, this connection-building is similar to when the DJs were younger and their music listening was often, even subconsciously, motivated by a particular event, feeling, person, thought, or other personal reason. The segue is then the technique, like an anchor, which, when applied to building mixtapes, playlists, or radio shows, builds upon this overarching theme or meaning through the connections made from one song to the next. This is also true for music sets used in everyday life, whether with friends trying to impress each other, choosing music for a party, or following an emotional rollercoaster after a breakup. The segue guides the direction of a set of songs, sets the emotional and musical mood, and creates cohesion throughout a listening experience, capturing attention for longer listening and interest in more.

Riffing: Improvisatory Programming

One programming strategy not discussed much in the DJs' interviews but aligned with the other strategies described above is musical improvisation. Music choices can be random and less intentional to any degree that serves the needs of the moment. A three-hour radio show can be structured with a schema and use anchors with segues to capture the listeners' interests as

much as possible. A show can also be made up on the spot with elements like anchors or segues, as well as having a schema, without any prior song selection involved. As Michael describes his show,

> I like theme shows, like last week was International Women's Day. So, I personally played a lot of women artists. But I don't put my sets together in advance. I'll try to come up with the first two or three songs, and then I just do what I want to play. I just kind of riff and I'm always trying new stuff. Like, follow the muse, you know, wherever I want to listen to at the time.

This "riffing" also describes many of the listening scenarios DJs engaged in throughout their youth, when they would sit in their room switching records to play random songs from the top of their head. This is increasingly more common in recent listening technologies like MP3 players and streaming services that can carry thousands of songs available at any moment. Unlike creating mixtapes and playlists, riffing through songs attends to the momentary needs of a listener (or DJ) who wants to satisfy a certain feeling, explore a new song, or create a sonic landscape over time by deciding on sequences of songs right before they're played.

Connections From Then to Now

There is a professional benefit to the years these DJs spent throughout their youth cultivating an avid music listening regimen and following the prompts of family members, influential musical events, sharing music with friends, and other experiences that shaped them most as music listeners. In retrospect, sharing music, building mixtapes, and rapid music technology advancements were particularly influential in shaping the path of the DJs' trajectory toward freeform radio curation, especially for younger DJs who benefitted from higher volumes of accessible music to listen to and manipulate during childhood and adolescence. Using music

for self-regulation through childhood adversity and sharing powerful music with others to support the well-being of their friends and community members shaped how they orient their shows today to support their listeners and feel helpful in a hurting community.

The act of choosing music met their needs in satisfying boredom, coping with difficult emotions, and seeking thrills through the stories in the lyrics and the power of the musical sound. Then, as they listened, these DJs learned about music and developed personal connections to the music, which drove them to seek out more music and more of those personal feelings that they could control at their leisure. Now, the DJs have many hours of listening experience and have honed skills to lean on as they program through KEXP for audiences today. They grew up idolizing radio hosts, musicians, siblings, and role models who provided influential musical guidance. The DJs serve a similar purpose for the listeners today who they do not know and will likely never meet, with a passion and fulfillment that comes from musically "paying it forward." They apply the same strategies that built and sustained their personal music listening practices as curious children and adolescents, and which currently help them cultivate a growing listening audience.

Music education could draw insight from these findings to support concrete strategies for teachers who want to better engage their students in music-listening activities. Students experience music outside of school before, during, and after their K-12 years. Understanding which experiences and influences are most likely to shape students musically could help teachers harness layers of musical teaching that can draw students into music programs, keep students in music programs, or further inspire those who already love music class. The programming techniques shared in this chapter help apply music listening in music curricula to meet students at their already established musical interests and help broaden their music awareness. The

experiences and relationships that helped the DJs develop the skills they use on air as free-form radio DJs at KEXP can be applied in classrooms to help ensure school music is accessible, relatable, welcoming, and student-oriented.

Chapter 6: Connecting DJs to Music Educators

Let's hope you never leave, old friend

Like all good things, on you we depend

So stick around, 'cause we might miss you

When we grow tired of all this visual

- *Queen, Radio Ga Ga*

The interview responses shared by the DJs in this research characterize a deep and enduring connection with music listening that permeates nearly all parts of their lives. Starting in the home with family, adding in layers of school, community, friends, social events, technology, and their own agency, these professional listeners developed their knowledge of music over time, from childhood through adolescence, and into their young adulthood. Their early musical experiences became the foundation for their understanding of music and ways of programming music meaningfully in their radio work. As these freeform DJs curate musical selections and program music for their listeners, they transmit lessons learned across decades of musical discovery and self-taught curatorial skills.

Across the research questions and purpose that guided this study was a goal of finding understanding for music education in promoting music listening as a more fundamental component of music teaching. As demonstrated by the DJs in this study, music listening experiences at a young age can be life-changing, and part of the responsibility of music educators in schools is to cultivate a life-long enjoyment of music, a noble goal but one which is not met for every student in the very same way. Music listening is a unique learning experience in its

accessibility compared with instrumental learning which requires storage, fine motor skills, use of the voice and lungs in a healthy manner, and/or years of scaffolded teaching within an ensemble (Hargreaves, North, & Tarrant, 2006). The act of listening can require little time, training, practice, or resources, yet may yield considerable educational outcomes (Campbell, 2018). Furthermore, music listening supports the development of other musical skills like musicianship by heightening listening skills toward the use of different instruments in different contexts, by helping students identify and envision what kind of musician they want to become, and by being able to hear the successful outcome of a current musical goal (Espeland, 2011; Hargreaves, MacDonald, & Miell, 2012). For those not interested in learning to play an instrument or to sing, music listening offers understanding around the human experience with its many social and emotional layers that are uniquely expressed through music.

This chapter provides the necessary bridge between the study of radio DJs as professional listeners, and the inside-outside school MUSIC experiences that supported their development as listeners. It targets the relevance of their early development as listeners to the curatorial skills they employ as professional free-form DJs, and challenges music educators to consider ways of developing listeners and enfolding within their curriculum the pedagogical choices that can help facilitate listening. Examples include choral-vocal ensembles, bands and orchestras, general music classes, composition and song-writing ventures, and other music education opportunities that figure into music education programs from the primary grades onward to graduation from secondary school. A discussion of the research findings and their connection to music education is offered next, followed by implications for teachers as well as recommendations for future research.

Integrating Music Listening into the School Music Curriculum

Music listening can be the most accessible form of musical engagement and learning for students across grades K-12, regardless of which type of formal music program it may be, from performance to creative composition to the broad spectrum of general music classes. Music listening also enhances the development of knowledge and skills that are standard in formal ensembles or theory-based music education programs (Hargreaves, MacDonald, & Miell, 2012). Music listening in the music classroom is crucial to the development of students' overall music learning, especially their taste, listening motivation, and life-long engagement in music. Teachers are ultimately responsible for ensuring a music education that represents the variety of music that exists globally as well as the ways in which people engage musically around the world. For students to hone their musical interests and identities within the greater context of music that exists, they would benefit from exploring their own personal options for musical expression and consumption which can be navigated through school efforts to develop their music listening capacity. Consequently, the cultivation of listening skills in school music education programs is an important goal in every class and at every age (Russell-Bowie, 2009).

However, music education programs in the United States can feel constricting to students whose musical interests feel ignored or dismissed, and students may not feel represented in the classroom material or types of musical interactions presented to them. Myers argues that school music programs in the U.S. are too concerned with large ensembles and as a result, students are not equipped with the necessary skills which promote lifelong music involvement, of which music listening is pivotal (2007a). This dissonance between students' musical interests and formal music learning structures can lead to decreased interest in school music or withdrawal from formal music learning entirely, especially as music listening remains an uncommon

practice in school music programs. Music education has a commitment to honoring students' identities through student-centered music, for which listening is a natural educational strategy (Halick, 2017), and this is an area that music educators can lean into for increased student participation in school music and overall student satisfaction. Many school music teachers are faced with shortages of time, energy, and training, however, and they can become overwhelmed by learning new styles of music to teach. As a result, music educators typically focus on Western art music as they have been trained in this music and are most familiar with its forms and structures (Abril & Kelly-McHale, 2016).

Incorporating more music listening into a school music curriculum, however, is not only vital to a well-balanced program but also entirely manageable for busy teachers. More listening engagement for students can also expand their interest, engagement, and investment in school music as well as their own personal relationship with music. Music educators and freeform radio DJs share similarities, in that both aim to spread a love of music and musicians to listening audiences who, like students, are eager for entertainment, musical enjoyment, and personal connection. DJs are professional listeners and curators with listening experiences that span their own school-age experience, as well as decades of recorded music across genres and cultures from before (and since) their time, and from across the world. They program new and familiar music for broad audiences, teach about the music they share, entertain those who tune in, shape the musical tastes and preferences of listeners, all while negotiating a constant balance of listener interests, DJ chops, and ethically driven music artist support. For the DJs in this study, their passion and professional command in music programming emerged through many experiences across their childhoods and adolescences, in and out of formal school music, and largely as the

result of being granted agency over their music listening lives and therefore, their own growing identity.

Revisiting the Research Purpose and Questions

The purpose of this research was to explore the evolution of freeform radio DJs as professional music listeners and curators for listening audiences. The primary objective was to delve into the development and evolution of freeform radio DJs as professional music listeners, curators for their listening audiences, and professionals with programming techniques, and their affinities with music educators in the enhancement of listening as key musical engagement for students in school music programs. As discerning listeners and curators of listening programs, the work of freeform radio DJs might be reasonably described as musically educating ~~to~~ their listeners. The current research focused on comprehending the nature and extent of music listening and learning experiences by radio DJs during their childhood and adolescent years. The intent was to uncover the circumstances that led to their becoming ardent music listeners, and that eventually drew them into professional work as freeform radio DJs at an internationally renowned public radio station. Furthermore, this research explored musical as well as nonmusical influences that contributed to the development of the DJs' commitment as music listeners and their expansion into curatorial skills that they employ in their radio programming. Music educators can hone pedagogical strategies for developing students' listening capacities, particularly as a result of understanding the ways in which radio DJs grew their musical interests, especially when on their own outside the realm of school.

Formal music learning experiences as children and adolescents

While 18 out of the 24 DJs spoke of formal music programs like school music or private lessons, their involvement in these programs were described as largely unsatisfactory and instead

motivated their more autodidactic music consumption and discovery outside of school. Those DJs who recalled learning an instrument in school or through private lessons spoke of their disinterest or dislike of the experience due to the top-down nature of the learning experience, their lack of personal agency in selecting music or practice time, and their feeling of being forced by their parents to play a particular instrument and repertoire. Many DJs described their decision to discontinue their study of an instrument within an average of one to two years. As children and adolescents, the DJs in this research desired agency, in which they would have been able to make decisions for themselves, especially regarding their own music learning. Without the choice of the means of musical engagement, which might have included far more opportunities to listen alone, and to listen together, and to listen in open-ended and creative ways and through the flexible guidance and facilitation of their teachers, many DJs rejected school music experience and private lessons altogether.

Conversely, those DJs who, as children and adolescents, taught themselves instruments like guitar and singing were more likely to continue playing longer, and with more enjoyment. This implies an importance for music educators to consider the disparity between students' informal, personally driven and enterprising music interests, and the standard models of private lessons and ensembles which may afford less student-centered decision-making entry points and result in less investment from students. Agency to choose their instruments and what music they learn in school, with a kind and encouraging delivery, was a missing ingredient lamented by DJs who wanted to become like the musicians they idolized. Instead, they felt limited by their instrumental options and frustrated with the slowness of musical mastery and inability to relate to the music. Research on popular musicians corroborates this pattern as many have expressed that those who experienced formal music education "found it difficult or impossible to relate to the

music and musical practices involved" (Green, 2001, p. 5). Overall, persistence in formal music learning was largely predicted by the level of satisfaction in their learning experiences, which in itself was predicted by the degree of agency afforded to them throughout the process.

Informal musical learning experiences as children and adolescents

The musical home environments for DJs proved to be the greatest determining factor for how they were set up to embrace music as a significant role in the rest of their lives. The age ranges of when these interviewees were open to new music, picky toward and possessive of their own taste in music and motivated to share music with others aligns with prior research on the developmental stages of adolescence and open-mindedness to music (Hargreaves & Lamont, 2017). DJs' home music experiences further aligned with current research on child development and music wherein as children grow older, their exposure to the outside world increased both musically and non-musically, influencing their choices in music listening and playing during early developmental years. These environmental influences thereby engender lasting music consumption behaviors and investment that the DJs reflected on fondly during their interviews (ibid.). Music listening was the conduit through which the DJs grew their musical knowledge and understanding in their own time and across their personal environments. Informal learning, especially through music listening, simultaneously made up for the lack of traction they were able to gain in formal music learning settings and instead provided them with more musically diverse, satisfying, and agentic experiences that fueled their drive to push toward professional success in music. The pivot from formal music education to informal autodidacticism increased musical agency in their lives, and in turn, satisfaction. For music educators, this is where the cycle of loss when students quit their music programs can be interrupted: by looking closely at

student interest and agency, while guiding musical discovery to retain student interests and investment.

Motivations and Experiences Related to Professional DJ Work

Several vehicles most notably supported the DJs' informal musical growth including technological advancement that enabled increased music access, access to radio and music regularly throughout their environment growing up, the manipulation of music through mixtapes and playlist, as well as influential events and people who shaped the DJs' musical interests. DJs were also motivated into deep connections and habits of music listening to further connect with friends and family, satisfy emotional needs and self-regulate, as well as feel a sense of agency over their life. They relished the ability to choose what they listen to when they want for whatever reason that drove them. Whether alone in their room with music as a social surrogate or teaching themselves to play guitar and attempt to replicate familiar tunes, music listening was a major force in the young lives of these DJs who became shaped by a variety of musical experiences that centered around music listening, to the point that they became curators of music for others. They shared gratitude in their interviews toward the availability and relationship with music listening that manifested into a drive to become a musical guide and sherpa to others, so that more people could benefit from the intangible joy of music listening and discovery. This is a passion and mission shared by many music teachers, who can look at these examples and draw conclusions for their own classrooms around what their students need to build musical identities and motivations.

Early Music Learning Experiences Which Influence Curation Today

The core of the DJs' programming lies in their minute-by-minute and show-by-show decisions, driven by the station's mission of listener-driven music discovery. As discussed in

Chapter 5, the curating intentions of DJs range from deep social and political philosophies like spreading awareness of current international conflicts through music by related musicians, or prioritizing music by local artists, musicians from minoritized populations, and lesser-known genres. As well as operating within philosophies of curation like prioritizing music for dancing or to bring joy. Several patterns emerged from interviews, including considering listeners, the historical significance of music, the DJs own interests, as well as the artist identities when choosing music. DJs often operate with the same motivations that steered their music listening when they were younger, now sharing their excitement and musical knowledge with listeners in each show. Many DJs are intent on guiding their audience's listening, introducing, and following up on song selections, and transitioning between selections, artists, and genres through strategies that blend songs in meaningful ways and without jarring the listeners who enjoy the regular balance of new and familiar music. Many DJs also view any on-air play as an important exposure opportunity for local artists, artists of color, female musicians, new bands, and politically relevant individuals or bands. Between the intentions behind the DJs' programming, and the practical skills they apply during the shows they produce, music teachers can enter their classrooms next Monday with practical ideas to engage their students in music listening discovery.

The Listener Enrichment Continuum which guides DJs at KEXP through balancing listener familiarity and novelty for increased listenership, is akin to the curricula that teachers use to guide their individual lessons throughout a given week, month, or year. The continuum is also similar to the historical education shows that were broadcast over the radio in the early 20th century to help develop rural students' musical knowledge. Being self-, artist-, or listener-oriented in the DJs' programming is similarly akin to the repertoire programming music teachers

decide on each year for ensembles and general music classes. Teachers who operate as directors of musical knowledge and what music is necessary to learn, without student input, are similar to the DJs who program music for listeners based on what they think listeners should hear, much of which is driven by personal music interests. Artist-oriented programming aligns with teachers who choose music to highlight certain composers or styles of music that they believe deserve more attention for social, musical, or political reasons. And Listener-oriented programming resembles the student-centered teacher who chooses music for the classroom based on their students' interests and musical familiarity. As teachers make curricular and pedagogical decisions to teach within individual classes, DJs' curating techniques offer inroads to helpful strategies that teachers can apply for increased student relevance and commitment. These strategies include the show schema which is akin to a lesson plan that guides a series of songs and tasks, anchors that are familiar songs to help bridge listening and understanding of unfamiliar songs, the segue which guides calculated transitions between songs or musical activities for students, and riffing which is improvisatory musical decision-making that could enable teachers to make more student-centered decisions in the teaching moment to align with student requests or curiosities. These techniques could help teachers feel more capable of incorporating music listening into their curriculum as a shared venture with their students for optimized student buy-in and long-term musical commitment.

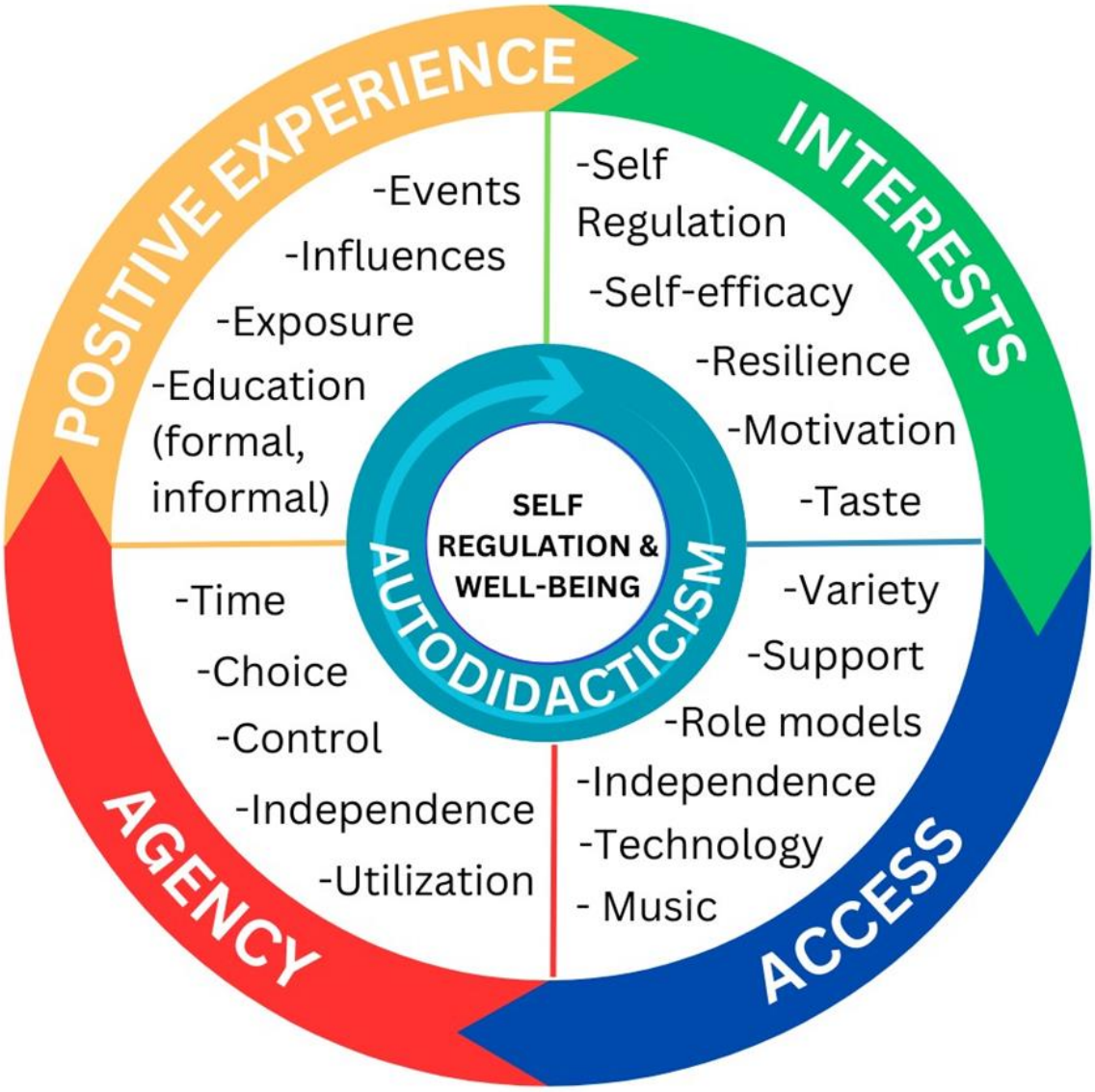
Towards a Model of Autodidactic Music Listening and Learning

Looking more closely at the experiences of the DJs in developing their own knowledge and professionalism in music listening, themes emerged which showcase both the areas of opportunity for students to build strong listening practices as well as for teachers to see areas in their pedagogy or curriculum that can be strengthened toward these outcomes. The following

Model of Autodidactic Music Listening and Learning, Figure 2, is presented as the Constructivist Grounded Theory research outcome described in Chapter 3 during the discussion of research methods. This model is offered as one way to understand the process and reasoning through which the DJs in this study developed their wide and deep musical content knowledge and curation skills in their childhoods and adolescences, which ultimately helped build the philosophies and practices they utilize on air today.

Figure 2

Model of Autodidactic Music Listening and Learning



Starting on the top left quarter of the model, **positive music experiences** like performance *events* (Dom who shared his Opera experience), *influential* people (Liam who idolized his older brother), *exposure* to new and unfamiliar music (Kayla whose dad managed Juke Boxes), as well as *formal and informal music settings*, all contributed to the DJs' further interests in music listening and continued experiences of musical enjoyment.

The DJs' growing **interests** in music listening sustained for many reasons, but most notably to *regulate their emotional state* (like listening to angry music when frustrated at a

parent), to feel confident (*self-efficacy*) in their ability to find more music and succeed in tasks related to music (like with David making and selling mixtapes to peers), as well as to harness *resilience* around challenging moments in everyday life (Like Amber channeling Aretha Franklin to build confidence as a woman). Music listening was also a general *motivator* for the DJs to interact socially with others (as was the case with Imani and her group of musician friends in Argentina), fit in (for Adam who played the three-jam-rotation with friends), discover more new music, and develop their musical *taste* over time.

However, without **access** to *music* recordings, *technology*, and people to share music with, as was the case with Kayla who got frequent free CDs from her dad's management of local jukeboxes, the DJs' musical interests could not be met. Because Kayla lived in the rural Midwest, access was a significant challenge for her to be able to connect with the outside world and grow musically, which her dad mediated. Access to musical *variety*, people who *supported* their musical interests, especially musical *role models* like radio hosts and older siblings, as well as the *independence* to listen to and choose music, were all crucial in the DJs' ability to grow musically throughout their childhood and adolescence.

Access to these elements of music listening also depended on the level of **agency** the DJs were able to exercise within their everyday life in and out of school. Positive experiences, musical interest, and access to music technology could not manifest musical outcomes without the ability for DJs to make their own musical choices. This required *time* in which the DJs could make choices for themselves and with others, the freedom to *choose* what they listened to and why, the ability to *control* their listening environment and musical responses, which required a degree of *independence* that many DJs shared, characterized by all of them being able to listen to music alone and on their own terms while growing up. Then, the activation of agency through

utilization of music technology and independence is what took the DJs back through the start of the cycle by providing themselves with more **positive music listening experiences** that perpetuated their musical knowledge and skill development.

At the core of these four main elements of knowledge and skill development sits the self-teaching, **autodidactic** music listening and discovery that defined the DJs and set them apart as deep musical connoisseurs compared to their peers. At the center of even the autodidactic tendencies was the drive to manage their own overall well-being by controlling their daily emotions through music listening, including being able to stay happy, feel socially integrated, and experience musical optimism through **self-regulation**.

As the cycle continued throughout their childhood and adolescence, the DJs persisted in learning about music and others through their music listening experiences and interactions with influential people in their lives, music technology advancements, and the freedoms that come with growing older and moving into an independent adulthood. Music listening supported the positive emotions, musical engagement, personal relationships, meaning they drew from life, and sense of achievement in at least one corner of their life for the DJs in this study, all of which makeup a person's capacity to flourish and be well (Seligman, 2011). With all the components put together, an understanding of these young, evolving music listeners can be captured and understood as they transformed over time into the professional music listening curators they are today.

This model is applicable to many music education contexts for students and teachers. For example, it can be dropped into a Grade 7 General Music Classroom for a teacher who might wish to develop a listening curriculum. By identifying where her curriculum may not be completing the circle of the four major quadrants, like student agency, they could look at the

characteristics which promote agency to make pedagogical choices that are likely to help cultivate their specific students' agency and therefor positive experiences in their music class. This could include adding more variety to their song choices, finding culture bearers to present to the class about a topic of student interest, inviting caregivers into the class for a music presentation, or finding ways to promote independence for students like through long-term independent projects that encourage students to investigate their own musical interests.

Implications for Music Education Practice

It was evident in the interviews and analysis that music listening was an important pathway experience of music learning for all DJs in their school-age years. This evidence supports the increased need for music listening to become a stronger and more present element in the practice of school music education. In line with research on music listening and human development, the k-12 years for children and teens are foundational for identity development, social integration, belonging, music taste, musicianship, and emotional self-regulation through music which highlights its importance in school music (Lehmann, Sloboda, & Woody, 2007; Reybrouck, 2020; Reybrouck, Podlipniak, & Welch, 2021; Tervaniemi, Makkonen, & Nie, 2021; Harvey, 2020). Given the alienation many DJs felt toward their formal music learning experiences, teachers must consider the importance of student agency in the classroom, and the ease of access with music listening that can serve to bridge students' in- and out-of-school lives. If multiple DJs confessed that "music saved their lives", it was the music listening for which they were grateful, much of which they sought out themselves due to the lack of opportunity, or the provision of time and space, in school music education. Teachers are-assumed to be the trained and well-informed musical role models who can guide the music discovery process for all students, so that they might come to understand their full capacity for music listening, music

teachers who can foster student learning in ways that encompass listening, as well as performance in ensembles and creative compositional activity, are more likely to grow the comprehensive musical education of all students.

Many-insights can be gleaned from the life and musical experiences of the 24 DJs represented in this research, as well as the many overlapping aims shared by music teachers and DJs. There is room for growth in understanding how music educators can give greater attention to listening education and to facilitating learning experiences for all students. The DJs show how social and emotional, even educational outcomes, from a self-taught habit of music listening can benefit those who opt out of performance but are enthusiastic about music listening or styles of musicianship not present in school music programs. As well as those in ensemble-based classes wherein building musical identity is of equal importance to musical technique. Music educators are equipped with the professional skills necessary for mediating many kinds of music learning, including music listening. Teachers are already equipped with all the tools they need to add dimension for their students through music listening.

Intersections of Music Teachers and Freeform Radio DJs

There are many overlaps between music teachers and the DJs interviewed in this study, starting with a passion for sharing the joy of music with others. One area of music education that teachers may struggle with and which the DJs excelled in, is the understanding of the significance of music listening in personal development and in connecting with others. Music education can be limiting to students when it focuses on predominantly ensemble- or notation-based learning within the context of European Art music because these teaching approaches increasingly lose relevance to younger listening populations who have access to an almost infinite availability of musical styles and genres. In a comparison between DJs and music

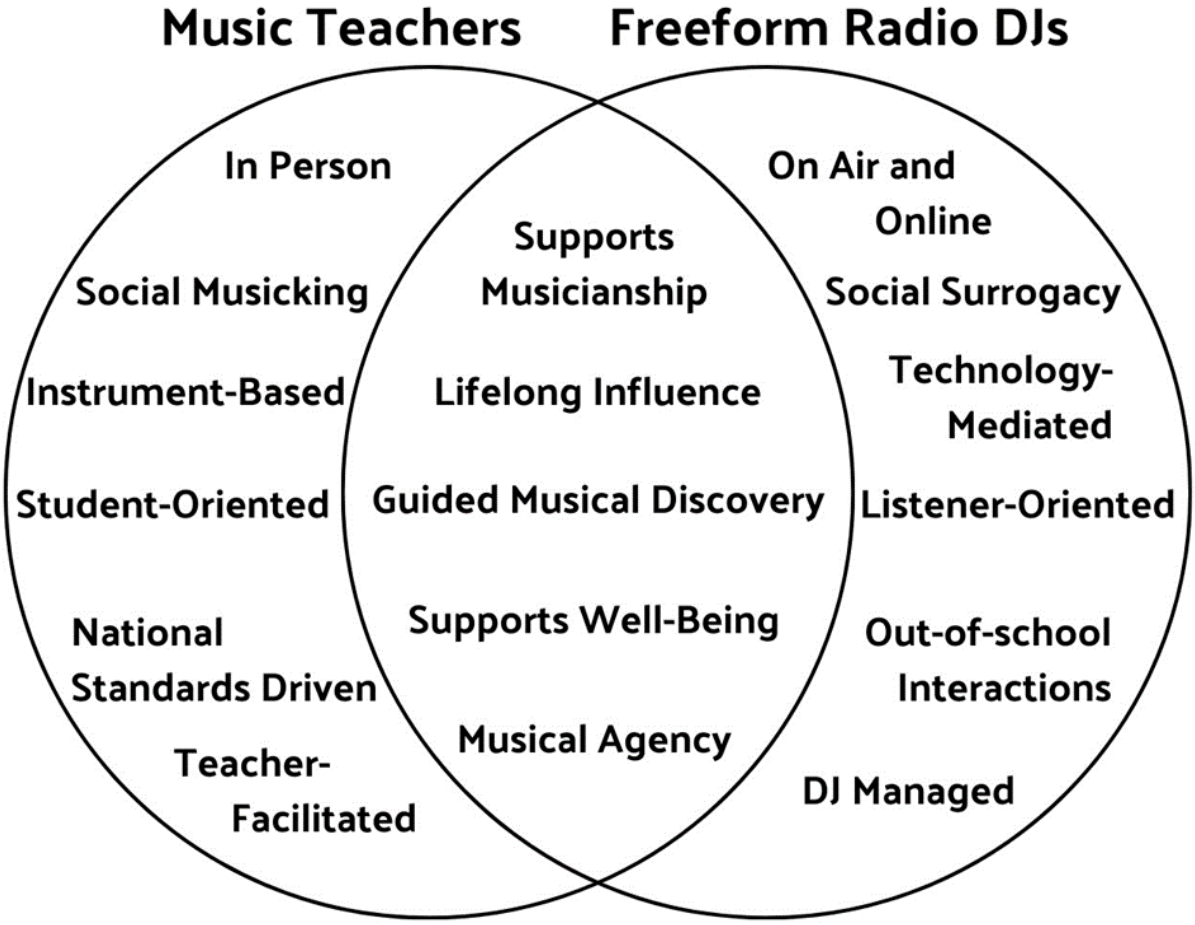
teachers, Tobias argues that “Focusing solely on aural skills and analysis within paradigms of Western music can limit students’ musical learning and engagement to particular ways of knowing music” (p. 1). This limitation of music teaching supports the need for discovery-based music exposure and aligns with the content knowledge required of radio DJs and the reality of music variety that exists in the world. If students should subsequently be encouraged to practice skills that make DJs experts at what they do, then the same principles should be applied to educators across the public education realm so they can model for and adequately support their students in the music discovery and decision-making learning process.

The following diagram (Figure 3) offers a visual display of the ways in which teachers already align with DJ curation techniques, and the areas in which they can continue to grow to meet the emergent findings of this study that highlight the importance of accessible and personally relevant music for students. On the left of the diagram shows qualities unique to music teachers that can support music listening outcomes further, while on the right show qualities unique to radio DJs. Teachers are able to interact with students in person which is an advantage compared to an on-air or online presence like DJing which may be less personable and relationship-building. Teachers can cultivate students’ engagement in music socially while DJs cultivate a relationship with their listeners that acts more as a surrogate for personal relationships. Music teaching is instrument based while DJing is technologically mediated, teachers are student-oriented compared with being listener-oriented for DJs, and teachers are held to the national standards for music education whereas DJs are able to program music that aligns more with what students hear and experience musically outside of school. Lastly, teachers are in a position to facilitate learning while DJs are in more of a one-way relationship with their listeners, unable to interact as deeply or dynamically outside of honoring listener requests. Music

educators could be a model for DJs to develop their own relationships with listeners and curatorial skills as much as teachers could learn from DJs which grew increasingly evident in the emergence of themes between strategies of both populations.

Figure 3

Diagram of Alignment Between Music Teachers and Freeform Radio DJs



Teachers and DJs align, however, in many ways that are listed at the center of the Venn diagram and can serve as a starting point for teachers who wish to find ways of transitioning into more music listening-oriented teaching spaces. First, both teachers and DJs support musicianship by championing musicians or training them. This relationship between creating musicians and

showcasing them helps music learners see their own capacity for musicianship which ideally inspires them into a life-long relationship with creating or supporting music. When DJs play a variety of music on air, listeners are more likely to find music they resonate with which could inspire them toward learning new genres or styles of music. Listeners also become exposed to the positive messaging from KEXP when they prioritize local artists and artists from marginalized communities, who might otherwise not see themselves becoming stronger or more successful musicians.

An important point to be made is that both teachers and DJs share interests in serving the goal of lifelong enjoyment of music as a main tenet of their profession, and in guiding the musical discovery process within their respective roles. Sometimes while supporting their students' well-being through building awareness and support of music as a tool for self-regulation. Still another shared interest is the manner of supporting listener (or student) agency. DJs support musical agency by empowering listeners to note favorite artists or songs, learn about new music, and encourage further musical discovery. Teachers do so by incorporating student interests in the classroom which help students feel in control of their learning experience and capable of managing their own musical success. Thinking about skills that DJs possess which a teacher may not can help that teacher see opportunities for growth in their own teaching where they may feel limited or less confident.

Guiding the Musical Discovery Process

There are students in and out of music classes who are passionate about music and who may require different types of teacher support to grow musically. Music education can provide opportunities for students to explore, share, and understand the music they love, including through exploration into its structure, sound, meaning, and origins, as well as the influences that

shaped it. With the guidance of a teacher, this understanding can deepen, leading students to examine the power and impact of music personally and for others. Students may subsequently be more inspired to pursue their own songwriting, composition, or performance skills through a music-listening incorporated learning environment than one that is limited to performance- or notation-based learning. By nurturing and honoring students' personal music interests and by cultivating music listening discovery in the classroom, teachers can help students develop a broader understanding of and commitment to lifelong relationships with music.

Music teachers who wish to more closely connect with their students can engage their students in musical discovery by bridging their students' out-of-school musical lives into their school music experiences. The DJs were clear that music listening fulfilled them, and yet there was also not enough opportunity in school to meet their musical needs, whether or not they could articulate what those needs were at the time. For music educators this could mean asking students about their musical interests, folding them into the curriculum, and then collectively soliciting unfamiliar music at the edge of familiarity and learning how to find new music and expand ones' own musical potentially. For instrumental educators, this could include helping students explore music that includes their instrument in a variety of fashions so that students learn about the many musical opportunities they have ahead of them. Starting with already established music listening curricula like World Music Pedagogy can help teachers facilitate this process in the general music classroom. Musical discovery through music listening can also develop student-centered curricula by matching students' musical interests in the classroom and programming music that students like into ensemble performances and general music exploration.

KEXP DJ, Will, spoke of the role of a DJ as similar to a guide to music, going so far as to refer to the DJ as a "musical sherpa." As all students benefit from musical discovery, the music educator is of critical importance in school music classrooms. They can serve students in their exploration of music as not only an adventure as performance and creative expression but also as a deep listening experience. The music educator contributes to a student's long-term investment in music by guiding them in how to listen as well as the extent of repertoire they can know by listening. But the process of learning to listen does not have to be a lonely one, and it can start with the guidance of the music educator. For the DJs, music listening served a purpose in their life by providing the visceral experience of emotions that come with music listening, as well as the ability to control these emotions through purposeful music choices in order to self-soothe and increase happiness. The DJs in this research taught themselves about music listening to and exposing themselves progressively more to various music. The self-taught capacity for music listening and especially the open-mindedness and curiosity needed for the DJs to develop their skills, can be achieved by students on their own as well as in school music. Music programs may otherwise lose committed students if the curriculum does not incorporate engage students in a variety of musical experiences to help students discover their interests and further cultivate them.

Curatorial Intentions in Music Teaching

Many pedagogical implications can be drawn from the intentions that drove DJs' decision-making during their programming at the radio station. The Listener Enrichment Continuum can be best understood as the curriculum that guides instruction and long-term learning goals, with a core interest in expanding students' musical knowledge by starting with what they know and introducing unfamiliar music strategically. This way, students can feel more

invested in the music learning process which may increase their commitment to music class involvement and opportunities for formal music learning that follow.

Thinking about the programming audience, as modeled by the DJs, is important for educators to ensure equal distribution of focus on music the students are interested in, music and musicians who deserve to be known and learned, as well as personal interests and experiences as the teacher which helps build connection with the students. Reflecting on a teacher's own curatorial framework, or positionality and life experiences, could allow them to understand what part of themselves and their past they bring into the classroom, and whether any growth is needed to foster a more equitable and student-centered classroom.

Table 6 shows the specific recommendations for teachers related to each curatorial intention that emerged across the DJs in this study. Overall, the DJs' intentions and recommendations are at a larger scale of considerations for music teachers who may be interested in shifting how they think about music teaching as a whole and the kind of decision-making they employ throughout the school year.

Table 6

Implications of DJs' Curatorial Techniques for Music Educators

Curatorial Technique	Music Teacher Recommendations
Listener Enrichment Continuum	Integrate music listening into the overarching curriculum and daily pedagogy to bridge student musical familiarity with novelty and variety so they can become invested in the music learning process. Choose music students know, as well as music that is unfamiliar to them by potentially enticing them to maintain open-mindedness about what learning outcomes can emerge from new musical experiences (as well as non-traditional instructional decision-making).

Programming Audience: listener-, self-, and artist-oriented	Develop a school music listening program that features artists or composers whose music offers sociodemographic diversity. Consider music that is lesser known to students, along with music the teacher likes (and can "story"). Feature music that students are interested in. Alternate choices evenly across the school year, cultivating meaning through personal stories the teacher and students can share, as well as learning about the artists who may be spotlighted.
Curatorial Musical Framework	Allow personal experiences in travel, music learning, education, relationships, jobs, and other personal experiences to inform curricular decision-making and acknowledge that these experiences inform everyday teaching interactions and decision. Question personal biases, seek professional development, and aim for equitable access to musical variety and student interest across the curriculum.

Music listening is a mechanism for so many students, and people in general, to regulate their emotional state and own sense of well-being. Music listening has been shown to improve mood and emotional regulation for young people (Garrido, du Toit, & Meade, 2022). There is educational potential for teachers to be positive influences in guiding and expanding this capacity for students who might not otherwise learn how to manage challenges in their personal lives but need tools to self-regulate and stay academically engaged. Understanding the use of music in this capacity can allow teachers to lean into discussion-based conversations with students about the role of music listening in everyday life and ask students open-ended questions to learn about their personal relationships with music so the teacher can learn about opportunities for further music learning and development. All three categories of the DJs curatorial intentions can be applied toward these students' mental health and well-being outcomes, especially through regularly integrated music listening in class.

Music educators cannot fully know what children experience when they are not at school, but the experiences of adversity in many of the interviews in this research shows a need for more

consideration by teachers around sharing the ways in which students can interact with music that may go beyond the classroom educational benchmarks and into social, emotional, and psychological outcomes.

The Application of DJ-Curatorial Techniques in Music Education

Table 7 shows the specific recommendations for music educators related to each curatorial technique that emerged across the DJs in this study. These recommendations are more localized to specific class periods or activities and can be integrated into lesson planning and everyday teaching. Especially if music listening becomes a more integrated part of music teaching.

Table 7

Implications of DJs' Curatorial Techniques for Music Teachers

Curatorial Technique	Music Teacher Recommendations
Show Schema	Apply music listening lesson plans with themes that revolve around current or historical events, student requests, connections between artists and genres, different versions of a song, other academic subjects, or themes relevant to the curriculum that help build connection across different music. Playlist building activities with students would also suit this technique.
Anchors and Mile Markers	Frequently incorporate familiar songs into the curriculum so students can connect more readily with the learning material, feel validated for their music interests, build trust with the teacher, and build comfort in experiencing unfamiliar music.
The Segue	Create transition activities between songs or pieces to maintain student attention and interest. Students can learn about developing a performance program or playlist and learn to identify and build connections across different or similar songs and pieces.
Riffing: Improvisatory Programming	Exercise an emergent curriculum by applying democratic approaches to decision-making in class during the moment that the decision needs to be made, through facilitated student input. In an ensemble this could look like asking students to identify areas for

> improvement and rehearsal strategies. In general music this could look like honoring a student request for a certain activity or song when it was not planned for that day but would be educational and engaging.

The show schema on which DJs operate is similar to how lesson plans are scaffolded to reach students with familiar material (anchors, life rafts, and steppingstones) and then build on it with unfamiliar material (new music). Music educators can use the concept of a schema and anchor in their music class to center student interests, then think strategically about how to expand their students' musical open-mindedness to welcome other genres and cultures. This way the teacher's own interests can be shared with students who also share their own interests with the class, collectively learning about unfamiliar music, much like DJs do through listener requests live on air. These musical collaborations model the openness freeform radio DJs nurtured throughout their lives as they became hallmarks of musical discovery.

The segue and riffing techniques contribute to the in-the-moment necessary skillset for teachers who wish to integrate more music listening in class but struggle with limited time to plan ahead. By practicing an emergent curriculum, where decisions are more spontaneous during class time and related to the students' questions or interest of the moment (Osberg & Biesta, 2008; Jones, 2012), students are able to exercise agency over their own learning and the teacher becomes facilitator of exploratory learning. Curriculum is a broad guide but what is taught to students is decided with the students emerges from class to class as student interests become apparent and topics transition organically into the next topic or activity. This can be exercised in part of a class time, like with a ten-minute music listening activity before rehearsal, or for the entirety of class time, which could feel more feasible in general music classrooms.

With purposeful curation that includes structured decision-making and an overall theme, students are guided through music listening into a more broadened understanding of what exists in that slice of the world, and what else they might become interested in which they do not yet know about. This way, formal music educators could use KEXP DJ curatorial strategies to help students learn about music similar to that which they like, learning over time how to facilitate inquisitive learning and musical discovery for themselves. Teachers learning how to make music teaching through music listening a regular part of learning could better support students' abilities to use music for personal interests and instrumental outcomes. With more musical options, students are presented with greater musical opportunities.

Directions for Future Research

Large educational initiatives, like equity-based curriculum and student-centered learning, often originate in scholarship and move into the national, state, and district levels. Teachers are then ultimately responsible for implementing these updated missions and actions (Kelly, 2016), but unfortunately, training and messaging for doing so is not all the same. There is much need for training and confidence-building to empower teachers toward developing new skills like musical discovery and music listening as learning, as teacher education programs and professional development programs may not satisfy this need (Holden & Button, 2006). This also means that for teachers to modernize their teaching they must develop the necessary skills and knowledge to diversify their curriculum themselves to appeal to student interests, starting with assessing their own awareness of musical and cultural variety, or lack thereof, and then expanding outward to unfamiliar music. In order to adopt music listening in a music classroom a teacher must be comfortable confronting and utilizing music they do not know. Unfortunately, not all music educators feel equipped to provide different styles of music in their classes

(Miralis, 2014) and there is still need for the research in the development of tools and models that can assist teachers in widening their own musical depth and breadth. Further research could build on this study by examining the DJs' curatorial techniques in a classroom and measuring teacher self-efficacy and student interest in the music listening activities presented.

Research is also recommended for understanding young people's curatorial habits and out-of-school music listening decision-making processes compared with their in-school music education experiences. With even more advanced music listening technology—like streaming services with unlimited repositories of music, free options like YouTube and SoundCloud where anyone can add music, and Bluetooth technology that allows listening on the go more accessible—further research is recommended to investigate the relationship students have with their school music programs given their own personal music listening habits, and what happens when teachers incorporate discovery-based music listening in their classrooms.

Concluding Thoughts

Music listening enhances the daily lives of people of all ages. Informal learning experiences, such as attending concerts or participating in shared music listening activities with friends, contribute to a well-rounded musical learning as does developing one's own musical taste quietly alone in their room. The importance of nurturing critical listening skills, analytical thinking, and an enduring passion for music, whether in the classroom or beyond, is the ultimate goal for many music teachers. The level of music knowledge and curation proficiency the DJs in this research cultivated over their lifetime rivals that of professional musicians and educators. Their musical knowledge and skills, however, were largely built overtime through informal settings like making mixtapes off the radio, exchanging music with others, or living with family members who had strong musical opinions and recommendations.

The articulation by radio professionals of their musical experiences as children and adolescents may serve as a framework for music educators who seek to develop listening as a critical component within their curriculum to help develop young, keen listeners. This research uncovered the sometimes-unbalanced relationship that can occur between formal and informal music learning for the DJs in this study, through which they honed their interests in listening, approaches to curation, and relationships with listeners. DJs on air today are like music teachers over the airwaves, while their listeners are akin to music students who are seeking personally relatable music as well as novelty and discovery. Music educators can actively seek strategies that will aid students in honing their ability to understand music as art, as having personal and collective meaning, as providing the means for feeling deeply about life's many joys and challenges, and as a way to understand the world around them (Campbell, 2018). The results of this research may well benefit music educators and their students to know new techniques for deep listening, following on the pathways taken by these radio DJs and the life lessons they shared around their lasting relationship with music listening.

Music educators are tasked with guiding students through analyzing and interpreting music, teaching them to hear the nuances, emotions, and historical context embedded within the notes, and then learn to produce music. Music listening can similarly foster a lifelong love for music and enrich students' capacity for critical thinking and emotional intelligence (Brittin, 2014). By listening to a variety of genres and styles of music, students develop a deeper appreciation for the breadth of musical expression that has and continues to exist for the human species (Campbell, 2018). The DJs skills and knowledge offer music educators considerations around the relationship between students' informal, personally driven and enterprising music interests, and the standard models of ensembles which may not offer students the relevance they

seek to match their avid music listening outside of school. There are students in music classes who are drawn to music, and music teachers must facilitate opportunities for them to listen, to explore, to choose, share, and understand more of this music that they seek.

Music education has the potential to attend to music lovers and learners all across the spectrum, so that even students who do not wish to play an instrument or sing in choir can still be supported, and their learning can still be facilitated, by school music educators. Whether that means that educators can give students choices, agency, and opportunities to pursue their own musical interests (as listeners, creators, co-creators, writers about music, technicians and engineers, or as singers and players), or whether it means that educators can become more aware of and be informed by the music that students listen to outside of school. There is equity in music education when we are aware, can accept, and can foster various musical pathways in school which connect to students' musical lives outside of school and the world around them.

References

About KEXP. KEXP. (n.d.). https://www.kexp.org/about/

Abrahams, F. (2014). Starbucks Doesn't Sell Hot Cross Buns: Embracing New Priorities for Pre-service Music Teacher Preparation Programs. Oxford University Press. http://www.oxfordscholarship.com.offcampus.lib.washington.edu/view/10.1093/acprof:oso/9780199384747.001.0001/acprof-9780199384747-chapter-3

Abril, C. R., & Gault, B. M. (2022). General Music: Dimensions of Practice. Oxford University Press.

Akobo, L. (2018). Action learning through radio: Exploring conceptual views and lived experiences of women entrepreneurs. Action Learning: Research & Practice, 15(3), 235–248. https://doi.org/10.1080/14767333.2018.1509838

Alkozei, A., Smith, R. & Killgore, W.D.S. Gratitude and Subjective Wellbeing: A Proposal of Two Causal Frameworks. J Happiness Stud 19, 1519–1542 (2018). https://doi.org/10.1007/s10902-017-9870-1

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review, 84(2), 191.

Banks, J. A. (2009). The Routledge International Companion to Multicultural Education. Routledge.

Bell, C. L. (2018). Critical Listening in the Ensemble Rehearsal: A Community of Learners. Music Educators Journal, 104(3), 17–25. https://doi.org/10.1177/0027432117745951

Benedict, C., Schmidt, P., Spruce, G., & Woodford, P. (2015). The Oxford handbook of social justice in music education. Oxford University Press.

Bianchi, W. (2008). America's Schools of the Air. TechTrends, 37.

Boal-Palheiros, G. M., & Hargreaves, D. J. (2001, July). Listening to music at home and at school. British Journal of Music Education. /core/journals/british-journal-of-music-education/article/div-classtitlelistening-to-music-at-home-and-at-schooldiv/A70722C543EB1C100E076F072D4A20F8

Boer, D. (2009). Music Makes the People Come Together: Social Functions of Music Listening for Young People Across Cultures. http://researcharchive.vuw.ac.nz.offcampus.lib.washington.edu/handle/10063/1155

Boer, D., & Fischer, R. (2012). Towards a holistic model of functions of music listening across cultures: A culturally decentered qualitative approach. Psychology of Music, 40(2), 179–200. https://doi.org/10.1177/0305735610381885

Boer, D., Fischer, R., Tekman, H. G., Abubakar, A., Njenga, J., & Zenger, M. (2012). Young people's topography of musical functions: Personal, social and cultural experiences with music across genders and six societies. International Journal of Psychology, 47(5), 355–369. https://doi.org/10.1080/00207594.2012.656128

Bowman, W., & Frega, A. L. (Eds.). (2012). The Oxford handbook of philosophy in music education. Oxford University Press.

Brodeur, N. (2018, April 16). Anonymous donor leaves $10 million to Seattle radio station KEXP. The Seattle Times. https://www.seattletimes.com/entertainment/music/anonymous-donor-leaves-10-million-to-seattle-radio-station-kexp/

Broomhead, P. (2018). What is Music Literacy? Routledge.

Brown, R. M., Zatorre, R. J., & Penhune, V. B. (2015). Chapter 4 - Expert music performance: Cognitive, neural, and developmental bases. In E. Altenmüller, S. Finger, & F. Boller

(Eds.), Progress in Brain Research (Vol. 217, pp. 57–86). Elsevier. https://doi.org/10.1016/bs.pbr.2014.11.021

Campbell, P. S. (2005a). Cultural Diversity in Music Education. Cultural Diversity in Music Education, vii.

Campbell, P. S. (2005b). Deep Listening to the Musical World. Music Educators Journal, 92(1), 30–36. https://doi.org/10.2307/3400224

Campbell, P. S. (2018). Music, Education, and Diversity: Bridging Cultures and Communities. Teachers College Press.

Campbell, P. S. (2021). Musica exotica, multiculturalism, and school music. Visions of Research in Music Education, 16(5), 20.

Campbell, P. S., & Lum, C. H. (2019). World music pedagogy, volume VI: School-community intersections. Routledge.

Campbell, P. S., Scott-Kassner, C., & Kassner, K. (2017). *Music for elementary classroom teachers*. WW Norton.

Charmaz, K. (2014). Constructing Grounded Theory. SAGE.

Charmaz, K., & Belgrave, L. L. (2015). Grounded Theory. In The Blackwell Encyclopedia of Sociology. American Cancer Society. https://doi.org/10.1002/9781405165518.wbeosg070.pub2

Charmaz, K. (2016). Shifting the grounds: Constructivist grounded theory methods. In Developing grounded theory (pp. 127-193). Routledge.

Chowdhury, N., Latulipe, C., & Young, J. E. (2021). Listening Together while Apart: Intergenerational Music Listening. Companion Publication of the 2021 Conference on Computer Supported Cooperative Work and Social Computing, 36–39. https://doi.org/10.1145/3462204.3481765

Cooper, A., adcoops1980@gmail. com. (2016). “Youth Amplified”: Using Critical Pedagogy to Stimulate Learning Through Dialogue at a Youth Radio Show. Education as Change, 20(2), 44–66. https://doi.org/10.17159/1947-9417/2016/732

Cowie, H., & Myers, C.-A. (n.d.). The impact of the COVID-19 pandemic on the mental health and well-being of children and young people—Cowie—2021—Children & Society—Wiley Online Library. Retrieved December 9, 2022, from https://onlinelibrary.wiley.com/doi/full/10.1111/chso.12430

Creswell, J. W. (2014). Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research. Pearson Higher Ed.

Cross, I. (2005). Music and meaning, ambiguity and evolution. In D. Miell, R. MacDonald, & D. J. Hargreaves (Eds.), Musical Communication (pp. 27–44). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780198529361.003.0002

Cross, I. (2016, July). The roles of music in social life and thought. In International Journal of Psychology (Vol. 51, Pp. 854-854). 2-4 Park Square, Milton Park, Abingdon Ox14 4rn, Oxon, England: Routledge Journals, Taylor & Francis Ltd.

Dale, Pete, 'Technology and the Music Curriculum: Maximising Inclusion, Diversifying Options', in Pete Dale, Pamela Burnard, and Raphael Travis Jr. (eds), *Music for Inclusion and Healing in Schools and Beyond: Hip Hop, Techno, Grime, and More* (2023; online edn, Oxford Academic, 23 Nov. 2023), https://doi.org/10.1093/oso/9780197692677.003.0005

Denzin, N. K., & Giardina, M. D. (2016). Qualitative Inquiry Through a Critical Lens. Routledge.

Dewey, J. (1903). Democracy in education. The Elementary School Teacher, 4(4), 193–204.

Dotov, D., Bosnyak, D., & Trainor, L. J. (2021). Collective music listening: Movement energy is enhanced by groove and visual social cues. Quarterly Journal of Experimental Psychology, 74(6), 1037–1053. https://doi.org/10.1177/1747021821991793

Dousay, T. A. & Janak, E., Edward (2018). All Things Considered: Educational Radio as the First MOOCs. TechTrends: Linking Research & Practice to Improve Learning, 62(6), 555–562. https://doi.org/10.1007/s11528-018-0257-x

Easton, E. W. (2017). Weirdness Takes Work: Using Cultural Capitals to Understand How Freeform Radio DJs Choose Music [Thesis, University of Illinois at Chicago]. https://indigo.uic.edu/articles/thesis/Weirdness_Takes_Work_Using_Cultural_Capitals_to_Understand_How_Freeform_Radio_DJs_Choose_Music/10849295/1

Easton, E. W. (2020). A Freeform Approach to Building Audiences. Radio's Second Century: Past, Present, and Future Perspectives, 119.

Ellis, R. J., & Thayer, J. F. (2010). Music and Autonomic Nervous System (Dys)function. Music Perception, 27(4), 317–326. https://doi.org/10.1525/mp.2010.27.4.317

Elpus, K. (2022). Access to arts education in America: The availability of visual art, music, dance, and theater courses in U.S. high schools. Arts Education Policy Review, 123(2), 50–69. https://doi.org/10.1080/10632913.2020.1773365

Ericsson, K. A., Prietula, M. J., & Cokely, E. T. (2007). The making of an expert. Harvard business review, 85(7/8), 114.

Espeland, M. (2011). A century of music listening in schools: Towards practices resonating with cultural psychology. A cultural psychology of music education, 144-178.

Events. KEXP. (n.d.-b). https://www.kexp.org/events/

Fairchild, C. (2009). When a place becomes a community: Music, radio and the reach of social aesthetics. Transforming Cultures eJournal, 4(1). https://doi.org/10.5130/tfc.v4i1.1061

Fancourt, D., Ockelford, A., & Belai, A. (2014). The psychoneuroimmunological effects of music: A systematic review and a new model. Brain, behavior, and immunity, 36, 15-26.

Feneberg, A., Stijović, A., Forbes, P., Lamm, C., Piperno, G., Pronizius, E., Silani, G., & Nater, U. (2023). Perceptions of Stress and Mood Associated with Listening to Music in Daily Life During the COVID-19 Lockdown. JAMA Network Open, 6, e2250382. https://doi.org/10.1001/jamanetworkopen.2022.50382

Feraria, P. J. 1. (2018). Radio Waves and Curriculum Pathways: Jamaican "At Risk" Learners Construct Media. Journal of Media Literacy Education, 10(1), 42–58.

Finkelhor, D. (2020). Trends in Adverse Childhood Experiences (ACEs) in the United States. Child Abuse & Neglect, 108, 104641. https://doi.org/10.1016/j.chiabu.2020.104641

Fitzpatrick, K. R. (2012). Cultural diversity and the formation of identity: Our role as music teachers. Music Educators Journal, 98(4), 53–59.

Gao, Y., MacDonald, R. A., & Wilson, G. B. (2022). The role of family musical involvement in family relationships. Psychology of Music, 03057356221108764. https://doi.org/10.1177/03057356221108764

Garrido, S., du Toit, M., & Meade, T. (2022). Music listening and emotion regulation: Young people's perspectives on strategies, outcomes, and intervening factors. Psychomusicology: Music, Mind, and Brain, 32, 7–14. https://doi.org/10.1037/pmu0000285

Gault, B. M. (2016). Listen Up!: Fostering Musicianship Through Active Listening. Oxford University Press.

Giles, T. M., de Lacey, S., & Muir-Cochrane, E. (2016). Coding, Constant Comparisons, and Core Categories. Advances in Nursing Science, 39(1), E29–E44. https://doi.org/10.1097/ANS.0000000000000109

Glaser, B., & Strauss, A. (2017). Discovery of grounded theory: Strategies for qualitative research. Routledge. https://www.taylorfrancis.com/books/mono/10.4324/9780203793206/discovery-grounded-theory-barney-glaser-anselm-strauss

Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: strategies for qualitative research.

Global Music Report 2023: Full Report, Data and Analysis. (2023). United Kingdom: IFPI.

Granot, R., Spitz, D. H., Cherki, B. R., Loui, P., Timmers, R., Schaefer, R. S., Vuoskoski, J. K., Cárdenas-Soler, R.-N., Soares-Quadros, J. F., Li, S., Lega, C., La Rocca, S., Martínez, I. C., Tanco, M., Marchiano, M., Martínez-Castilla, P., Pérez-Acosta, G., Martínez-Ezquerro, J. D., Gutiérrez-Blasco, I. M., … Israel, S. (2021). "Help! I Need Somebody": Music as a Global Resource for Obtaining Wellbeing Goals in Times of Crisis. Frontiers in Psychology, 12. https://www.frontiersin.org/articles/10.3389/fpsyg.2021.648013

Green, L. (2008). Group cooperation, inclusion and disaffected pupils: Some responses to informal learning in the music classroom. Presented at the RIME Conference 2007, Exeter, UK. Music Education Research, 10(2), 177–192. https://doi.org/10.1080/14613800802079049

Greenberg, D. M., Matz, S. C., Schwartz, H. A., & Fricke, K. R. (2021). The self-congruity effect of music. Journal of Personality and Social Psychology, 121, 137–150. https://doi.org/10.1037/pspp0000293

Gregory, B. C. (2016). Educational Radio, Listening Instruction, and the NBC Music Appreciation Hour. Journal of Radio & Audio Media, 23(2), 288–305. https://doi.org/10.1080/19376529.2016.1224423

Griffin, S. M. (2011). Essay: Reflection on the Social Justice Behind Children's Tales of In- and Out-of-School Music Experiences. Bulletin of the Council for Research in Music Education, 188, 77–92.

Groarke, J. M., & Hogan, M. J. (2018). Development and Psychometric Evaluation of the Adaptive Functions of Music Listening Scale. Frontiers in Psychology, 9. https://www.frontiersin.org/articles/10.3389/fpsyg.2018.00516

Groarke, J. M., & Hogan, M. J. (2019). Listening to self-chosen music regulates induced negative affect for both younger and older adults. PLOS ONE, 14(6), e0218017. https://doi.org/10.1371/journal.pone.0218017

Groarke, J. M., MacCormac, N., McKenna-Plumley, P. E., & Graham-Wisener, L. (2022). Music Listening Was an Emotional Resource and Social Surrogate for Older Adults During the COVID-19 Pandemic: A Qualitative Study. Behaviour Change, 39(3), 168–179. https://doi.org/10.1017/bec.2022.10

Gupta, U. (2018, July 1). Personality, Gender and Motives for Listening to Music. | Journal of Psychosocial Research | EBSCOhost. https://doi.org/10.32381/JPR.2018.13.02.1

Gupta, U., & Singh, V. K. (2020). Effects of music listening on resilience, self-efficacy and positivity in healthy young adults. Journal of Psychosocial Research, 15(1), 1–24. https://doi.org/10.32381/JPR.2020.15.01.1

Halick, M. E. (2017). Neuroscience, Music, and Culture: Finding Pathways to Effective Multicultural Music Education. Update: Applications of Research in Music Education, 35(3), 11–15. https://doi.org/10.1177/8755123315619765

Hallam, S., Cross, I., & Thaut, M. (2016). The Oxford Handbook of Music Psychology. Oxford University Press.

Hansen, N. Chr. (2021). Music for hedonia and eudaimonia during pandemic social isolation [Preprint]. PsyArXiv. https://doi.org/10.31234/osf.io/s9jf6

Hargreaves, D. J., MacDonald, R., & Miell, D. (2012). Musical Identities Mediate Musical Development. The Oxford Handbook of Music Education, Volume 1. https://doi.org/10.1093/oxfordhb/9780199730810.013.0008

Hargreaves, D. J., & Marshall, N. A. (2003). Developing identities in music education. Music Education Research, 5(3), 263–273.

Hargreaves, D. J., & North, A. C. (1997). The Development of Musical Preference across the Life Span. https://eric-ed-gov.offcampus.lib.washington.edu/?id=ED424141

Hargreaves, D. J., North, A. C., & Tarrant, M. (2006). Musical preference and taste in childhood and adolescence. Oxford University Press.

Hargreaves, D., & Lamont, A. (2017). The psychology of musical development. Cambridge University Press.

Hartley, J., Hearn, G. N., Tacchi, J. A., & Foth, M. (2003). The youth Internet Radio Network: A research project to connect youth across Queensland through music, creativity and ICT. In S. Marshall & W. Taylor (Eds.), Refereed papers from the 5th International Conference on Information Technology in Regional Areas (ITiRA) (pp. 335–342). Central Queensland University Press. http://hdl.cqu.edu.au/10018/29695

Harvey, A. R. (2020). Links Between the Neurobiology of Oxytocin and Human Musicality. Frontiers in Human Neuroscience, 14. https://www.frontiersin.org/articles/10.3389/fnhum.2020.00350

Holden, H., & Button, S. (2006). The teaching of music in the primary school by the non-music specialist. British Journal of Music Education, 23(1), 23–38. https://doi.org/10.1017/S0265051705006728

Houlahan, M., & Tacka, P. (2015). Kodály today: A cognitive approach to elementary music education. Oxford University Press. https://books.google.com/books?hl=en&lr=&id=jYElCgAAQBAJ&oi=fnd&pg=PP1&dq=music+listening+kodaly&ots=fKA0Gy-xPC&sig=XYd89TwTvIgjUe9PDkri9F6_vvU

Howe, S. W. (2003). The NBC Music Appreciation Hour: Radio Broadcasts of Walter Damrosch, 1928–1942. Journal of Research in Music Education, 51(1), 64–77. https://doi.org/10.2307/3345649

Ilari, B. (2016). Music in the early years: Pathways into the social world. Research Studies in Music Education, 38(1), 23-39.

Iusca, D. G. (2013). Intercultural dimensions of music education. Review of Artistic Education, 5/6, 122.

Jansson, J., & Hracs, B. J. (2018). Conceptualizing curation in the age of abundance: The case of recorded music. Environment and Planning A: Economy and Space, 50(8), 1602–1625. https://doi.org/10.1177/0308518X18777497

Jeanneret, N., & DeGraffenreid, G. M. (2012). Music education in the generalist classroom. The Oxford.

Johnson, D. (2013). Creating meaningful music listening experiences with active music making. Musicworks: Journal of the Australian Council of Orff Schulwerk, 18, 49–56.

Jones, E. (2012). The Emergence of Emergent Curriculum. YC Young Children /, 67(2). https://doi.org/info:doi/

Juntunen, M.-L. (2016). The Dalcroze Approach. Teaching General Music: Approaches, Issues, and Viewpoints, 141–168.

Keeler, A. (2016). Defining a Medium: The Educational Aspirations for Early Radio. Journal of Radio & Audio Media, 23(2), 278–287. https://doi.org/10.1080/19376529.2016.1223974

Kertz-Welzel, A. (2018). Globalizing music education: A framework. Indiana University Press.

KEXP's 50th Anniversary - Independent together. KEXP. (n.d.-b). https://www.kexp.org/50/

Kiley, B. (2022, May 3). The many lives of KEXP, now a more diverse, online global phenomenon. The Seattle Times. https://www.seattletimes.com/pacific-nw-magazine/the-many-lives-of-kexp-now-a-more-diverse-online-global-phenomenon/

Kivijärvi, S., & Väkevä, L. (2020). Considering Equity in Applying Western Standard Music Notation from a Social Justice Standpoint: Against the Notation Argument. Action, Criticism, and Theory for Music Education, 19(1), 153–173. https://doi.org/10.22176/act19.1.153

Kong, S., & Wong, W. (2022). Stressors and psychological distress: Music listening as a coping strategy for pre-service kindergarten teachers. International Journal of Music Education, 40(2), 260–275. https://doi.org/10.1177/02557614211050986

Kratus, J. (2017). Music listening is creative. Music Educators Journal, 103(3), 46-51.

Krause, A. E., & North, A. C. (2014). Contextualized music listening: Playlists and the Mehrabian and Russell model. Psychology of Well-Being, 4, 1-16.

Krause, A. E., & North, A. C. (2016). Music listening in everyday life: Devices, selection methods, and digital technology. *Psychology of Music, 44*(1), 129–147. https://doi.org/10.1177/0305735614559065

Krause, A. E., North, A. C., & Davidson, J. W. (2019). Using self-determination theory to examine musical participation and well-being. Frontiers in Psychology, 10, 439908.

Kuntsche, E., Le Mével, L., & Berson, I. (2016). Development of the four-dimensional Motives for Listening to Music Questionnaire (MLMQ) and associations with health and social issues among adolescents. Psychology of Music, 44(2), 219–233. https://doi.org/10.1177/0305735614562635

Lamont, A. (2017). Music alone and with others: Listening, sharing, and celebrating. In The Routledge companion to music cognition (pp. 325–335). Routledge.

Lamont, A. (2021a). Listening to, evaluating and appraising music. In Routledge International Handbook of Music Psychology in Education and the Community (pp. 116–130). Routledge.

Lamont, A. (2021b). Music and Flourishing 24. The Oxford Handbook of the Positive Humanities, 319.

LeBlanc, A., Sims, W. L., Siivola, C., & Obert, M. (1996). Music style preferences of different age listeners. Journal of Research in Music Education, 44(1), 49-59.

Lee, K., Nam, R., & Olivo, D. (2022). Exploring the Emotional Perception of High School Students When Utilizing Music as a Coping Mechanism during the COVID-19 Pandemic. Journal of Student Research, 11(3). https://doi.org/10.47611/jsrhs.v11i3.2901

Lehmann, A. C., Sloboda, J. A., & Woody, R. H. (2007). Psychology for musicians: Understanding and acquiring the skills. Oxford University Press.

https://books.google.com/books?hl=en&lr=&id=wI4RDAAAQBAJ&oi=fnd&pg=PR9&dq=psychology+for+musicians+listening&ots=x9HyRnWN8f&sig=Vsz9JYolo8B8nS18TbbFIpAmOzU

Linnemann, A., Ditzen, B., Strahler, J., Doerr, J. M., & Nater, U. M. (2015). Music listening as a means of stress reduction in daily life. Psychoneuroendocrinology, 60, 82-90.

Lohmeyer, D., & Ojemann, R. H. (1940). The Effectiveness of Selected Methods of Radio Education at the School Level. The Journal of Experimental Education, 9(2), 115–120.

Luthra, R. (2009). JOURNALISM AND MASS COMMUNICATION -Volume I. EOLSS Publications.

MacDonald, R., & Saarikallio, S. (2022). Musical identities in action: Embodied, situated, and dynamic. Musicae Scientiae, 26(4), 729-745.

Madamombe, I. (2005). Community radio: A voice for the poor. Africa Renewal, 19(2), 4–5. https://doi.org/10.18356/614eab52-en

McFerran, K. (2019). Handbook of Music, Adolescents, and Wellbeing. Oxford University Press.

McFerran, K., Derrington, P., & Saarikallio, S. (2019). Handbook of Music, Adolescents, and Wellbeing. United Kingdom: OUP Oxford.

Mantie, R. (2022). Music, leisure, education: Historical and philosophical perspectives. Oxford University Press.

Meals, C. D. (2023). Composer Diversity in State Music Lists: An Exploratory Analysis. Journal of Research in Music Education, 00224294231218272. https://doi.org/10.1177/00224294231218272

Miksza, P., Parkes, K., Russell, J. A., & Bauer, W. (2022). The well-being of music educators during the pandemic Spring of 2020. Psychology of Music, 50(4), 1152–1168. https://doi.org/10.1177/03057356211042086

Mills, J., Bonner, A., & Francis, K. (2006). Adopting a constructivist approach to grounded theory: Implications for research design. International Journal of Nursing Practice, 12(1), 8–13. https://doi.org/10.1111/j.1440-172X.2006.00543.x

Miralis, Y. (2014). World Musics and Cultural Diversity in the Music Classroom and the Community. The Oxford Handbook of Qualitative Research in American Music Education. https://doi.org/10.1093/oxfordhb/9780199844272.013.029

Miranda, D., & Claes, M. (2009). Music listening, coping, peer affiliation and depression in adolescence. Psychology of Music, 37(2), 215–233. https://doi.org/10.1177/0305735608097245

Mitchell, L. A., MacDonald, R. A., Knussen, C., & Serpell, M. G. (2007). A survey investigation of the effects of music listening on chronic pain. Psychology of music, 35(1), 37-57.

Morinville, A., Miranda, D., & Gaudreau, P. (2013). Music listening motivation is associated with global happiness in Canadian late adolescents. Psychology of Aesthetics, Creativity, and the Arts, 7(4), 384–390. https://doi.org/10.1037/a0034495

Myers, D. E. (2007). Freeing Music Education from Schooling: Toward a Lifespan Perspective on Music Learning and Teaching. International Journal of Community Music, 1(1), 49–61. https://doi.org/10.1386/ijcm.1.1.49_1

Narita, F. M., & Green, L. (2015). Informal learning as a catalyst for social justice in music education. The Oxford handbook of social justice in music education, 302-317.

Osberg, D., & Biesta, G. (2008). The emergent curriculum: navigating a complex course between unguided learning and planned enculturation. Journal of Curriculum Studies, 40(3), 313–328. https://doi.org/10.1080/00220270701610746

Pethel, R. (2019). The state of guitar education in the United States. Journal of Popular Music Education, 3(2), 245-260.

Podkalicka, A. (2009). Young listening: An ethnography of YouthWorx Media's radio project. Continuum, 23(4), 561–572. https://doi.org/10.1080/10304310903015704

Podkalicka, A., & Thomas, J. (2010). The Skilled Social Voice. International Communication Gazette, 72(4–5), 395–406. https://doi.org/10.1177/1748048510362710

Potter, C., & Naidoo, G. (2006). Using Interactive Radio to Enhance Classroom Learning and Reach Schools, Classrooms, Teachers, and Learners. Distance Education, 27(1), 63–86. https://doi.org/10.1080/01587910600653280

Potter, C., & Naidoo, G. (2009). Evaluating large-scale interactive radio programmes. Distance Education, 30(1), 117–141. https://doi.org/10.1080/01587910902845980

Powell, B. (2021). Equity in Music Education: Addressing Equity and Social Justice in Music Education through Modern Band: Opportunities and Challenges. Music Educators Journal, 108(2), 57–59.

Powell, B., Smith, G. D., West, C., & Kratus, J. (2019). Popular music education: A call to action. Music Educators Journal, 106(1), 21-24.

Reybrouck, M. (2020). Musical sense-making: Enaction, experience, and computation. Routledge.

Reybrouck, M., Podlipniak, P., & Welch, D. (2022). Music Listening and Homeostatic Regulation: Surviving and Flourishing in a Sonic World. International Journal of

Environmental Research and Public Health, 19(1), Article 1. https://doi.org/10.3390/ijerph19010278

Reybrouck, M., Podlipniak, P., & Welch, D. (2020). Music listening as coping behavior: From reactive response to sense-making. *Behavioral Sciences*, *10*(7), 119.

Rinsema, R. M. (2018). De-sacralizing the European: Music appreciation (then) and music listening (now). Music Education Research, 20(4), 480–489. https://doi.org/10.1080/14613808.2018.1433146

Rosenberg, N., Greenberg, D. M., & Lamb, M. E. (2021). Musical Engagement is Linked to Posttraumatic Resilience: The Role of Gender, Personality, and Music Listening Styles After Childhood Trauma. Music & Science, 4, 2059204321993731. https://doi.org/10.1177/2059204321993731

Russell-Bowie, D. (2003). A Salad Bar or a Sandwich Approach to Teaching Music?: Integrating Music Education with Other Subjects. Conference Proceedings: Over the Top; the Impact of Cultural Learning in Our Own and Neighbouring Communities in the Evolution of Australian Music Education, 111.

Russell-Bowie, D. (2009). What me? Teach music to my primary class? Challenges to teaching music in primary schools in five countries. Music Education Research, 11(1), 23–36. https://doi.org/10.1080/14613800802699549

Ruthsatz, J., Detterman, D., Griscom, W. S., & Cirullo, B. A. (2008). Becoming an expert in the musical domain: It takes more than just practice. Intelligence, 36(4), 330–338. https://doi.org/10.1016/j.intell.2007.08.003

Saldaña, J. (2009). The coding manual for qualitative researchers (pp. xi, 223). Sage Publications Ltd.

Schäfer, K., & Eerola, T. (2020). How listening to music and engagement with other media provide a sense of belonging: An exploratory study of social surrogacy. Psychology of Music, 48(2), 232–251. https://doi.org/10.1177/0305735618795036

Schäfer, K., Saarikallio, S., & Eerola, T. (2020). Music may reduce loneliness and act as social surrogate for a friend: evidence from an experimental listening study. Music & Science, 3, 2059204320935709.

Schäfer, T., & Sedlmeier, P. (2009). From the functions of music to music preference. Psychology of Music, 37(3), 279–300. https://doi.org/10.1177/0305735608097247

Schurig, M., Busch, V., & Strauß, J. (2012, July). Effects of structural and personal variables on children's development of music preference. In Proceedings of the 12th International Conference on Music Perception and Cognition (ICMPC) and 8th Triennial Conference of the European Society for the Cognitive Sciences of Music (ESCOM), (1992) (pp. 896-902).

Seligman, M. E. P. (2011). Flourish: A visionary new understanding of happiness and well-being (pp. xii, 349). Free Press.

Sheehy, D. (2016). Mexican Mariachi Music. The Music of Multicultural America: Performance, Identity, and Community in the United States, 137.

Shifflett, D. R. (2013). Radio Broadcasting and Schools for the Blind: Existing Programs and Fledgling Student-run Station at the Arizona State Schools for the Deaf and the Blind. Journal of Visual Impairment & Blindness, 107(2), 152–156. https://doi.org/10.1177/0145482X1310700209

Shuler, S. C. (2021). A critical examination of the contributions of Edwin Gordon's music learning theory to the music education profession. Visions of Research in Music Education, 16(2), 7.

Silverman, M. (2015). 9 Listening-for Social Justice. Giving Voice to Democracy in Music Education: Diversity and Social Justice in the Classroom, 2, 157.

Sloboda, J. A., O'Neill, S. A., & Ivaldi, A. (2001). Functions of Music in Everyday Life: An Exploratory Study Using the Experience Sampling Method. Musicae Scientiae, 5(1), 9–32. https://doi.org/10.1177/102986490100500102

Small, C. (1998). Musicking: The meanings of performing and listening. Wesleyan University Press.

Soto, A. C. (2018). Mariachi and Western Art Music in the Preparation of Future Teachers: Nurturing the Bimusical Complexities of Mexican-American Students. Texas Music Education Research, 32, 57.

Spruce, G. (2015). Music education, social justice, and the "student voice": Addressing student alienation through a dialogical conception of music education. Squires, C. R. (2000). Black Talk Radio: Defining Community Needs and Identity. Harvard International Journal of Press/Politics, 5(2), 73–95. https://doi.org/10.1177/1081180X00005002006

Swanwick, K. (2012). Understanding Music as the Philosophical Focus of Music Education. In The Oxford Handbook of Philosophy in Music Education.

Tarrant, M., North, A. C., & Hargreaves, D. J. (2000). English and American Adolescents' Reasons for Listening to Music. Psychology of Music, 28(2), 166–173. https://doi.org/10.1177/0305735600282005

Ter Bogt, T. F. M., Mulder, J., Raaijmakers, Q. A. W., & Nic Gabhainn, S. (2011). Moved by music: A typology of music listeners. Psychology of Music, 39(2), 147–163. https://doi.org/10.1177/0305735610370223

Tervaniemi, M., Makkonen, T., & Nie, P. (2021). Psychological and Physiological Signatures of Music Listening in Different Listening Environments—An Exploratory Study. Brain sciences, 11(5), 593.

Theodosiadou, S. (2018). From DJ talk to music journalism. Social Semiotics, 29, 1–14. https://doi.org/10.1080/10350330.2018.1425319

Tobias, E. S. (2015). From Musical Detectives to DJs: Expanding Aural Skills and Analysis Through Engaging Popular Music and Culture. General Music Today, 28(3), 23–27. https://doi.org/10.1177/1048371314558293

Todorova, M. S. 1. (2015). Dusty But Mighty: Using Radio in the Critical Media Literacy Classroom. Journal of Media Literacy Education, 6(3), 46–56.

Tweed, A., & Charmaz, K. (2011). Grounded Theory Methods for Mental Health Practitioners. In D. Harper & A. R. Thompson (Eds.), Qualitative Research Methods in Mental Health and Psychotherapy (1st ed., pp. 131–146). Wiley. https://doi.org/10.1002/9781119973249.ch10

Van Goethem, A., & Sloboda, J. (2011). The functions of music for affect regulation. Musicae scientiae, 15(2), 208-228.

Vargas, L. C. 1, & Erba, J. (2017). Cultural Competence Development, Critical Service Learning, and Latino/a Youth Empowerment: A Qualitative Case Study. Journal of Latinos & Education, 16(3), 203–216. https://doi.org/10.1080/15348431.2016.1229614

Vidas, D., Larwood, J. L., Nelson, N. L., & Dingle, G. A. (2021a). Music Listening as a Strategy for Managing COVID-19 Stress in First-Year University Students. Frontiers in Psychology, 12. https://www.frontiersin.org/articles/10.3389/fpsyg.2021.647065

Virtala, P. (2015). The neural basis of Western music chord categorisations effects of development and music expertise. https://helda.helsinki.fi/handle/10138/144476

Welch, G. F., Biasutti, M., MacRitchie, J., McPherson, G. E., & Himonides, E. (2020). Editorial: The Impact of Music on Human Development and Well-Being. Frontiers in Psychology, 11. https://www.frontiersin.org/articles/10.3389/fpsyg.2020.01246

Williams, K. (2008). Steel Bands in American Schools: What They Are, What They Do, and Why They're Growing!: Steel drum ensembles promote multicultural music education and attract a wide range of students. Music Educators Journal, 94(4), 52–57. https://doi.org/10.1177/00274321080940040107

Zehren, M., Alunno, M., & Bientinesi, P. (2022). Automatic Detection of Cue Points for the Emulation of DJ Mixing. Computer Music Journal, 46(3), 67–82. https://doi.org/10.1162/comj_a_00652

Ziv, N. (2018). Musical flavor: The effect of background music and presentation order on taste. European Journal of Marketing, 52(7/8), 1485–1504.

Appendix A: Interview Questions

- Tell me about yourself
    - *In order to develop a rapport and see what they consider important in a basic understanding of themselves*
        - Where are they from, how long have they lived in this country/state/city
- What is a musician?
    - *To understand their definition of this as a music expert*
- Are you a musician
    - *This is to understand their experience/history in playing music which informs the questions about how they define themselves as a music expert, whether it has any relation to the choices they make as a DJ, and if it had an impact on their music knowledge development*
    - *If they say no but say they play music then ask them what the difference is*
        - What do they play, for how long, when and why did they start, what kind of music have they played and which do they enjoy most, how/through what platforms do they study and learn?
    - If they say yes, what do they play, for how long, when and why did they start, what kind of music have they played, and which do they enjoy most?
    - If they say no
        - Did they used to?
        - Ask them if there was ever a reason they didn't
- Can you tell me about your background in music?

    - *This is to learn about how "music" fits into their life before asking how it became a resource for being a DJ*
    - If they ask for more specific questions start with:
        - Do members of your family play any instruments and/or sing? What about close friends?
        - What music education did you experience growing up?
            - What do you remember most about your music education?
            - What would you have liked more of?
            - What was positive about your music education experiences?
            - What was not positive about your music education experiences?
- What kind of a relationship have you had/do you have now with music listening?
    - *This is to understand the role of music listening in their life, and potentially juxtapose it with their music education and/or instrumental learning*
    - When do you first remember listening to music on your own?
    - What did you like to listen to growing up?
    - What was playing in your community or environment growing up?
    - What do you like to listen to now?
    - What do you think or feel when you listen to music from when you were growing up?
- How do you learn about new music?
    - *This is to understand how they develop further expertise in music listening*
    - Has the way you find new music changed over time?

        - What are other ways you learned about music growing up?
            - As a child?
            - In high school?
            - College age?
    - Has becoming a DJ affect the way you look for or learn about new music?
- Why did you become a DJ?
- How long have you worked for KEXP?
- Why did you want to work at KEXP?
- What do you do when you're not working at KEXP?
- Tell me about your show
    - Ask follow up questions regarding their background and familiarity with that genre/musical styles
    - Can you talk me through some of your decision-making processes when you select music to broadcast?
        - Ask about the role of the listener in their choices, how much of the listeners' interests matter and why
    - What kind of information do you usually include with music that you broadcast?
        - How do you obtain that information?
        - What kind of information do you think is important for a listener to know about a song or genre? Why?
    - What relationship do you have with your listeners?

- Do you think it's similar or different from other radio shows? Why?

- If you could do more of, less of, or something different from what you currently do with your show, what would that be?
- What do you like most about conducting your radio show?
- (*If they mentioned being a musician earlier in the conversation)* Does being an instrumental musician the music they choose to program for their show? What about other information they provide about the musicians, music, and musical context

- How have you developed the contextual information about the artists, their genre, where they come from, social or political background information, etc?
  - Do you actively look for background information to include in your broadcasting?
    - If so, why?
  - *Does travel come up in the conversation? What about other influential people in their life?*
- Do you think there is an educational element to what you do as a DJ? Why?
- Would you have any recommendations for teachers who want to include the style of music you cover in their classrooms?