NORTHWESTERN UNIVERSITY

Music Education for Students with Disabilities

A DISSERTATION

SUBMITTED TO THE GRADUATE SCHOOL
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

for the degree

DOCTOR OF PHILOSOPHY

Field of Music Education

by

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Abstract

This multi-study dissertation explores experiences of music education for students with disabilities with a particular focus on students with autism spectrum disorder (ASD). It is comprised of three distinct papers including two qualitative studies and a literature review. In the first study, I collaborated with Dr. Sarah J. Bartolome to examine the culture of a university undergraduate volunteer organization offering music instruction for individuals with disabilities. In my second study, I examined stakeholder perspectives of music education for two students with ASD in an inclusion context. The literature review explored general education research on best practices for teaching students with ASD, offering recommendations for future lines of research in music education. The findings of these studies illuminate issues of access and barriers to music learning for students with disabilities. Further, they offer evidence of practice and its benefits for these students and suggest a way forward regarding music education research for this population.

Paper 1: Academy of Music and Arts for Special Education: An Ethnography of an Individual Music Instruction Program for Students with Disabilities

Co-authored with Sarah J. Bartolome, PhD

This three-year ethnography explored the culture of Northwestern University's Academy of Music and Arts for Special Education (AMASE), a university undergraduate volunteer organization offering music instruction for individuals with disabilities. We examined the organization and its impact on students, parents, and volunteers through the lens of the social relational model of disability (Reindal, 2008). Findings clustered around three pillars of organizational values: *Ability, Community*, and *Service*. The organization's philosophy of ability

cultivated a community that acknowledged the impairments of the students while actively seeking ways to breakdown the socially imposed barriers to musical learning that were disabling to them. The program filled a need where access to music education had previously been limited or denied. Undergraduate volunteers' experiences raised their awareness of inequity for people with disabilities and motivated them to consider ways to serve this community in their future careers. Findings illustrate the potential impact of a social relational model on music education philosophy and practice, suggesting a need for music educators to challenge implicit beliefs about students' capabilities and actively inquire into the ways in which music education contexts may be inherently disabling.

Paper 2: "It Needs to Be There, Always and Forever": Stakeholder Perspectives of the Role of Music Education for Students with Autism Spectrum Disorder in an Inclusive Context

The purpose of this multiple-case study was to explore stakeholders' perspectives of the purpose and benefits of education in music for students with ASD and what factors contributed to music education opportunity for this population. Three themes emerged from the data: *The Not So A-Typical Benefits, A Focus on Strengths,* and *A Culture of Inclusivity.* Factors related to the educators and school community had significant impact on these students' experiences and are further explored through the lens of an Ethic of Hospitality (Derrida & Dufourmantelle, 2000; Ruitenberg, 2001). Elucidating the beliefs of stakeholders (including music educators, the special education team, administration, and parents) regarding music education for students with ASD in an inclusion setting may offer insights into best practices and ways music teacher education programs and inservice professional development could better prepare teachers for their work with this population.

Paper 3: Evidence of Best Practice in the Education of Students with Autism Spectrum Disorder: Considering a Path Forward in Music Education Research

While a significant body of literature is available offering best practices for teaching music to students with autism spectrum disorder (ASD), there is a lack of supporting empirical research. The purpose of this literature review was to examine empirical research conducted between 2013-2019 that studied best practices for teaching students with ASD in general education settings and explore how it could inform future research in the field of music education. I reviewed 47 publications from general education that provided empirical support for best practices for teaching students with ASD. Findings are organized in four sections: *Teacher Directed Approaches to Instruction, Intervention Tools, Peer-Mediated Instruction,* and *The Autistic Voice.* Examining this literature provides insights into unique research methods pertaining to data collection with students with ASD and future lines of research related to instruction and support for students with ASD in music contexts.

Acknowledgements

It seems that of all the thousands of words that are in this document, these have been the most difficult to write. Bringing this chapter to a close in the midst of a global pandemic has made me acutely aware of the beautiful opportunities I have been given to do this work and I am immensely grateful to those who helped me along the way. I have learned so much on this journey, but the path was filled with an enormous amount of loss and grief. It seems that using just a few words to say thank you feels small compared to the magnitude of support I was given by so many. To each person who walked this journey with me, thank you. I know these two little words can never truly repay the enormous gifts you each gave me, but they come from the bottom of my heart.

Rich, you once told me "Teaching music is not a job, it's a way of life." As I look back on the winding path that brought me to writing this dissertation, those words stand like the marker at the starting line. They were wise words from a dear mentor and friend. I think you would have been proud of this work. In so many ways, I am indebted to you. Thank you for teaching me a standard of excellence that I continue to strive for with every song, with every student, and in writing each one of these words.

Brady, Zion, Diana, Tyler, Aidan, and Kyla, each of you, and countless other students, taught me more than I could have ever taught you. I do this work because of each of you.

Mama, Daddy, and Sarah, thank you for believing in me, for being my sounding boards, cheerleaders, and for reminding me I can do this one breath at a time. Kelly, Chris, Clare, and William; Blake and Blaine, Matt, Nick, and Drew; you each had a role in helping me make it here. Thank you for welcoming me into your lives and for being a part of my chosen family. I

am so fortunate to have the incredible, loving support of a family I was born into and one that I choose. I love you all to the moon.

Megan, my brilliant friend, you and I dreamed some big dreams. Thank you for reminding me that I am Strong Enough, and I will make it through to the other side. Krissie, thank you for being my long-distance writing partner, for the Skype chats, and for knowing just when I needed a little bit of good energy. Thank you to Brian and Jake for showing me the ropes, to Erica for being my Center sister and for all your encouragement. Especially, thank you to Casey, Adam, Patrick, and Diego-we walked a journey together and I am so very grateful to have been there with each of you.

Patrick, thank you for your patience, for your calm in the storm, for reading the worst of the drafts and finding the good parts. Mostly, thank you for being my person. You have been my greatest champion and I am so lucky to have your love and support. We make a great team and I look forward to supporting you as you finish your journey next.

Thank you to my committee members, Dr. Steven Morrison and Dr. Maud Hickey. Steve, I am grateful to you for willingly stepping into this role and supporting my work. Maud, you have always been an inspiration to me, and I am so thankful to you for seeing me through to the end. Most especially, thank you to my advisor, Dr. Sarah Bartolome. Sarah, thank you for taking a chance on a brand-new doc student and suggesting we collaborate on “a little tiny case study.” In the three years we worked on that study, I learned how to be a researcher. More than that, in working with you these last five years I learned how to use my voice, how to hold my own, and how to be a colleague in higher education. I look forward to sharing these lessons, and the thousands of others you taught me, with my students in the future. I am so very grateful we got

to be freshman together. Thank you for the incredible support you have given me as a teacher, a mentor, and a friend. I truly could not have done it without you.

There is one committee member left to thank, Dr. Steven Demorest. Steve, when I was considering PhD programs you told me to choose a program not because it would answer my questions but because "it will teach you how to answer the questions you don't even know you want to ask." In coming back to Northwestern, I found that and then some. I dearly wish you were here to push against my ideas and pose some tough questions. You asked some of the hardest questions, but in learning how to answer them *I* learned how to ask them. That was all part of the process, right? It was a great privilege to learn from you, to work with you, and to teach next to you. Thank you for that gift. And next time, I'll think about running a chi-square.

Dedication

For Rich and for Steve

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Introduction

"Good morning!" I sing to the bright-eyed Kindergarten students who are ushered into my music room, eager and excited to make music with the new music teacher. I can feel the nervous butterflies as I direct the class to find a seat on the circle marked on the carpet. Three adults follow the last few students into the room and I greet them with a smile, mentally noting how lucky I am to have so many adults on hand for my first class of Kindergarten. I take my seat in the circle and with a deep breath and a smile I start to sing, "Oh, Here We are Together…." And just like that, the class is finished. As the last of the students passed through my door, I thank the adults who joined me and ask, "Will you always come to music with Kindergarten?" One of the adults, Alex, looks at me a bit puzzled as he gestures towards Brady and his peers, "We'll be here with these three kids."

"Oh, that's lovely! Why?" I ask, a bit confused.

"Well, they have autism and need the support," Alex replied.

"Oh, that's lovely!" I exclaim again, not really sure what else to say. Alex prompts Brady to wave goodbye and follows him out the door. As they walk away, I wonder…

"What's autism?"

***

"We'll have one last turn!" I called out, as the students groaned with disappointment. They love to play this song game because they get to be part of the train with the teacher. When selected, the student has the chance to choose to be the engine of the train, shouting "All Aboard!" or the caboose, making the sound of the train whistle. We all start to sing, and I move to the rhythm of the song around the outside of a circle of Kindergarten students, each watching with eager

anticipation to see where I will be when the song ends. As I inch around the circle, I can tell that Brady is very excited because he thinks it could be his turn. He is barely able to contain himself when my feet stop at his spot. He leaps to stand and before I can ask "Brady, do you want to be the engine or the caboose?" He grabs my hands and exclaims, "Engine!" Cupping one hand around his mouth he shouts, "All Aboard!" and in his excitement, plays both roles as he pulls the chain of an imaginary train whistle and gives a boisterous "Toot, Toot!" before taking a big step to start the singing. I laugh and make a silly face at him for stealing my chance to make a train whistle. He joyfully leads the singing for us all while gripping my hands as we move like a train around the circle one last time.

Brady was in one of my first Kindergarten classes, and he was the first person I knew with autism. Like many music educators, when I started teaching, I did not know anything about autism or what to expect in music class for students with this diagnosis. Brady was an enthusiastic boy with low verbal communication and, as I was told later that day, an aversion to touch. I had no preconceived notion about his ability, and as shared in the second vignette, he frequently surprised us all with what he *could* do. This experience and the countless others had with students like Brady shaped an important tenet in my philosophy: teach as though they can, and often, they will. In the years since my first day of teaching, I have been in constant pursuit of an answer to that question, "what's autism?", striving toward an understanding of how best to nurture the musical abilities of students with this and other diagnoses. It was this pursuit that inspired the question that guided this research: What do we know and still need to learn about music education for students with disabilities, particularly for students with autism?

Dissertation Rationale

It is widely accepted that music instruction is beneficial for children with disabilities and much scholarly attention has been paid to increasing teacher preparedness with regards to working with this population (Bartolome, 2013, 2017; Hourigan, 2009; VanWeelden & Whipple, 2005, 2014). The Centers for Disease Control and Prevention (2018) reported that 1 in 59 children in the United States is diagnosed with autism spectrum disorder (ASD). Due to its prevalence, it is probable that most educators will have students with autism in their classrooms, making research pertaining to this population of particular interest. Researchers in psychology (Ockelford, 2013, 2016; Treffert, 2009; Treffert & Rebedew, 2015), music cognition (Heaton, 2003, 2005, 2009; Heaton, Allen, et al., 2008; Heaton et al., 1999; Heaton, Williams, et al., 2008; Taruffi et al., 2017), and music therapy (Bieleninik et al., 2017; Geretsegger et al., 2014; Sze & Yu, 2004) have provided the bulk of what is known about the intersection of music and ASD. There are many resources describing best practices for working with students with disabilities in music (i.e. Adamek & Darrow, 2018; Hammel & Hourigan, 2011) and some which are specific to students with ASD (Hammel & Hourigan, 2013). However, with a few notable exceptions (i.e. Gerrity et al., 2013), there is a paucity of empirical investigation within music education research related more broadly to musical development and special education and no identifiable research specific to ASD (Jellison & Draper, 2015).

The field of music education would benefit from a more robust body of empirical research examining best practices for teaching music to students with disabilities. In order to identify a meaningful line of research in this area, we might first explore the current state of music education for this population and answer the following questions:

1. What is currently happening in music education for students with disabilities?
2. What do stakeholders believe about the role of music education for students with disabilities?
3. How could general education research examining best practice for teaching students with ASD offer suggestions for future research in music education?

The first paper is a three-year ethnography that explored the culture of Northwestern University's Academy of Music and Arts for Special Education (AMASE), a university undergraduate volunteer organization offering music instruction for individuals with disabilities. The study was co-authored with Dr. Sarah J. Bartolome and submitted for publication in February of 2020. In this study, we examined the organization and its impact on students, parents, and volunteers through the lens of the social relational model of disability (Reindal, 2008). Findings from this present study address the research questions related to current experiences in music education for students with disabilities and stakeholder beliefs. The AMASE program filled a need where access to music education had previously been limited or denied and the stakeholders (students, parents, and volunteers) shared that they valued the musical and social benefits of this program for all participants. Findings illustrate the potential impact of a social relational model on music education philosophy and practice, suggesting a need for music educators to challenge implicit beliefs about students' capabilities and actively inquire into the ways in which music education contexts may be inherently disabling.

In the second paper, I explored the music education experiences of two first grade students with ASD, Malik and Luke, and the perspectives of key stakeholders regarding their music education. This present study directly addresses the first two research questions. It provides evidence of music teacher practice with students with ASD and illuminates the perceptions of the voices that are critical in making decisions about music education for these two boys. An understanding of the beliefs of stakeholders regarding music education for students with ASD in an inclusion setting may offer insights into best practices regarding music education for students with ASD and ways music teacher education programs and inservice professional development could better prepare teachers for their work with this population.

The final paper addresses the last research question. In this document, I reviewed empirical research conducted between 2013-2019 that examined best practices for teaching students with ASD in general education settings and explored how it could inform future research in the field of music education for this population. The legislative necessity to provide empirical evidence of best practices in education has resulted in a large body of research related to teaching approaches, classroom tools, and peer-based experiences. This review also identified educational research that incorporated the perspectives of students with ASD as critical voices in research concerning their educational experiences. Examining this literature provided insights into unique research methods for data collection with students with ASD and future lines of research related to instruction and support for this population in music contexts.

This multi-study dissertation lays the groundwork for a line of research examining the role of music education for students with ASD and other disabilities. The findings within these papers illuminate issues of access and barriers to music learning for students with disabilities.

Further, they offer evidence of practice and its benefits for these students and suggest a way forward regarding music education research for this population. My aim with these papers is to contribute empirical research regarding music education for students with disabilities and elucidate avenues for future research to support the teaching and musical learning of all students regardless of ability.

Paper 1

Academy of Music and Arts for Special Education: An Ethnography of an Individual Music Instruction Program for Students with Disabilities

It is widely accepted that music instruction is beneficial for children with disabilities. While music therapy research has identified positive outcomes for clients with disabilities (Gold et al., 2004; Sze & Yu, 2004) and there are many resources describing best practices for working with students with disabilities in music education (e.g. Adamek & Darrow, 2018; Hammel & Hourigan, 2011), empirical research regarding music education for students with disabilities remains limited (Jellison & Draper, 2015; VanWeelden & Whipple, 2005, 2014). Much of the research in the field has focused on factors tangential to music for this population, exploring the perceptions of pre-service (Bartolome, 2013, 2017; Hourigan, 2009; VanWeelden & Whipple, 2005) and in-service (Jellison & Taylor, 2007; Scott et al., 2007) music educators and typically developing peers (Cassidy & Sims, 1991; Johnson & Darrow, 1997) rather than the experiences of students with disabilities themselves.

Data from the 2018 American Community Survey, an annual survey conducted by the US Census Bureau, indicated that 5.5% of the US population ages 5-17 has a disability. The Individuals with Disabilities Education Act (IDEA; United States Department of Education, 2017) guarantees the right of students with disabilities to receive a free and appropriate public education (FAPE) and that education should be provided to the maximum extent possible in a setting with students without disabilities. Practitioner literature has suggested that the first inclusion placement for students with disabilities is often in the music classroom (Adamek & Darrow, 2018; Jellison, 2015; VanWeelden & Whipple, 2014), however it is unclear how many

of the 5.5% of school age children and youth with disabilities have access to music education in the school environment. Hourigan (2015) noted that students with disabilities may have limited access to in-school music, spurring families to seek opportunities within the community. This research study examined one such community-based music program, the Academy of Music and Arts for Special Education, (AMASE) which provides free, private instrumental music instruction to students with disabilities. This three-year ethnography examined the culture, philosophy, and stakeholder benefits of the AMASE program and sought to contribute to the limited research on music instruction for students with disabilities.

Review of Literature

A small body of research investigating the lived experiences of individuals with disabilities in music education has provided valuable insight into the perceptions of student musicians with disabilities (Burdett, 2012; Haywood, 2006; Jellison & Flowers, 1991). Interviews with 73 students with disabilities about their musical preferences, experiences, and skills demonstrated remarkable similarities between their responses and those of their typically developing peers (Jellison & Flowers, 1991). Similarly, in a case study involving two teens with hearing impairments in instrumental ensembles, Burdett (2012) noted that participation in an ensemble helped them to develop identities as musicians that were similar to their hearing peers. In contrast, Haywood (2006) shared the experiences of Deborah, a musician with physical disabilities, and the challenges she faced in gaining access to school and choir. After being denied entrance to an arts school because it did not have an elevator, an inclusive-minded conductor warmly welcomed Deborah by focusing on her contributions as a musician rather than challenges of her physical disability. The inclusion of these voices highlights the similarities

between the students with disabilities and their typically developing peers as well as some of the challenges that student musicians with disabilities may encounter.

Research has also demonstrated that inclusive community music programs may have social and musical benefits for participants with disabilities. Carpenter (2015) detailed the formation of a community chorus that included singers with and without disabilities. Participation in the choir was a source of joy for all the musicians regardless of ability and provided an opportunity for choristers to share that joy with others. Hassan (2017) explored a choir formed in response to a hate crime against a person with disabilities, revealing the ensemble as a place for empowerment and identity formation. Participation in community music ensembles appears to promote tolerance, acceptance, and a sense of social bonding, and choirs may use their platform for educational outreach and advocacy.

The *Prism Project*, a community music program with similarities to the AMASE organization presented here, offers music, theatre, and dance experiences for students with disabilities who have limited or no access to music education in school (Hourigan, 2015). It also functions as a pedagogical learning space for preservice music educators. Although benefits specific to the program have not been documented, one study of the program provided empirical evidence of strategies that support musical development for students with disabilities (Gerrity et al., 2013). Upon our arrival at Northwestern University in the fall of 2015, we were introduced to the AMASE program and recognized the value of the opportunities the program provided to both the students enrolled and the undergraduate volunteers, dual outcomes that are similar to those offered by The Prism Project. Continued examination of successful community arts organizations for people with disabilities may offer insight into ways music education might

meet the needs of students with disabilities while also illuminating issues of access to music instruction. The purpose of this ethnography (Spradley, 2016a) was to broadly explore the culture of the Academy of Music and Arts for Special Education (AMASE) program and its impact on the students, parents, and volunteers. The following questions guided the research: 1. What are the philosophy, values, and organizational structure of the AMASE program? 2. How do participants describe the impact of individual musical instruction on students with disabilities? 3. How do participants describe the broad impact of this program and its community on students, parents, and volunteers?

Theoretical Framework

Traditionally, disability has been perceived as the result of a biomedical deficit, making it an individualized problem for the person with the impairment (Shakespeare, 2018). The social model of disability (Oliver, 1983, 1996; Shakespeare & Watson, 1997), however, argues that *disability* is imposed by societal barriers for people with *impairments*. In this view, disability exists because of the social barriers that favor the "normal" body and mind. This model has done much to advance advocacy for people with impairments. However disability theorists have challenged that this model is not complete (Shakespeare & Watson, 2001). The social model does not account for the pain and fatigue that may be associated with impairment. Nor does it acknowledge that some limitations, such as climbing a mountain for a person with lower limb impairments, inherently exist in the environment.

Reindal (2008) argued for a social relational model of disability that acknowledges the oppression recognized by the social model of disability while also acknowledging the disadvantages that may exist due to impairment. Reindal explained,

> A reduced function is a necessary condition that has both personal and social implications for the individual. However, whether the reduced function and its effects become a disability is dependent on restrictions within various macro levels in society that are imposed *on top of* the social effect that the reduced function implies for that individual (p. 144).

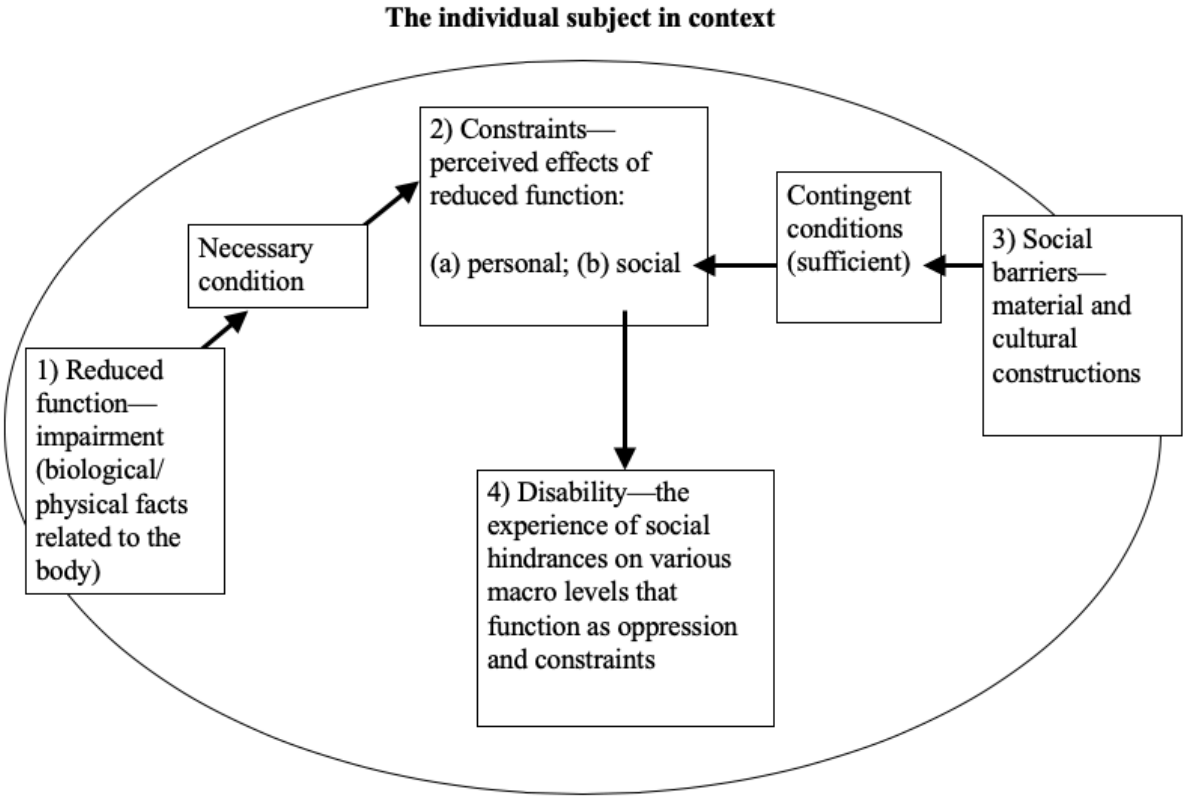
In Reindal's model (see Figure 1-1), impairment, such as a diagnosis of autism spectrum disorder (ASD), is a necessary condition for a student to experience constraints perceived as personal disability. It also may not. In those cases, how social barriers relate to the impairment may be the disabling condition. For example, if a person with ASD enters a theatrical performance that is not sensory friendly, the context of the theater may represent a disabling social barrier. The environmental stimuli paired with the behavioral expectations of the theater may preclude participation for a person with ASD. If, however, a theatre intentionally avoids overstimulating elements and explicitly adopts a policy that establishes a welcoming space for all theatre-goers without the expectations of the traditional rules of etiquette, they are removing the environmental and social barriers that might limit participation. In this instance, the individuals with autism can engage as audience members without the social barriers that may be disabling. These social barriers are considered contingent conditions and Reindal noted that it is these conditions into which we can inquire and seek to change.

We adopted this theoretical frame in the early stages of data analysis as the alignment of the naturally emerging values of the organization with the tenets of the model became apparent. In applying this frame, we examined the interplay between impairment and the social barriers experienced by the students of AMASE, while also highlighting how the volunteers sought to

combat the ways in which society disables them.

Figure 1-1

A Social Relational Model: The interplay between reduced function and disability



From "A Social Relational Model of Disability: A Theoretical Framework for Special Needs Education?," by Reindal, S. M., 2008, *European Journal of Special Needs Education*, *23*(2), p. 143 (https://doi.org/10.1080/08856250801947812). Copyright 2008 by Taylor and Francis.

Site and Context

Northwestern University's the Academy of Music and Arts for Special Education (AMASE) program is an undergraduate-run organization that provides free, weekly music lessons to individuals with disabilities. The program, started in 2010 by an undergraduate, grew

to comprise 17 student musicians (ages 8-34) from 14 families, 31 undergraduate volunteers, and a 9-member Executive Board made up of undergraduates elected to these roles[1]. AMASE volunteers represent many different majors, including Music Education, Music Performance, Music Cognition, Neuroscience, Biology, Economics, Engineering, and Psychology (See Appendix A-Supplemental Table 1). At the time of the study, the students enrolled in the program disclosed a variety of disabilities including autism spectrum disorder (ASD), attention deficit disorder (ADD), learning disabilities, physical disabilities, and other neuroatypicalities. The families that participate in AMASE come from the local Evanston community and the Chicago area. The organization's stated mission is "to enrich the lives of students with special needs through weekly music and art lessons and also promote greater awareness about neurodiversity and language inclusivity" (http://nuamase.weebly.com).

Families of students with disabilities most often found the AMASE program through the word of mouth recruiting of other participating families or through the organization's website. Upon enrollment, a member of the Executive Committee meets with the family to learn about the new musician and identify learning approaches to help the student succeed. Each student selects from a number of musical instruments including piano, violin, guitar, cello, harp, percussion, or boomwhackers, allowing student musicians with varying levels of cognitive and physical ability to engage with an instrument best suited to their needs. The enrollment of students is limited by the amount of classroom space available for lessons on a Saturday morning and a waitlist is maintained. On Saturday mornings, students receive a 30-minute private music lesson (at either

[1] For the sake of clarity, the term *students* will be used when discussing the student musicians who participate in AMASE and the term *volunteers* will be used to denote the undergraduate volunteers who run the program. All participants are represented by pseudonyms. A full list of participants is included in Appendix A.

9:40 or 10:40) and participate in an all-community Ensemble period before or after their lesson. During Ensemble (10:10-10:40), all students and volunteers join together to sing songs, engage in music activities, and do arts and crafts projects related to a quarterly theme like Under the Sea, Musicals, or Space.

The AMASE program is one of many volunteer organizations in which undergraduates at Northwestern University may participate. The primary recruiting of volunteers occurs during a University-wide Activities Fair early in the fall quarter, where student organizations set up information booths to advertise opportunities for engagement on campus. Additional recruiting is done by individual volunteers who recruit like-minded peers. There are no prerequisites for volunteers, however, like student enrollment, participation is limited by space and a waitlist is maintained. At the start of each term, volunteers participate in a training session to prepare them for teaching. During these training sessions, Executive Committee members and veteran volunteers share the organizational philosophy, community expectations, and teaching strategies.

Two volunteers are assigned to each student, allowing one volunteer to focus on music instruction while the other focuses more on the behavioral needs of the student. A new volunteer is always paired with a more experienced volunteer allowing for peer-mentorship and for the expressed philosophies and values of the organization to be transmitted organically from one generation of volunteers to the next. Volunteers adapt their approach to accommodate the needs and interests of each student, selecting or arranging music that their student enjoys, teaching music literacy when appropriate, helping students learn instrumental technique, and guiding them to prepare a piece for performance. During Ensemble time, volunteers stay with their assigned students, assisting them with activities and encouraging social interaction. Each week

the volunteers also participate in a closing debrief during which they share highlights from the lessons and discuss suggestions for working through student challenges. These debriefs provide regular opportunities for the institutional culture of the AMASE organization to be actively expressed and reinforced among the volunteers.

Each quarter culminates in an AMASE Recital, where students perform music for their family and friends. Some perform a solo on their instrument, while more experienced students collaborate to perform a duet or trio with their volunteer teachers or another AMASE student. The volunteers also share performances as part of the recital. The performance hall is decorated with the arts and crafts projects created by the students over the course of the term and the volunteers and students all perform a finale, singing a song that relates to the quarter's theme. Throughout the year, the Executive Board also organizes fundraisers and other community events to raise money for the program, build community among volunteers and families, and raise awareness regarding individuals with disabilities.

Genesis of the Study

When Sarah joined the music education faculty at Northwestern University in 2015, AMASE was seeking a new academic advisor. Given Sarah's experience with music education for students with disabilities, she was invited to step into this role. She met with AMASE leadership and made several informal site visits to familiarize herself with the organization and meet the undergraduate volunteers. She quickly became curious about the ways the program was impacting both the students and the volunteers. She approached the Executive Board about the possibility of conducting a long-term study of the program and they enthusiastically agreed. Amanda also joined the department in the Fall of 2015, enrolling in the PhD program. Given, her

background as a general music educator who worked with students with disabilities, Sarah invited Amanda to collaborate on the nascent project. We began visiting the site to build rapport with participants and complete initial, informal observations to inform the design of the study. We entered the research process with only a desire to "describe the cultural terrain" of the AMASE organization (Spradley, 2016b, p. 26), prompting us to adopt an ethnographic approach. Once the project was granted approval by the Institutional Review Board, we began formally collecting data.

Method

The data for this report were derived from a three-year ethnography (Spradley, 2016a) of the AMASE organization undertaken from October 2015 through June 2018. Over three years, we attended diligently to "what people do, what people know, and the things people make and use," pursuing "the meaning of actions and events to the people we [sought] to understand" (Spradley, 2016a, p. 5). We immersed ourselves in the culture[2] of AMASE, gathering data from observations, interviews, and material culture to piece together a "cultural description" (Spradley, 2016b, p.13) of the organization. For an overview of the data collection schedule, see Figure 1-2.

[2] For the purposes of this study, culture was defined as "the set of shared attitudes, values, goals, and practices that characterizes an institution or organization" (http://www.merriam-webster.com/dictionary/culture).

Figure 1-2

Data Collection Overview

<table>
<tr><th></th><th>Observations
(126 hours)</th><th>Interview Phase I
Volunteers (n=31)</th><th>Interview Phase II
Parents (n=11)
Students (n=8)</th></tr>
<tr><td rowspan="3">Year 1
(Oct. 2015 –
June 2016)</td><td rowspan="3">47 hours</td><td></td><td></td></tr>
<tr><td></td><td></td></tr>
<tr><td>Spring 2016
Volunteers incl. 2015-2016 Executive Committee Members</td><td></td></tr>
<tr><td rowspan="3">Year 2
(Sept. 2016 –
June 2017)</td><td rowspan="3">59 hours</td><td>Fall 2016
Volunteers incl. 2016-2017 Executive Committee Members</td><td></td></tr>
<tr><td>Winter 2017
Volunteers</td><td></td></tr>
<tr><td></td><td>Spring 2017
Parents</td></tr>
<tr><td rowspan="3">Year 3
(Sept. 2017 –
June 2018)</td><td rowspan="3">20 hours</td><td></td><td></td></tr>
<tr><td></td><td>Winter 2018
Parents and Students</td></tr>
<tr><td></td><td>Spring 2018
Parents and Students</td></tr>
</table>

We began attending weekly Saturday programming in tandem, observing lessons, ensemble time, and volunteer debrief sessions together to gain an understanding of the structure of the organization and develop rapport with members (Spradley, 2016b). Over time, we began observing in separate locations and extended our observations to volunteer trainings, community events (e.g. Snow Ball and Sensory-Friendly Carnival[3]), and leadership meetings. We also observed all nine end-of-quarter recitals that took place during the fieldwork period. All observations were field-noted by hand (Emerson et al., 2011) and totaled more than 120 hours.

While we observed continuously across three years, we pursued interviews (Spradley, 2016a) in two phases: During Phase I (beginning spring of 2016), we spoke with all of the undergraduate volunteers (n=31) involved in AMASE. During Phase II (beginning spring of 2017), we spoke with parents (n=11) and students (n=8). Phasing the interviews in this way allowed us time to develop rapport with the students and their families before we interviewed them (See supplemental online materials for interview protocols.). Volunteer interviews (Phase I) lasting 30-90 minutes took place in the second author's office on campus and were scheduled according to the availability of the volunteers. We first interviewed the 2015-2016 Executive Board members, allowing us to learn about the history, goals, and philosophy of the program from those running the organization when we began the study. Volunteers and the 2016-2017 Executive Board members were interviewed throughout Phase I[4]. We amassed 31 interviews with undergraduate volunteers (all of those volunteering during Phase I of the study), resulting in

[3] The Snow Ball is social dance hosted by AMASE volunteers each winter for students and their families. The Sensory-Friendly Carnival is held each spring and includes carnival games and activities created by volunteers.
[4] All of the 2017-2018 Executive Board Members were former volunteers and had already been interviewed when they took office.

approximately 820 minutes of recordings and more than 200 pages of transcriptions.

During Phase II, we interviewed parents and students on Saturday mornings at the AMASE site. Eight of the 17 students consistently enrolled in AMASE during the data collection period were interviewed. Students were given the option to be interviewed alone, in pairs, or with a parent present[5] and these interviews were short (about 8 minutes), resulting in 39 minutes of recordings and 16 pages of transcriptions. We were unable to interview all the students because six students did not communicate verbally and one student's parent did not grant permission for an interview. There were also two students who persisted for longer than two quarters but eventually discontinued enrollment before Phase II interviews began. It should be noted that during the research period, other students were involved in the AMASE program, but unless they were enrolled for more than 2 quarters of study, they were not included in the participant pool. Our intent of getting at the culture of the ensemble and the impact on the community members informed this decision: We were interested in the experiences of the families who had prolonged engagement with the AMASE community. We also interviewed 11 of the 14 parents whose children were involved in AMASE during the data collection period (3 parents had 2 children in the program). All parent interviews took place at the AMASE site on Saturday mornings and they lasted from 10 to 25 minutes resulting in 140 minutes of recordings and 40 pages of transcriptions. Two parents, Billy's mother Alicja and Ella's father Aleksander, chose to be interviewed together as a pair.

[5] We completed a total of five interviews with eight students. Sisters Louisa (age 10) and Sonya (age 8) took lessons together and also opted to be interviewed together, as did close family friends Billy (age 23) and Ella (age 34). We also interviewed T.J. (age 17) and Michael (age 17) together because they are best friends and T.J. was able to support Michael's limited verbal ability, allowing him to be more communicative. We interviewed Alice (age 29) and Clare (age 22) individually with a parent present.

In addition to observations and interviews, we collected material culture including concert programs, song transcriptions, and communications of the Executive Board, volunteers, and families. We also accessed digital media including an online drive containing schedules, job descriptions, volunteer training materials, student reports, and resource banks, as well as the organization's website and social media pages. These materials were used to inform our understanding of the history and philosophy of the organization as well as the day-to-day details of running this program.

Analysis took the form of open and closed coding (Miles et al., 2014) and the full data set was read repeatedly to identify emergent themes. We first examined interview data from each group of participants, completing side-by-side coding of a subset of five randomly selected interviews and then comparing emergent codes. We discussed and refined each emergent code, coming to a consensus before moving on to the next batch of interviews. Once we had processed all of the interviews in this way, we compiled a list of emergent codes and began to cluster them into themes (Emerson et al., 2011). The same process was applied to field texts and material culture. We finally revisited the entire data set to achieve focused coding.

Trustworthiness

The primary strategy we used to increase trustworthiness (Creswell & Poth, 2017) was prolonged engagement in the field: the nature of ethnography required extensive and persistent immersion in the culture of the AMASE organization. We employed member checking throughout the entire project, asking volunteers and parents about our "assertions in progress" (Saldaña, 2002, p.5) and asking participants to confirm, extend, or challenge our interpretations. Triangulation was achieved through comparison among data sources as we cycled repeatedly

through the data from interviews, observations, and material culture analysis. We completed a negative case analysis, scouring the data for disconfirming evidence that was contrary to our findings and exploring the possibility of alternative interpretations (Creswell & Poth, 2017). We also sought feedback from peer debriefers in music education and music therapy as we endeavored to piece together a holistic representation of the AMASE organization.

Limitations

The qualitative nature of this study limits its generalizability to naturalistic transfers (Creswell & Poth, 2017). We aimed to provide rich enough descriptions of the context to allow readers to make logical judgements regarding the ways findings might transfer to other contexts. While our immersion in the field for three years helped to develop trust and rapport, Sarah served formally as the faculty advisor for the organization and also had several of the AMASE volunteers in music education classes during data collection. While these relationships established a power dynamic (student and professor/advisor), a few factors helped diffuse this power. AMASE is a student-run volunteer organization and therefore Sarah had no role in evaluating or grading any undergraduate participants. AMASE activity takes place on Saturday mornings, outside of the typical "school week" and occurs outside of the School of Music building, perhaps loosening the connection to formal student-professor relationships. Casual weekend attire also helped to lessen the distance between us (researchers) and the undergraduates (students). Amanda, a graduate student at the time of the study, had more of a peer relationship with students and served as lead interviewer for most undergraduates enrolled in music education courses. Although our regular participation allowed us to become expected members of the community, we were never a fixture in any one lesson interaction and our

presence potentially changed how volunteers worked with students. Despite these limitations, our persistence in the field enabled us to maintain strong and enduring relationships with community members, giving us confidence that participants were open and honest in sharing their perspectives.

Findings

In exploring the culture of the AMASE organization, emergent themes clustered around three pillars of organizational values: *Ability, Community*, and *Service*. Themes within each pillar illuminate how these values manifest in the philosophy and activities of the organization and influence the perceived impact of the program on the volunteers, parents, and students of AMASE. Each pillar is introduced with a short vignette to provide the reader with a glimpse into the lived experience of AMASE participants and to highlight manifestations of the emergent findings. Figure 1-3 provides an overview of the emergent themes and subthemes.

Figure 1-3

Emergent Themes and Subthemes

Ability	**Community**	**Service**
Organizational Philosophy of Ability	An Accepting Social Community	Filling a Need
Emergent Musical Skills	A Pre-Professional Volunteer Community	Recognizing Privilege and Inequity
Exceeding Parental Expectations	A Community of Parents	A Civically Engaged Identity

Ability

The audience in the performance hall applauds as Annie serenely walks to the stage and takes a seat at the keyboard. Annie, 22, is tall with dark hair and dark eyes. She is dressed in a simple black dress and low heels, the sides of her hair pulled back out of her face. Typically, Annie uses minimal speech and carries herself in a quiet manner. Her volunteers are also on the stage but seated slightly away from her keyboard for this performance. The applause fades into an astounding silence, almost as if everyone in the room is holding their breath to help Annie concentrate. She places her fingers gently on the keyboard and begins to play her recital piece, a version of a song from her favorite movie. As she comes near the end of the song, she misses a note and begins to stutter, restarting and looping through the same section of the piece. The volunteers remain in their seats offering their nonverbal support but not intervening in the performance. The audience maintains their laser focus and resounding silence. After several loops, Annie continues through the piece to the end without a pause. As she lifts her hands, a diminutive smile dances across her face. The audience and her volunteers burst into thunderous applause. She stands, bows, and returns to her seat just as she came. Her mother and sister hug her as she arrives and congratulate her on a wonderful performance.

An Organizational Philosophy of Ability. All volunteers interviewed identified the importance of approaching the teaching and programming at AMASE through the lens of ability. Volunteer trainings focused on sensitivity to person-first language, recognizing, first and foremost, the individual as a person with many characteristics of which just one may be a disability. In addition to this, volunteers often used language like “cognitively different” and “neuroatypical” when referring to the population they served. Although the discourse

surrounding the accepted terminology for individuals with disabilities is evolving (see Shakespeare, 2018), it was evident that the volunteers were thoughtful about the words they used when discussing their students. Executive Board member, Chrissy elaborated:

> We train our volunteers to see music students first. Rather than having a framework of "all students who are on the spectrum do this," it was more like "this is what works for your student and if that's how they progress, then continue doing that."

For many volunteers, the relationship that they formed with their student was their first interaction with a person with a disability. In debriefs, they expressed how these relationships changed their views of disability and challenged their preconceived notions of people with disabilities. Betsy expressed how this was ultimately reflected in her approach to teaching her students: "Everyone is different and needs different things to learn. A disability doesn't change much about that. They are just like us. We can relate to our students and teach them."

AMASE volunteers were intentional in focusing on their students' capabilities and supporting those in spite of challenges that may be associated with a student's diagnosed impairment. As an illustration, Parker (age 14), a student with acute anxiety, experienced great challenge in performing in a recital, yet it was something in which he eagerly wanted to participate. He required significant support in the form of social stories, assurances from teachers and family members, and certainty that no one would be videoing the performance for him to engage in this activity that his peers so freely enjoyed. The volunteer team discussed an action plan that put Parker first on the program, printed a request that no recording be made of the first performance, and reinforced that with a verbal statement prior to his performance. Through these actions, they removed the environmental barriers and empowered his capability to participate in

the event, allowing him to reach his goal of performance. The volunteers' philosophical orientation toward ability helped them to identify the strengths of their students and reduce the inherent contextual and personal barriers that might have otherwise limited their ability to participate and succeed.

Emergent Musical Skills. Over the three-year study, we observed the influence of the ability orientation on students' musical learning, as volunteers started with the students' strengths and built on those to grow their musicianship. Musical growth was particularly evident at the quarterly recitals. For example, at the first recital we attended, Alice (age 29) played a single melody with one hand. Three years later, she was playing a two-hand melody with chords. Parents were also aware of their children's musical growth. Clare's (age 22) mom, Sharon, remarked,

> I was watching her practice, and I thought, "This is not the same child I turned over to you six months ago. You've gotten a lot further with her!" She's reading music more now. Her harp strings are color coded, but it's wearing off and she's not needing it. She's pulling out chords by herself and she knows them by name. Her musical ability has definitely increased.

Students were often eager to share their musical learning with us. Ella (age 34), who takes lessons with her best friend Billy (age 23), shared, "We like coming here because we're practicing a lot and we've done different music and I like having help learning new music." Ella stopped mid-interview to demonstrate: without the guidance of her instrument, she performed the fingerings for her song while speaking the notes out loud. The musical growth that was demonstrated across three years by AMASE students provides evidence of the value of

instruction for the musical development of students with disabilities without the expectation of therapeutic outcomes.

Exceeding Parental Expectations. The ability orientation of the organization led to moments of surprise and delight as participating students exceeded the expectations of their families. T.J.'s (age 17) mom, Linda related this exchange with T.J.'s volunteer after his first lesson:

> [T.J.'s teacher] asked me, "How long has your child been playing piano?" I said, "Well, its 11:30. I dropped him off at 10 o'clock." She's like, "No, no, how many years?" [pauses, looking at her watch] I'm like, "It's 11:30 and I dropped him off at 10 o'clock." [laughing] And he's in there just playing away. We didn't have a clue.

In T.J.'s case, his mother brought him to the program seeking social interaction and discovered a proclivity to music that was previously unknown. Julieta, Louisa (age 10) and Sonya's (age 8) mother, attends lessons with her daughters to offer physical support due to the limited mobility of one of the girls. She shared her surprise about the progress of one of her daughters:

> I didn't think that [Sonya] would be able to learn, but she's surprised me. Sometimes it seems like she is not even paying attention when they are teaching her. Then she surprises me [with a new song] after a few days, and I see, oh, she *was* learning this song in AMASE.

Julieta recognized that although the growth might not appear immediately in the lessons, her daughters are developing musically. Many times, the families of AMASE came to the program seeking extracurricular activities for their child with limited expectations of outcome, but they often expressed amazement at the abilities that emerged in this setting.

Community

We arrive on Saturday morning, clutching cups of coffee in one hand and field notebooks in the other. As we settle into the corner of the busy room, the AMASE Executive Board members fire up the projector, assign rooms to volunteers, and scurry about coordinating the dispersal of keyboards, Boomwhackers, and other materials to the various third floor rooms. While the Student Activities Coordinator is busy preparing the materials for the students to make dream catchers later, a trio of volunteers exchange successful teaching and behavior management strategies. Across the room two other volunteers discuss a plan to color code the piano keys to help their student learn a new piece.

Seventeen-year-old T.J. bounds into the room carrying his keyboard. "Hello, Mr. Gregory!" he calls enthusiastically. He is more than six feet tall, dressed in a leather bomber jacket and the jersey he wears when playing basketball. Gregory smiles and responds, "Hey, T.J.! Ready for your lesson?" "I sure am!" T.J. replies as they head to Room 307. As we follow them into the hallway, Clare comes out of the stairwell with her mom, Sharon. Both women greet us with smiles and we ask Clare about her Special Olympics meet last week. She proudly shows us the three medals hanging from her neck. Clare, who is 22, studies the student harp, although she is also very active in local community theater programs. Before she hurries off to her lesson, she hands us a flyer for her upcoming show, Guys and Dolls.

An Accepting Social Community. All participants recognized the importance of the social community that emerged through membership in the AMASE organization. On a typical Saturday, the students interact with peers with disabilities of all ages and also with the undergraduate volunteers, many of whom are the same age as their students. Bethany, a former

Executive Board member, pointed out,

> In school, being a person with disabilities is very isolating at times. You often get paired with one person and they spend time with you throughout the day. I think AMASE teaches our students how to interact in a group setting without the pressure of feeling like they are outside the group to start with.

Clare's mom, Sharon, also identified the importance of this for her child:

> She can interact with similar people here. In grammar school, everyone thought she was wonderful but [as she got older] she kept being more and more excluded. Here she is part of the group. She is able to participate and help others to a degree and she loves it.

In the AMASE setting, Clare (age 22) can help her peers and be recognized for her strengths rather than ostracized for her diagnosis. During ensemble each week, students interacted with one another while doing arts and craft activities and preparing the large group piece for the recital. Here they formed friendships that were nurtured in periodic AMASE community events like the winter Snow Ball and the Spring Carnival. Volunteers recognized that the relationships between students were an additional benefit of the AMASE experience. Volunteer Betsy, noted, "One of the most exciting things was realizing that the students are friends outside of AMASE, too. I think that's one of the most important parts of what we do, using music as a jumping off place to make friends and relate to others." Outside of AMASE, friendships continued as students organized social meet-ups, participated in Special Olympics together, and met for pizza with other families in the community.

In addition to the relationships formed between the students, there were also special relationships between students and volunteers that extended beyond the individual lesson time.

Student musician Ella (age 34) shared, “I have good friends, good people teaching me, teaching us, piano. Every time I come here, I’m so happy to see my friends.” When observing interactions during ensemble time, it was evident that the students enjoyed spending time with their volunteers and the volunteers genuinely enjoyed sharing that time with their students. The pairs would laugh and joke around, talk about events outside of AMASE during ensemble time, and occasionally break into impromptu dance parties together at the end of a lesson. Volunteer Mike described his bond with his student, Michael (age 17), who has ASD and limited verbal skills:

> Michael is one of my friends. I don't want there to be a power discrepancy. When I'm working with Michael, I try to make it seem like we're on the same level. I'm just suggesting things to him and if he's not picking up what I'm trying to convey, we'll try something else. Then outside of teaching, we just goof around. Michael is a goofy kid and if he's having fun, I'm having fun.

Volunteers shared stories of visiting their students in school, being available to meet outside of ensemble times, going for ice cream with the family, and supporting their students through phones calls and emails when they were unable to attend ensemble. The genuine friendships formed through AMASE were observed at events like the annual Snow Ball, where students and volunteers danced, ate, and socialized together outside the context of Saturday ensemble.

The emphasis on relationships within AMASE is driven by the belief that the work of the program is about knowing the students, not saving them. Chrissy, a volunteer and Executive Board member, explained that the leadership and volunteers of AMASE were careful to avoid a ‘Savior Complex’ that she felt was persistent in other programs for people with disabilities. She shared how the relationship she formed with her student was holistic. She knew about her

student's family, school life, her boyfriend, and extracurricular activities, and she saw her student "within the bigger picture" of her life. She elaborated that AMASE avoided the power dynamic of other types of civic engagement by "really trying to make it more about your interactions with these students and not like you're coming in to save them." For the students, AMASE was a place where they could interact and grow socially beyond their diagnoses.

A Pre-Professional Volunteer Community. All the volunteers commented on how AMASE provided a unique opportunity to gain transferrable career skills while also developing strong, personal relationships with individuals with disabilities. Andy, a former Executive Board President, elaborated, "I think AMASE gives the volunteers an opportunity to really do some hands-on work with a population that they have probably never interacted with prior to this." When discussing the transfers to her future, Melissa, a pre-med volunteer, noted,

> Being with AMASE teaches you about the different types of personalities in the world. As a physician, there will be people of many backgrounds coming in for treatment and you have to cater the service and the healing process to them. I like to think it's a direct correlation with AMASE and how not every person that comes in is the same. You have to change the curriculum and teaching style for each person.

Although volunteer participants were pursuing a variety of degrees, each indicated their experiences with AMASE were valuable in preparing them to meet the needs of diverse individuals in their future careers. Logically, music education students were able to make the most concrete transfers to their intended vocation, noting the value of weekly teaching practice and learning to differentiate instruction as preparation for working with the students with disabilities they will inevitably encounter in their future music classrooms.

A foundational element of the Saturday sessions was the volunteer debrief during which the volunteers celebrated student successes and brainstormed solutions for challenges. Jessica emphasized transfers from the debrief process to the workplace:

> Debriefing is an integral part of AMASE. It's so important to be able to say, "Oh hey, you're having this problem? Let's brainstorm together and fix it." I feel like there are so many people who are brilliant but they don't work well in a group problem solving setting. It's so incredibly important to be able to work well with others.

Volunteers' limited experience with these populations often left them feeling uncertain about best approaches. They valued the collaborative nature of this community and noted that it was a place where they could develop group problem solving skills and a commitment to perseverance that will serve them in a wide range of workplace contexts.

Participation in AMASE also provides volunteers with real-world experience in all aspects of running an organization. In fact, the faculty advisor (Sarah) has almost no role in the administration of the program beyond signing forms and meeting quarterly with leadership. The volunteers elect their own administrative Executive Board, prepare and manage a budget, and recruit and interact with students and parents. Although the work of the AMASE program is specific to music for students with disabilities, volunteers from all areas of study identified benefits of the community as a pre-professional training ground for their future careers.

A Community of Parents. The AMASE community also had a significant impact on the parents of the students. Parents reported an appreciation of the safe space that Saturday morning ensemble provided for their children. Volunteers noted that parents would sometimes use the lesson time to run errands or grab coffee, knowing their children were engaged in an enjoyable

activity. Michael's mother, Suzanne, shared that AMASE gave her son (age 17) a chance to demonstrate independence: "I drop him off at the door and pick him up two hours later. I know this is a safe place for him where he can show some independence." These moments of student independence and parental freedom were highly valued by AMASE parents.

The parent network also shared resources and awareness of community programs that are welcoming for students with disabilities, including sensory friendly theatre productions, local arts day programs, resources for girls with autism, and programs for adults with disabilities. During Saturday morning ensemble, it was common to see small groups of parents discussing recent changes to special education programs in the local school districts or making plans to attend upcoming events together. These were valuable opportunities to discuss their children without the qualifier of the child's disability. Recognizing the importance of this network for parents, the volunteers designated a classroom where they could wait together comfortably, even providing coffee and bagels to encourage parent interaction.

Many parents expressed gratitude for the other AMASE parents who represent a broad range of parental experience. Parents with older children often provided support and guidance to parents whose children are younger. Izzy's (age 13) mother, Alena explained,

> I look to see if I can offer something to parents with younger children, even if it's just encouragement. You know, other parents have helped me to kind of see what's next. [For example,] I was talking with Sammy's [age 9] dad and he said, "How's Izzy?" and I said, last night she was sitting in her room ripping the stickers off one of her Minnie Mouse things and eating them. He said, "Oh, my kid does that." You could just see his face relax, like, "Oh, there's another kid out there that does the same thing that my kid does."

Similarly, former Executive Board President, Andy shared an anecdote about an exchange between two parents:

> Prior to coming to AMASE, one of our parents felt very unequipped to handle her son's cognitive differences. When she joined AMASE, she found this beautiful parent support group. Every Saturday, I would see her sitting down with some other parents and talking about the hardships that they faced as parents for differently-abled individuals. One day, her son was having a bit of a hard day, getting a little bit physical and just very easily agitated. She just didn't really know how to handle it. Then another parent went over to her and was like, “It’s going to be okay. My daughter also had these kinds of episodes and you've just got to ride it out and let it pass.”

The parents represented a network of individuals committed to supporting each other and sharing information that might enrich the lives of their children. Ultimately, the AMASE organization emerged as a multifaceted social enterprise, comprising multiple spheres of interwoven communities operating simultaneously to serve participants in myriad ways.

Service

The last of the lessons have wrapped up and the volunteers are all seated around the large table in the middle of the arts and crafts room. A few help tidy up the remnants of the day’s craft activity while others chat quietly about their lessons. The Executive Board has recently transitioned and the new curriculum director, Elsa, informally brings the session to order by sharing a few announcements related to the upcoming recital. As they begin the formal debrief, each pair of volunteers shares their celebrations and challenges from the day’s lesson. Rachel and Peter, two newer volunteers, describe a challenge they experienced with keeping their ten-

year-old student, Louisa, on task during the lesson. Jodi and Topher have experienced similar challenges in the past with their student and suggest that they try using a timer and scheduling in a break. Lilly notes that her student really enjoys a dance break part way through the lesson and suggests Rachel and Peter try that as an incentive to keep Louisa on task. It is week five of the ten-week Spring quarter and many of the volunteers will spend much of their weekend preparing for midterm exams. Despite this, no one is in a hurry. Each pair of volunteers is given time to share about the lesson and then the volunteers collectively brainstorm solutions to challenges and cheer for breakthroughs. As the debrief wraps up a few volunteers help carry out the last of the supplies while a couple more discuss plans to meet midweek to finalize an arrangement for their student. The rest trickle out of the room with waves and goodbyes.

Filling a Need. A lack of opportunity for musical learning was often identified as the impetus for families to seek out AMASE. Some students had already graduated out of formal schooling and therefore no longer had access to school music instruction. In some cases, even when music education was provided in the student's school, it was not available to the students with disabilities. Katy (age 18) and Annie's (age 22) mom, Kathy shared,

> It was more of an imposition for the school to have an aid bring her and her friends with disabilities to the actual music class. I mean the music teacher of course would welcome them, or so I was told, but they just didn't get any kind of music.

Although music education was available, and in some cases welcoming, school personnel were an unexpected barrier to access. For example, T.J.'s (age 17) mother, Linda, noted that her son's school limited his opportunities for extracurricular activities, instead mandating additional reading support, which he did not need. Furthermore, she was disappointed with the only music

class her son was allowed to take in high school, explaining, “He had some kind of remedial music class. That's the only way I can say it, because he didn't learn anything. They didn't know he played keyboard until the end of the semester.” Other parents also shared similar dissatisfaction with the musical offerings that were made available to their students. Limited availability of support personnel, inflexibility in course requirements, and lack of access to quality music education all served as barriers to musical learning for students of AMASE.

Parent frustration was not limited to in-school music education. We also heard stories of students being denied private instruction due to behaviors related to the students’ diagnoses and what parents perceived as private instructors’ discomfort with teaching students with disabilities. Clare’s (age 22) mom, Sharon shared,

> We called a guy who could have her in his house for a harp lesson. He said his insurance wouldn't cover him working with a special needs child. Now, to me, that is bullshit… pardon my French. It’s very irritating. If you don't want to work with her, just say “I'm not comfortable working with her.”

Sharon’s tone was common among the parents when discussing their frustrations. Although empathetic to the demands of teaching a child with disabilities, parents had to navigate a lot of insincerities and obstacles for their children to receive opportunities that were comparable to those of their typically developing peers. One of the primary ways AMASE fulfills its mission to serve the community is by providing access to music instruction to families that would not otherwise be afforded this opportunity.

Recognizing Privilege and Inequity. Many volunteers expressed an emergent awareness of the unequal access to services in the local community and the role of AMASE in meeting an

identified need. In discussing the importance of AMASE as a free program, Bethany noted,

> The music programs here that are geared towards people who have different needs all cost money[6]. It seems unfair for people to promote all of these programs for people with disabilities when they really can only be afforded by a small subset of people who have the money and have the means to participate.

Several volunteers also suggested that working with AMASE has helped them recognize the role and influence of privilege in their lives. Meghan explained,

> I think teaching music through AMASE allows you to sort of zoom out and see that there are so many more people than just the thirty people in your economics class. That's kind of humbling. You realize that you are not one out of a group of excellent people who just happen to be so smart and accomplished. Rather you have the privilege of being in the majority group and that privilege has gone a long way towards helping you get to where you are today. So, personally it motivates me to use the privileges that I have had growing up to sort of make small changes that I think could help people who unfortunately are on the other side of this majority/minority division.

The AMASE organization's valuing of and commitment to service appears to foster an awareness of privilege and inequity among volunteers. This outcome was repeatedly described as particularly valuable for students enrolled in Northwestern as it served as a foil to the culture of privilege that often characterized their lived experiences on campus.

A Civically Engaged Identity. Participants also described an emergent sense of civic mindedness, evidenced by a willingness to look beyond themselves and consider the needs of the

[6] Some local community music organizations offer programs for individuals with disabilities on a tuition basis.

community. Andy noted, “I think AMASE has taught me the true meaning of service and putting someone else's needs above my own. Even something as small as waking up on Saturday morning.” Bethany explained,

> I think that a lot of what we see as necessary to being successful here at NU is all about self-promotion and self-improvement. Those aren't always bad things, but it's very “me, me, me.” Like, “I have all these resources. I need to take advantage of all of them so I can ultimately graduate a better person.” But I think doing something like AMASE shifts the narrative to it not being about “me,” but about “me” in the context of a larger “we.”

Andy elaborated, “I'm mindful of not saying we ‘help people’, because I think help implies a power dynamic of someone of a higher standing ‘helping’ someone else. For me, it’s how can I serve my community in a way that benefits them?” Most volunteers indicated a commitment to continue engaging in service activities in the future, suggesting the emergence of a civically-minded disposition. Volunteers attributed their emergent service-mindedness to the long-term, sustained nature of the relationships developed through AMASE programming.

Discussion: Disrupting Social Disability

Applying Reindal’s (2008) social relational model of disability illuminates how the AMASE organization sought to remove the barriers to music instruction that were disabling for the students in this program. All of the students of AMASE had some form of reduced function, a necessary condition for the perception of disability (See Figure 1-1, Box 1). This portion of the model is individualistic: For some of the students, the nature of their impairment was enough for them to *perceive* disability. However, the necessary condition of reduced function did not automatically *cause* a sense of disability. In most cases, that was imposed by social and

environmental structures (Figure 1-1, Box 3). Most of the families we interviewed reported limited or no access to music instruction. The structures in place within the students' school systems and traditional models of private instruction were examples of social barriers imposed *in addition to* the students' diagnoses. The imposition of these barriers were sufficient contingent conditions for the students to experience *being* disabled by the society in which they lived.

Through the adoption of an ability-mindset, AMASE volunteers actively pushed back against these social barriers, providing access to instruction and creating learning environments that enabled all students to grow musically. Both the philosophical approach of the organization and the ways those values manifested in the learning environment embody Reindal's assertion that we must recognize limitations derived from impairment, while also disrupting the social barriers that further impose disabling conditions. Volunteers acknowledged the students' inherent impairments and adapted instruction and materials to meet the individual needs of each student, while simultaneously removing social barriers that might have precluded participation.

Earlier we described the experiences of Parker, a student who struggled to participate in the recital due to severe anxiety. He experienced both personal and social restriction due to his impairment. The volunteers acknowledged the personal restrictions stemming from his anxiety while also maintaining a philosophical belief that the social barriers imposed by the performance environment should not prevent his participation. By assuming Parker's competence ("It is *possible* for Parker to perform.") rather than expecting deficit ("It is *not possible* due to his anxiety."), volunteers were open to inquiring into the "contingent conditions" (i.e. the social barriers presented by the formal performance context) and sought creative solutions to remove these disabling barriers (*"How* is it possible to facilitate Parker's performance?"). When

volunteers gave Parker the opportunity to perform first and prohibited recording devices during his performance, they removed the social barriers associated with the performance and empowered him to participate in the event.

We observed the positive outcomes of this approach repeatedly across three years as students who might otherwise have been denied individual and group instrumental music instruction or assumed incapable of learning flourished musically. The power of this approach is further underscored by the frequency with which parents themselves underestimated the ability of their children, expressing surprise or even shock at what they were able to accomplish musically. The prevalence of the medical model of disability has led to a societal perspective that primarily focuses on the deficits of people with disabilities (Shakespeare, 2018). This was reflected in parents' tendencies to underestimate their child's potential for musical success; it was also successfully combatted by the volunteers' unwavering commitment to a philosophy of ability.

The community values that characterize the AMASE organization also reflect the social relational model. The volunteers were concerned with the contingent social conditions for disability, viewed in the context of this learning community as the social stigma of impairment and the institutional isolation that may be experienced in school settings. School programs offering services for students with disabilities categorize students in an academic hierarchy that labels them as "less capable." This is inherently socially disabling because students with diagnoses tend to be isolated, a social condition which may inhibit the development of real friendships with neurotypical peers. The AMASE community fostered an even social playing field for all participants, working to remove the social barriers of isolation and stigma. There was

little evidence of a social hierarchy defined by those who could and those who could not. This allowed AMASE community members to cultivate genuine friendships *both within and across* conventional social boundaries (i.e. student-student, student-volunteer, volunteer-volunteer). Even the parent community reflected aspects of the social relational model: Through AMASE, parents were afforded a space to regularly communicate about ways to remove or overcome the social barriers that limit their children, while also finding solace in a shared understanding of the realities of their child's impairments.

A strong example of the ways the AMASE community reflects a social relational approach, is the organization's annual Winter Snow Ball. The Snow Ball exemplifies the removal of social stigma and isolation, providing AMASE students the opportunity to participate in a dance, a rite of passage for many young people. Social stigmas of perceived ability ("they are not capable of enjoying this event") and institutional isolation ("they are not my friend, so I don't have to dance with them") are contingent conditions that make a school dance a potentially disabling environment. The Snow Ball carries all the significance of a traditional school dance—formal wear, decorations, a photo booth, food, and music—but it serves a community in which all members are valued as equals. The Snow Ball illustrated an environment of unrestricted social interaction, evidenced throughout the evening as volunteers, students, and parents enjoyed eating, dancing, and mingling together.

From a service perspective, there is perhaps a broader and more sustaining impact that reflects a social relational mindset: It appears that through their service, volunteers developed an awareness of their own privilege, becoming champions for change surrounding the misconceptions and stereotypes of people with disabilities. Their immersion in this culture

breeds acceptance and empathy, fostering the ability to consciously recognize and adapt to needs stemming from impairment while also recognizing and disrupting the social barriers that further disable individuals. Their commitment to advocacy is further evidenced by the second half of the organization's mission, "to promote greater awareness about neurodiversity and language inclusivity" (http://nuamase.weebly.com). Almost all volunteers voiced an awareness of how their emergent attitudes toward inclusion and diversity would be an important aspect of their vocational dispositions. In this sense, the AMASE organizational culture fosters a cadre of volunteers who will continue to disrupt disabling social and environmental barriers in many professional arenas in the future.

Conclusions

Given the qualitative nature of this study, generalizability is limited to logical, naturalistic transfers (Creswell & Poth, 2017). These findings do, however, add to the limited body of research that draws the voices of music learners with disabilities into the discourse. AMASE students identified as musicians and valued opportunities to learn music for music's sake (without therapeutic outcomes), much like participants with disabilities in earlier investigations (Burdett, 2012; Haywood, 2006; Jellison & Flowers, 1991). The barriers to access to music instruction experienced by participants also confirmed earlier findings related to student musicians with disabilities, including exclusion from programs (Haywood, 2006), the need for community organizations (Hourigan, 2015), and a lack of preparation among music educators (Hourigan, 2009; VanWeelden & Whipple, 2014). This study highlights the critical need to better prepare future music educators as both teachers of and advocates for students with disabilities.

Notably, while the therapeutic benefits of music are well documented (Gold et al., 2004; Sze & Yu, 2004), with few exceptions (e.g. Gerrity et al., 2013) the empirical research that examines the non-therapeutic outcomes of music education for learners with disabilities remains shockingly scant. There are also very few empirical studies that explore best practices in this context (Jellison & Draper, 2015). While the present investigation provides evidence of the ways a social relational mindset empowers music learners with disabilities to succeed and illuminates a variety of positive benefits for all stakeholders, continued research in this area is critical. Music education scholars must commit to a more systematic approach to research on music education for students with disabilities, looking perhaps to general education scholarship, which boast a robust body of empirical work to help inform practice (e.g. Parsons et al., 2009). A deeper understanding of what is happening in the field and a commitment to listening to the voices of students and musicians with disabilities might enable music educators to improve access to and quality of music instruction for these populations.

The AMASE organization does more than simply offer music instruction for students with disabilities. It nurtures a culture of individuals who not only serve their local community but who also seek to disrupt the narrative surrounding disability on a more global scale. In light of the success of the AMASE community's removal of socially disabling contingent conditions, the organization might stand as an inspiring model of the potential impact a social relational philosophy may have on practice. Through the adoption of an ability mindset, music educators might begin to challenge their implicit beliefs about students' capabilities, moving beyond adaptations and modifications to inquire into the ways in which music environments, curricula, and instruction may be inherently disabling. As we recognize and disrupt the socially imposed

disabling conditions that may limit students with disabilities, we imagine a more accessible music education, one that serves and fosters the musical development of every student.

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Paper 2

"It Needs to Be There, Always and Forever": Stakeholder Perspectives of the Role of Music Education for Students with Autism Spectrum Disorder in an Inclusive Context

As the first graders come filing into the room for general music, Elise Schneider begins to chant. The students join her as they find their way to a circle on the floor. Luke moves with purpose to Elise's side to tell her—as he does each Tuesday—that "it's double music day!" because he has his viola lesson today after music class. He then moves carefully to his spot and sits quietly with his legs crossed. Malik comes into the room with the last few students. His paraprofessional, Amelia, trails behind him, allowing Malik to find his own path to the circle. He takes the long route and eventually his friend, Tegan, quietly calls to him and pats the ground next to her spot to indicate where he should sit. Elise starts to sing "Oh, My" and the class echoes. Malik's face lights up as he enthusiastically joins Elise singing "no more pie." He knows every word and after a couple of lines called together, Elise drops out and lets Malik lead the song. The class easily switches to following Malik's lead. He stumbles on a line, and Elise gently primes the lyrics for him. Malik picks up the cue and completes the song. The focus of the class returns to Elise as she thanks Malik for helping her to lead the song. Elise chants "personal space, please, at a slow pace" and the class recognizes the cue to move into personal spaces in the room for a movement activity. As the opening strains of Saint Saën's "The Swan" from Carnival of the Animals *begin, Luke assumes a serious face and raises his arms much like a conductor on a podium. He follows the movements Elise suggests while occasionally providing his own interpretation as if he were leading the lines of the cello. Elise notes "how musical" Luke is moving and encourages his classmates to follow some of his examples.*

Autism spectrum disorder (ASD) is a neurodevelopmental disorder that results in impairments of social communication and interaction and the presence of restricted, repetitive patterns of behavior (American Psychiatric Association, 2013). The Centers for Disease Control and Prevention (2018) report that 1 in 59 children in the United States is on the autism spectrum (National Institute of Mental Health, 2016). Due to the prevalence of this neurodevelopmental disorder and its range of severity, it is likely that most educators will have students with autism in their classrooms. While the music classroom is often one of the first inclusion placements for students with autism spectrum disorder (Adamek & Darrow, 2018), preservice music teacher education may not adequately prepare teachers for working with students with ASD in music education settings (Salvador, 2010; VanWeelden & Whipple, 2014b). Practitioner literature (e.g. Adamek & Darrow, 2018; Hammel & Hourigan, 2013) offers best practice suggestions for music educators working with students with autism but empirical evidence of what music educators are doing in practice is largely missing from the literature (Salvador, 2015). In their book, *Music in Special Education*, Adamek and Darrow (2018) indicated that the purpose for the participation of students with ASD in music classes may be social or musical, yet there is a lack of research illuminating the beliefs about this among critical stakeholders.

This study sought to address this gap in the research by exploring stakeholders' perspectives of the purpose and benefits of education in music for students with ASD and what factors contributed to music education opportunity for this population. Elucidating the beliefs of stakeholders (including music educators, the special education team, administration, and parents) regarding music education for students with ASD in an inclusion setting may offer insights into

best practices and ways music teacher education programs and inservice professional development could better prepare teachers for their work with this population.

Review of Literature

The Individuals with Disabilities Education Act (IDEA) of 2004 was the reauthorization of The Education for All Handicapped Children Act (EAHCA) adopted in 1975. This key legislation guarantees a free appropriate public education (FAPE) and ensures special education and related services for children with disabilities (United States Department of Education, 2017). In a review examining music research in inclusive settings since the passage of this legislation in 1975, Jellison and Draper (2015) identified just 22 studies, only 11 of which were conducted in music classrooms[7]. In another review related to IDEA since 1975, Jones (2015) noted only five studies had examined the experiences of the students with disabilities in those music classrooms. Most of the research in the field has focused on areas peripheral to the education of students with disabilities, examining preservice preparation for teaching this population (Colwell, 2013; Grimsby, 2019; Salvador, 2010; VanWeelden & Whipple, 2014b; Whipple & VanWeelden, 2012), the perceptions of preservice (Bartolome, 2013, 2017; Hourigan, 2009; VanWeelden & Whipple, 2005, 2007) and inservice music educators (Darrow, 1999; Jellison & Taylor, 2007; Scott et al., 2007; VanWeelden & Whipple, 2014a), and the perceptions of and impact on typically developing peers (Darrow & Johnson, 1994; Jellison, 2002; Jellison et al., 1984).

In the first study in the field to investigate instructional techniques in integrated music classrooms, Jellison et al. (1984) found that experiences in a music classroom contributed to

[7] Nine studies were in regular settings (mostly preschool), nine studies were in elementary music classrooms, two case studies pertained to an individual child with disabilities in regular music and special music classes, one study was in a tutorial session, and one study was conducted on a school bus.

positive social interactions between students with and without disabilities. Subsequent studies examined the inclusion of students with disabilities in preschool (Humpal, 1991), the on-task behavior of one student with a mild cognitive disability when she was in music classes and music therapy sessions (Jellison & Gainer, 1995), the impact on the on-task behavior of typically developing peers (Jellison, 2002), and the use of music technology to enhance the musical creativity for a student with a cognitive disability (McCord, 2004).

Salvador (2015) conducted a case study of one music educator's practice with students with cognitive impairments in an inclusion and self-contained setting. The teacher's practice and goals for the two students changed depending on the context to balance their social and academic needs. Salvador documented the benefits of the curricular choices and class modifications for these students and concluded that modification of musical activities in inclusion settings may have greater benefits for this population than social inclusion as it allowed for student success both academically and socially. Salvador posed, "Is the purpose of music education in elementary schools to operate as an arena for socialization with age peers, or to increase the musical skills and abilities of each individual student?" (p. 170). With only six studies in 36 years examining the experiences of students with disabilities in music classrooms, there is little empirical evidence of what is happening in practice to help answer that question and notably, no research to date has examined the experiences specific to students with ASD.

To address this, I examined the experiences of two students with ASD in their school-based music education programs. The purpose of this multiple-case study (Stake, 1995) was to explore the perspectives of stakeholders regarding music education for students with ASD within an inclusive context. The following questions guided this research: 1. What do music educators,

special education teachers, administrators, and parents perceive as the purpose and benefit of music education for students with ASD in an inclusive context? 2. How does this school's approach to inclusive learning contribute to the music education of students with ASD?

Site and Context

Tower Elementary[8] is a full-inclusion K-5 school that offers general music, choir, and a strings/orchestra program before and during the school day for all students beginning in first grade. In 2019, the school district was nationally recognized for the second time by the NAMM Foundation as one of the Best Communities for Music Education in the country, a designation honoring the district's "exceptionally high commitment and access to music education" (NAMM Foundation, 2019). Tower is located in a small suburban community in the Midwest. It serves just over 450 students[9] in grades K-5, of which approximately 8% of the students receive free or reduced lunch. Eighty-five students have a 504 plan or Individualized Education Program (IEP) and five have a diagnosis of ASD. All of these students are fully included in general education classrooms, so there is no additional placement of students in classes such as music to meet social IEP goals. Most of the students and their families live in the neighborhood surrounding Tower Elementary.

General music is offered for all students beginning in first grade at Tower Elementary. Additionally, any child who is interested can begin on a string instrument in their first-grade year. The school has both a beginning and advanced orchestra that students may participate in after developing their skills in individual and small group lessons. Students may also learn to

[8] Pseudonyms were used for the name of the school and all participants.
[9] The Tower Elementary school community is comprised of White (58%), Asian (24%), Hispanic (9%), two or more races (8%), and Black (1%) students.

play a band instrument beginning in fourth grade. There are three choirs at Tower that meet for 30 minutes before the school day begins (Monday-Wednesday): *Gioso*, a preparatory choir for any students in grades 1-5; *Concert Choir*, an advanced ensemble for students in grades 3-5 who have previously sung in *Gioso* and have demonstrated musicianship and strong leadership skills; and *Comunità,* an inclusive choir which was modeled after a local reverse inclusion high school choir. In communication with parents, *Comunità* (pronounced "co-mu-ni-Ta", Italian for "community") is described as:

> A strong community of joyful voices where everyone is welcome. Students sing and use movement, instruments, and other materials to work together towards a common goal. Students take ownership by helping to decide which songs will be performed in concert. (Elise Schneider, email communication)

Membership is drawn from all grade levels and abilities and includes students with disabilities, students who present with social or behavioral challenges in school, and typically developing peer buddies. At the start of the school year, students with disabilities are matched with a peer buddy. Some students are naturally drawn together, and some students are paired based on the director's knowledge of the students and who she feels "would be a good match."

In the 2018-2019 school year, both Malik and Luke were in first grade. Malik is a charismatic and enthusiastic musician who loves to sing, dance, and lead songs in general music class and with *Comunità.* Luke is quiet and exact. He enjoys musical movement and conducting and began playing viola in the Tower strings program at the start of his first-grade year. Both Malik and Luke have a diagnosis of ASD and were served that year by a special education team led by Sylvia Bennett, a Learning Behavior Specialist. The boys' first grade class was cotaught

by Sylvia and the first-grade teacher to support the learning needs of both students. Malik was supported by paraprofessional Amelia Nicholas throughout the school day, including music class and before-school *Comunità* rehearsals. Luke did not require additional assistance in the general classroom or in music.

Malik and Luke attended a twice weekly, 30-minute general music class with Elise Schneider who has been at Tower Elementary since 2006. At the time of this study, Elise was in her 26th year of teaching, 15 of which were in elementary general and choral music. She is a trained Kodály[10] teacher and also uses the methods of John Feierabend[11]. Elise teaches general music for students in first through fifth grade and also directs the three before school choirs. Elise did not have any preservice training in teaching students with disabilities and admits that she has had limited experiences with this population—particularly students with ASD—until more recently in her career.

Each week, Luke had a 30-minute viola lesson with one other typically developing first grade peer and another 30-minute group lesson with five other beginning viola students. Ann Wachowski, his viola teacher, has more than 35 years of teaching experience and grew the orchestral program over her 32 years in the Tower School District. She is primarily a middle school orchestra director, but a retirement at the elementary school in 2018 gave her the opportunity to teach Suzuki strings at Tower Elementary part-time in the 2018-2019 school year. Ann is a certified Suzuki teacher who has gained vast experience teaching students with ASD throughout her years of service.

[10] Organization of American Kodály Educators: https://www.oake.org.
[11] Feierabend Association for Music Education: https://www.feierabendmusic.org

Method

Case study is used for an in-depth investigation into a phenomenon within a real-world context (Yin, 2018). Multiple case study is used to gain insight into one issue or question by selecting multiple cases to illustrate the issue (Stake, 1995). In this study, two student participants with a primary diagnosis of ASD were selected as the cases. These two cases were selected because the boys were in the same classroom and had such similar music opportunities they were believed to be "literal replications" of the experiences of music education for students with ASD in this inclusive context (Yin, 2018). The school district's outstanding commitment to music education was not the primary reason for choosing this site. It was chosen because of the receptiveness of administration to research, the willingness of faculty and parents to allow my observations of the teachers and students in music class, lessons, and ensembles, as well as an openness among all participants to be interviewed. I focused this study on the students' experiences and their stakeholders' perceptions, allowing for the collection of extensive details about the individuals and the site for the study of the particularity and complexity of the case (Stake, 1995).

A primary diagnosis of ASD was required for participation in this study, so both Malik and Luke were recruited by school personnel prior to my contact with their families to protect confidentiality. During the 2018-2019 school year, I spent 27 weeks (30 hours) observing[12] the two students in general music classes, viola lessons, choral rehearsals, and ensemble performances (Spradley, 2016b). I conducted eight semi-structured interviews (Spradley, 2016a)

[12] Observations included 21.5 hours in general music, 5.5 hours in the inclusive choir, *Comunità*, 2 hours in individual viola lessons, and 1.5 hours of performances.

for a total of 209 minutes with the music educators, principal, special education team, the two students and their families. I interviewed Elise Schneider, both students' general music educator, three times: in the first semester of observations, at the end of the school year, and post-data collection during the later stages of analysis. Initially, I focused on developing an understanding of Elise's experience with teaching students with ASD and her expectations for these two students. In follow up interviews, I inquired into questions that arose in observations and discussed emergent themes from iterative data analyses. I also conducted interviews with Ann Wachowski, Luke's viola teacher, and Maggie Anderson, the school principal. Per the request of the school district administration, I interviewed Sylvia Bennett, the boys' learning behavior specialist and Malik's primary paraprofessional, Amelia Nicholas, together. Both of Malik's parents, Ahmed and Neima Taleb, were interviewed with Malik. Luke declined to be formally interviewed but was present and offered some input when I interviewed his mother, Melissa Jenkins. I also collected material culture, including curriculum materials, lesson plans, email communication with Elise, and concert programs.

Analysis took the form of open and closed coding (Miles et al., 2014) and the full data set was read repeatedly to identify emergent themes. I first examined data related to each participant, completing descriptive and in-vivo coding (Miles et al., 2014) on family interview data and field notes pertaining to the students. The second round of coding utilized the same processes on the full data set of interview transcripts, field texts, and material culture. I used a code map to visualize and examine the list of emergent codes and cluster them into themes (Emerson et al., 2011; Miles et al., 2014). Lastly, to achieve focused coding, I reviewed the full data set again to extract emergent themes and identify evidence to support my interpretations.

Trustworthiness

To increase trustworthiness (Creswell & Poth, 2017), my primary validation strategy was prolonged engagement and observation in the field. I completed fieldwork in the school for the duration of the 2018-2019 academic year. In doing this, I became a regular fixture in weekly general music classes, which allowed me to develop rapport with participants and minimized behavior changes due to the novelty of my presence. I utilized member checking throughout analysis to determine the "accuracy and credibility" of the emerging themes (p. 261), and I asked teachers, parents, and the administrator to confirm, challenge, and extend my interpretations. Triangulation was achieved by comparing data sources in multiple rounds of coding and repeated cycles through data from interviews, observations, and material culture analyses. I also sought feedback from peer debriefers who were familiar with music education for students with disabilities as I attempted to represent the experiences of these students in this music program and interpret stakeholder understandings and belief about those experiences. This research was reviewed and approved by the Northwestern University Institutional Review Board.

Limitations

The nature of this qualitative study limits its generalizability to naturalistic transfers (Creswell & Poth, 2017). I made every effort to include rich descriptions of the context so readers may make logical judgements as to how the findings might transfer to other contexts. It is important that I acknowledge my positionality as a former elementary general music educator for students with ASD. Although this could have affected my focus of attention in observations and interpretation of the data, I utilized member checking throughout the research process as a way to limit my biases from influencing my interpretations.

While my regular attendance in general music classes lessened the novelty of my presence, it may have influenced Elise's teaching and the students' participation. Luke was extraordinarily focused and seemed unphased by my being in class, rarely taking notice of me throughout the data collection period. Malik, however, was particularly interested in my presence and would look to me when reacting to class events and occasionally break away from activities to try to talk with me. To overcome this, I established a routine to welcome him into the classroom and to say goodbye at the end of class as well as a nonverbal cue to redirect his attention to the teacher when needed. Despite these limitations, my persistence in the field enabled me to build and maintain a strong and enduring relationship with the participants. This gives me confidence that the student participation was authentic, and participants were open and honest in sharing their perspectives.

Findings

Three themes emerged from the analysis: *The Not So A-Typical Benefits, A Focus on Strengths,* and *A Culture of Inclusivity.* The first emergent theme highlights the purpose and benefits of music education for Luke and Malik according to the various stakeholders. In exploring the stakeholder perspectives of music education for Malik and Luke, it became clear that factors related to the educators and school community had significant impact on these students' experiences. The second and third themes explore aspects of the teaching environment that influence the boys' music education experiences. Factors related to the music educators' approaches are explored in *A Focus on Strengths,* while *A Culture of Inclusivity* and its subthemes examine the influence of the school's culture. These themes and their subthemes contribute to an understanding of the values and beliefs of the stakeholders regarding music

education for students with ASD and how the approaches of the educators and school community cultivated a musical environment where these students with ASD were able to thrive.

The Not So A-Typical Benefits

Stakeholders noted a variety of benefits of musical experiences for Malik and Luke. Among the first things all of Malik's family and teachers expressed was his love for music and singing. Malik even shared, "I love choir! I look forward to it." Malik's father, Ahmed, reiterated how motivated Malik is to participate: "He loves it. It's kind of early to wake up in the morning, but for choir, he'll make the time." Amelia, Malik's paraprofessional, shared, "I noticed pretty early on that Malik loved music class and singing. Sometimes he was singing when he wasn't supposed to, so I encouraged Ms. Schneider to reach out to his parents so he could join *Comunità*." In addition to his structured music classes, Amelia used music with him throughout the day for relaxation, for motivation, and for the joy of singing together. Focus was another benefit for Malik. His father, Ahmed, explained, "When he's singing or listening to music, he's definitely focused. That's been one of his challenges in a lot of subjects, he has a hard time focusing and tends to be distracted very easily." Special education teacher, Sylvia shared a story of Malik in a school assembly for a string ensemble: "The concert was long. I was in the back of the room and Malik was in the front, as far away from the doors as possible. Sitting still can be really hard for him, but he was fabulous. I mean you could just tell he loved it."

Similarly, when discussing benefits of his musical experiences, Luke's mother, Melissa, noted that the discipline and structure of learning the viola was motivating and appealed to Luke's nature. She laughed, saying, "I don't have to ask him to practice, he does it all on his own." Ann highlighted Luke's pride and confidence: "When I say, 'Hey, could you play your

latest song?' Luke will say, 'Of course!' He prides himself. I hope he never loses that confidence." Elise noted Luke's enthusiasm for music, pointing out that he always reminded her when he had a lesson. "That viola lesson is the highlight of his week," remarked Sylvia, his special education teacher.

For both of these students, the benefits identified by all of the stakeholders are similar to benefits for any student in music: the joy and pleasure of the musical experience; confidence and pride in accomplishments; structure and discipline; motivation; and focus (Droscher, 2014). Both Elise and Ann were intentional in explaining that they perceived the benefits of music for Luke and Malik just as they do the benefits of music for all of their students. When asked about the value of music for students with ASD, Elise exclaimed, "It needs to be there, always and forever. But I guess that's true for all children."

The families of both students indicated that they valued music, identifying other family members with musical ties and shared enthusiasm and gratitude for their child's musical experiences in school. For the families in this study, it may be that the expectations and beliefs about the benefits of music education for their children with ASD reflect how they feel about music more generally. This is in line with research examining musical engagement for children with hearing loss, in which families that valued and participated in music considered musical involvement for their children with hearing loss to be important (Driscoll et al., 2015; Looi et al., 2019). These families believed in music for music's sake and as such expected that music education for their children would have the same outcomes that it does for any child: the chance to be musical.

A Focus on Strengths

Observations of Malik and Luke in general music class revealed a variety of ways in which Elise supported their strengths. Elise used Malik's love and enthusiasm for singing to encourage his participation in general music. She consistently gave him space to lead call and response songs and used his song requests as a motivational tool for his participation. Malik's special education team, Sylvia and Amelia, highlighted this point, noting music was a place where Malik excelled and experienced success. Sylvia explained, "It is probably a part of his day where Malik feels more successful and probably a time when he looks most like his peers and he's included most like his peers." Luke was less motivated by singing but enjoyed the movement activities and opportunities for leadership. Elise supported this by giving him time to be "the conductor" of musical movement and lead activities when the class played instruments.

Elise acknowledged that she had little experience with students with ASD and had no preservice preparation for teaching students with disabilities. Her Kodály training gave her a variety of multimodal tools that through trial and error she found to be successful with students with ASD. The experiential nature of Elise's approach to teaching created many avenues for the students to participate in general music class. A typical 25-minute music class would include singing, movement, storytelling, and occasionally playing of instruments. For Elise, the variety of activities is one way she can be certain that everyone in her class can participate. She explained, "If we do a movement activity, everyone can move. If they can't necessarily verbally express themselves, they absolutely can move to the music." In her teaching, she constantly evaluates the students' engagement level, taking cues from the students' participation and adjusting to draw them into the activities. I frequently observed her using a student's idea to

adapt an activity or to intensify the challenge. Elise explained, “The thing I think about is making sure to give them opportunities for their strengths.”

The idea of supporting the strengths of the students is also part of Ann Wachowski’s philosophy. She spoke about all of her students as individuals:

> I guess that's what I would wish for any child, any person, who is studying music. We are all differently abled. If you need help going up the stairs does that mean that you shouldn't go upstairs? No, it just means you need a little help. I have specific goals and they’re different for every child. It’s about tapping into everybody’s strengths. Everybody learns differently, thinks differently, can feel differently. I think it’s making sure we’re reaching all kids and I don’t think it’s exclusive to children that are on the spectrum.

Ann shared, “I find the Suzuki method for little kids is brilliant,” noting that the playful and “loving” approach of the program appealed to all young learners, including her students with ASD. By starting with the experience of playing the instrument, Ann had flexibility to tailor the lessons to the strengths of her students building them towards music literacy in a developmentally appropriate way. She felt that strategies she used for one student were useful for many, regardless of a diagnosis. The principal, Maggie, observed that this approach was successful with students at all developmental levels because it begins with experience before reading.

Both Elise and Ann’s approaches to teaching are flexible and responsive to the students in their classes and lessons. These educators embrace an ability mindset towards their work, each remarking how they seek opportunities to support the strengths of their students. Maggie indicated how she valued this for the Tower community:

> There are opportunities for movement, there are opportunities for thinking through rhythms. In a performance space, you can either perform or you can't. It sounds right or it sounds wrong. And I think music should just be a point of access for all kids. [Our music program] is really much more big picture, which is so much more accessible.

The mindset and approaches of these educators are cornerstones to a music education program that is developmentally appropriate and engaging to all of the students it serves. The various approaches that supported the strengths of Malik and Luke, such as multimodal activities and experiential music making before note reading, were also successful in supporting the musical growth of their peers. This concept is articulated as part of the Universal Design for Learning (UDL) framework in which classroom environments, curriculum and instruction, and assessment are designed with customizable options that meet the needs of all students from the planning stages, requiring less adaptation in the moment (Meyer et al., 2014). Although these educators were not explicitly using UDL, elements of their approaches were reflective of the framework. Like many music educators (Salvador, 2010; VanWeelden & Whipple, 2014b), both teachers indicated they had little preparation for working with students with ASD. Elise in particular expressed uncertainty at times about how best to work with Malik and Luke and would seek the advice of myself and other colleagues when facing a new challenge with one of the students. Despite this, the strategies and techniques both Elise and Ann collected “on the job” were useful for the same reason educators have found success with the UDL framework: By offering multiple points of access (or multiple means of engagement, representation, and action and expression in UDL terms) each student was welcomed into the learning through their strengths rather than being limited by a deficit.

A Culture of Inclusivity

Data related to the philosophical approach to inclusive learning among the faculty and administration of Tower Elementary revealed how the school's Culture of Inclusivity influenced the musical outcomes for both Luke and Malik. Findings clustered into two subthemes: *Curricular Extracurriculars* and *Nurturing Peer Relationships.*

Curricular Extracurriculars

The availability of musical opportunity starting in the first grade at Tower Elementary is part of what made this school district one of the best communities for music education in 2019 (NAMM Foundation, 2019). While some of the ensembles required more advanced musicianship, there was a place for any student who wished to participate in extracurricular music regardless of ability. In addition to the students' general music classes twice a week, any student who wished to play a string instrument or sing in the choir could do so at the start of first grade. The school principal, Maggie, shared that the opportunities for music so early in elementary school set the district apart. Parents of students with ASD expressed how grateful they were because, as one parent noted to Elise, "there are so few opportunities for students with autism." Luke's mom, Melissa, recognized, "The environment is so supportive. That's one of the reasons why they're a top school district."

Particularly notable is the availability of these musical opportunities during the school day. All lessons, small group instruction, and ensemble rehearsals take place before and during school hours. Amelia noted this had a unique benefit for students with disabilities:

> For these families [of students with ASD], their extracurriculars are therapy. They go straight from [school] to hours of speech therapy, social groups, or academic support.

> They don't have the time after school to be in music extracurriculars. I think what Tower is doing by providing these services during or before the school day is really great for all these kids. Where maybe Malik would never have been a part of the choir, here he has the opportunity as a first grader. It's pretty cool.

Providing music typically viewed as "extracurricular" during the school day removed a barrier to access for these students with ASD who otherwise may have been forced to prioritize therapeutic interventions in their non-academic time. Researchers have documented a lack of opportunities for and access to in-school music education for students with disabilities (A.R. Draper & Bartolome, in review; Hourigan, 2015). Tower Elementary is an illustration of how school music programs can prioritize musical access for all students.

Nurturing Peer Relationships

The successes these two students experienced in music may also be due, in part, to the approach towards peer relationships that Tower has taken as a full-inclusion school. I noticed early on in my observations of Malik that he had a friendship with Tegan, another first grade student in his class. Malik liked sitting next to her in the music circle and would occasionally look to her for cues about what they should do in a transition or activity. Tegan could be seen offering non-verbal cues to sit in the circle or modeling ways to creatively move to a listening piece. Malik's paraprofessional, Amelia, allowed time for these interactions to support Malik in class before stepping in to offer her support if needed. Elise noted that Tegan could be off task at times, but it seemed that her friendship with Malik encouraged her to be more of a role model.

Although these peer relationships were very evident for Malik in general music, they were less present for Luke. Luke was described by most as a rule-follower and I observed him to

be self-directed and almost always on task. He would occasionally express frustration when his classmates were talking or not following directions. Elise was aware of this and kept a watchful eye for opportunities to encourage peer interactions for him. However, Luke did seem to form closer peer relationships with the other viola players in first grade. When I spoke with him and his mom, he informed me he played "viola *not* violin" and shared that he was one of six viola players in first grade, but "the only one in [his teacher's] class." In his lessons, he laughed and talked more readily with the other musicians. It may be that this was a space where he felt he had more in common with his peers. His viola teacher, Ann, shared with a smile, "Viola players tend to have this identity—I'm a viola player so, I get it—but Luke is *really* like that."

At Tower, the friendships that organically developed among students were nurtured and supported to ensure that all students had a positive association with school. Maggie, the school's principal, explained,

> It's intentional. When we do sectioning, for every single kid we're thinking, "When a student walks in the classroom on the first day of school, is there at least one person that they're going to be like, 'That kid is here! This is gonna be a great year!'?"

This was also true, she said, for the students with disabilities in the school. She noted, "For our students on the spectrum or any special need, we have that same mantra. We want to make sure that there is somebody there who is truly not just patient but genuinely friendly with them."

In recent years, there has been an increase in students with disabilities enrolling at Tower Elementary. Maggie shared, "we started to have students whose needs were very different and so we needed to figure out how to destigmatize it and really make it a part of the culture." To support this, the special education team in collaboration with the administration instituted

disability awareness programs like Circle of Friends[13] and Best Buddies International[14] as a way to develop an accepting school culture. According to administration, these programs have had a positive impact on the students of Tower. Maggie described a situation in a fourth-grade class in which the Circle of Friends training empowered the students to be advocates for a non-verbal friend:

> Our kids gave voice to something that we didn't notice. The students shared with us, "Sometimes kids laugh at her and they're not laughing with her. And you talk to her, all the teachers, the adults, talk to her like she's a baby." And I was [taken aback] when they brought that to me.

Maggie and the team worked with the students to devise a plan to educate the staff and students. She noted, "It gave them a chance to advocate. It was awesome."

With the increase of students with disabilities in the school, Elise recognized a need for musical opportunities that supported these peer relationships, so she started *Comunità*. Fundamental to this inclusive choir are the peer buddies, which Elise explained ensures that "everyone has one or two people they can connect with." The ensemble is more focused on building community and friendships than preparing multiple pieces for performance. The students sing and do musical activities together as a way to connect and develop their social emotional skills. These friendships carry over into the rest of the school day. Amelia shared,

> There are three of [Malik's] classmates in the choir with him and I think it's good to

[13] Circle of Friends (https://www.circleofriends.org) is a school inclusion program that promotes friendships between students with disabilities and typically developing peers. The program encourages self-awareness and social skills for students with disabilities and awareness and advocacy for their peers.

[14] Best Buddies International (https://www.bestbuddies.org) is a program that supports one-to-one friendships between people with and without disabilities. The friendship program begins in middle school, however Tower Elementary used this program as a resource for disability awareness.

foster those friendships. There is a fourth grader also named Malik and when we see him in the hallway, he'll be like “Hi Malik!” and Malik will say “Hi!”

As a full-inclusion school, students with a diagnosis of ASD are educated for the majority of the school day with their peers without a diagnosis. The teachers and administrators were deliberate about providing awareness education for the students and staff, equipping students with tools and language to be advocates for one another, and creating environments that encouraged and supported peer relationships. As a result, attitudes of acceptance and openness to difference cultivated a culture of inclusivity in which friendships flourished, benefitting students with and without diagnoses.

Benefits of peer-mediated instruction and peer mentoring for students with ASD and typically developing peers have been identified in educational research (e.g. Bradley, 2016; Carter et al., 2017) and also for students with severe disabilities in inclusive music settings (E.A. Draper et al., 2019). Although specific peer-mediated interventions were not being used in this program, the intentional nurturing of the peer relationships appeared to have positive benefits for Malik and Luke as well as their peers.

An Expansive School Culture: Adopting an Ethic of Hospitality

When I began this study, I bound the cases by the students in an effort to understand their experiences and the perspectives of those who made critical decisions about their music education. Unexpectedly, it became clear early on that much of the success of these two students in music education could be attributed to the philosophical approach held by the educational team at Tower Elementary. Malik and Luke were welcomed into musical spaces as individuals

by the entire school community, a phenomenon that I propose can be explored through the lens of an Ethic of Hospitality (Derrida & Dufourmantelle, 2000; Ruitenberg, 2011).

An Ethic of Hospitality (Ruitenberg, 2011) is an ethical frame based on the work of Jacques Derrida which posits that Hospitality occurs when a *host* gives an unconditional gift: welcoming a *guest* into their *home* (Derrida & Dufourmantelle, 2000). The host prepares a place in their home for the guest without any plan for arrival. Derrida expounded: "The other may come, or he may not. I don't want to programme him, but rather to leave a place for him to come if he comes. It is the ethic of hospitality" (Derrida & Ferraris, 2001, p. 83). In traditional notions of hospitality, a guest is indebted to their host for the gift of welcome. By contrast, Derrida countered that it is the host who is indebted to the guest because without their arrival there would be no gift to give.

Ruitenberg (2011) connected this to education stating, "in every educational situation a teacher is confronted with a student who is fundamentally ungraspable, and the ethical challenge is to respond to this student in a way that lets her or him be in otherness, that does not seek to recognize or otherwise close the gap with this singular other" (p. 32). Ruitenberg made a distinction between an Ethic of Hospitality and traditional notions of inclusion which assume a majority "whole" into which students with disabilities must assimilate. Ruitenberg continued that in contrast, Hospitality accepts that the arrival of the guest (in the case of Tower Elementary, students with disabilities) may change the space into which he or she is received. It is not enough to prepare for the arrival of the guest (a student with disabilities); the gift of Hospitality is in welcoming the guest and their differences without attempting to assimilate them towards a norm.

I suggest rather than inclusive, the space becomes expansive and allows for students to feel welcome to "be in otherness."

The music program at Tower Elementary was uniquely poised to be hospitable for students with disabilities because of the wealth of available musical options (general music, choir, and strings/orchestra) starting in first grade and the opportunities for participation during school hours. In this way, Tower was prepared "for a guest without any plan for arrival" (Derrida & Ferraris, 2001). Further, Elise and Ann's experiential approaches to music teaching and their philosophical beliefs about student ability made them ready to welcome any student (guest) who entered their classrooms (home). In this way, the host's home (school programming, administrators, teachers) was prepared to welcome a guest (student with disabilities). An Ethic of Hospitality, however, requires the arrival of a guest to welcome.

In recent years, Tower Elementary began to see an influx of students with disabilities enrolling in the school. It became apparent to the faculty and administration that changes needed to be made in order to support these students. They were confronted with a decision regarding how best to welcome these guests into their home. The principal, Maggie, explained,

> It came out of our special education teachers [recognizing] we had some students who did not typically go to Tower and whose needs were very different. So we tried to figure out how to destigmatize it and really make it a part of the culture.

The educational teams coordinated disability awareness and peer mentoring programs in an effort to destigmatize the different ways of being that the students with disabilities brought to the community. Rather than force the students with disabilities to fit into a school culture, the educational team looked for ways to cultivate an environment where they were given space to be

themselves and accepted as members of the community. Through this lens, Tower Elementary ushered in an Ethic of Hospitality by expanding the culture of the school through an openness to the differences that students with disabilities contributed to the community. The Tower community is indebted to their guests (the students with disabilities), as it was their arrival that helped this host to realize ways in which they could expand their thinking to change and grow into an expansive community of learners.

Conclusions

The purpose of this study was to explore the perspectives of stakeholders regarding music education for students with ASD within an inclusive context. Salvador (2015) questioned whether the purpose of music education for students with disabilities should be social or musical, and findings from that study suggested context may have influence on the answer. All stakeholders in this study indicated they valued the role of music education for these two students in the same way it would be valued for any student. While researchers in music therapy have provided ample evidence of the therapeutic benefits of music for this population (e.g. Geretsegger et al., 2014), interestingly, the social and therapeutic outcomes were not considered primary benefits of music education for these two students. This is likely due to the nature of a full-inclusion school, which does not have self-contained classrooms that require students to be placed in general education contexts to meet social IEP goals. The intentionality with which Tower Elementary approached nurturing the inclusivity of the environment meant that these social needs were being met throughout the school day. The music classroom did not need to serve as a singular space to provide for socialization, so Malik and Luke attended music classes just like their typically developing peers and were perceived to benefit in the same ways. In this

way, the benefits identified by stakeholders were not unique to students with ASD or even for students with disabilities. Further research is needed to examine stakeholder perspectives in partial inclusion and self-contained contexts to determine if stakeholders believe there are unique benefits of music education for students with ASD. This study does provide evidence of stakeholders' value of music for music's sake and music educators should continue seeking to provide curriculum and instruction that supports musical outcomes for their students with ASD.

To promote this, music educators can include experiential instructional approaches which allow for a variety of ways in which students with ASD can enter into music learning. The approaches to teaching that were observed included elements that easily fit into the framework of Universal Design for Learning (Meyer et al., 2014) and teachers may find this framework useful in planning to effectively meet the musical learning needs of all students in their classes. The pillars of UDL encourage teachers to consider providing multiple means of (1) engagement, (2) representation, and (3) action and expression which allows students to approach the learning experiences in the ways they best learn. Practitioner literature (Adamek & Darrow, 2018; Hammel & Hourigan, 2011, 2013) has advocated for the use of this framework to support musical learning for students with disabilities, but research examining its efficacy in practice has not been identified. Studies examining UDL in music education would be informative for the field and contribute to the body of research that supports UDL in other learning contexts (Crevecoeur et al., 2014).

Comunità, modeled after a local high school reverse inclusion ensemble, is an example of an ensemble predicated on inclusive beliefs about music making. Music educators may consider this type of ensemble as a way to make the music program, and ensembles in particular, more

expansive. Key to these ensembles are the peer buddies who support the student with disabilities both socially and musically. Research in education has found Peer-Mediated Instruction to be an effective strategy for social and academic outcomes for students with ASD (e.g. Bradley, 2016; Carter et al., 2017) and there is evidence of success of peer interaction strategies within music education (E.A. Draper, 2017; E.A. Draper et al., 2019). Implementing peer buddies and cultivating peer communities could be a way for music educators to support multiple levels of learning while also encouraging social connections.

Examining the community of Tower Elementary through an Ethic of Hospitality highlighted the reciprocal benefits of this school's approach to inclusion. A small amount of music education research has included a framework of Hospitality (Sullivan, 2017; West & Cremata, 2016), but this is the first example of its application to music for students with disabilities. The culture of the school was not the focus of this study but emerged as a significant finding related to the experiences of music education for these two students with ASD. Future research may consider exploring schools and music programs that explicitly demonstrate an Ethic of Hospitality with regard to students with disabilities.

Lastly, music education research pertaining to students with ASD is notably absent in the field. This study contributes evidence of two music educators' practices related to students with ASD, but the benefits identified by stakeholders are not specific to this population which is perhaps due to the nature of a full-inclusion school community. Individuals with ASD may have exceptional musical potential (Heaton, 2003, 2005, 2009; Stanutz et al., 2014) but, as indicated by Heaton (2009), this musical ability will likely not develop without instruction. Therefore, it is critical that the dearth of research in this area be addressed. A continued effort to highlight the

music teaching practices regarding students with ASD will be informative for preservice and inservice teachers.

Both Malik and Luke were included in interviews, however, their perspectives are largely absent from this report. Although verbal, Malik had limited communication and Luke declined to be interviewed the day I met with his family. Frequently, research regarding students with ASD is done *to* them and reported *about* them (Goodall, 2018; Goodall & MacKenzie, 2019) and it is imperative that future research seek out these critical voices to be included in the discourse. Documentation of first-hand experiences of students with ASD in the music classroom may highlight additional barriers to participation as well as serve to shift teacher mindsets toward a paradigm of ability. Educational researchers have developed alternative interview techniques that include multiple ways of engaging a student with ASD and a variety of ways they can respond (e.g. Bradley & Male, 2017). It would be useful for music education researchers interested in these topics to explore these methods of data collection that provide a greater degree of accessibility to individuals with ASD.

The distinctive aspects of the music program at Tower Elementary offered these two students the opportunity to experience music education in the same way as their typically developing peers which all the stakeholders viewed as beneficial. As a result of the community's work toward understanding the variance in all their learners, Malik and Luke were welcomed, not in spite of their differences, but because of them. The teachers identified their areas of strength and supported their musical learning from a position of ability. Music educators are uniquely positioned to offer the gift of hospitality, extending to students with ASD an

unconditional welcome into our music learning spaces. In being open to their gift of arrival, we stand to learn as much as we hope to teach.

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Paper 3

Evidence of Best Practice in the Education of Students with Autism Spectrum Disorder: Considering a Path Forward in Music Education Research

Autism spectrum disorder (ASD) is a neurodevelopmental disorder that results in impairments of social communication and interaction and the presence of restricted, repetitive patterns of behavior (American Psychiatric Association, 2013). The Centers for Disease Control and Prevention (2018) reports that 1 in 59 children in the United States is on the autism spectrum (National Institute of Mental Health, 2016). The prevalence of ASD all but guarantees that music educators will have these students in their classrooms, however little is known about how to best support their musical development. There is research evidence that supports the belief that individuals with ASD may have exceptional musical potential (Heaton, 2003, 2005, 2009; Stanutz et al., 2014). Although, like most typically developing students, musical ability for students with ASD will likely not develop without instruction (Heaton, 2009). The field has benefitted from a large body of literature in music education suggesting best practices for teaching students with ASD (Adamek & Darrow, 2018; Hammel & Hourigan, 2013), but recent literature reviews have elucidated the limited empirical research in the field (Jellison & Draper, 2015; Jones, 2015). To date, no research has been identified in music education that specifically examines how to best support the musical development of students with ASD.

The research landscape is different within the broader field of education. In 2009, Parsons et al. completed an exhaustive literature review of empirical evidence of best practices for the education of people with ASD. The researchers identified 100 papers addressing this topic from 2002-2008, 92 of which pertained to young people (Parsons et al., 2009, 2011). The

researchers highlighted the difficulties related to robust research of this population in educational settings, noting that of the 100 articles originally included, only 12 were rated as "offering a high weight of evidence" for the review (Parsons et al., 2009, p. 3). In 2016, Bond et al. contributed an update, systematically reviewing empirical research published between 2008-2013. The review adopted a broader framework which included evidence of educational utility (e.g. social utility ratings, school staff or peer's direct involvement). Within the 85 best practice studies identified, there was increasing evidence for peer-mediated interventions and interventions involving technology. Findings from general education research may be informative for music education practice but differences between the learning contexts make direct transfers difficult. To better serve students with ASD in music education, empirical research is needed within a musical learning context. Therefore, the purpose of this literature review was to examine empirical research regarding best practices for teaching students with ASD in general education settings and to explore how it might inform future research in the field of music education.

Method

The criteria for ASD changed with the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5, American Psychiatric Association, 2013). In the previous edition of the manual, there were four subcategories under the umbrella of autism: autistic disorder, Asperger's disorder, childhood disintegrative disorder, and pervasive developmental disorder-not otherwise specified (American Psychiatric Association, 1994). With the DSM-5, the four subcategories were collapsed into one diagnosis of autism spectrum disorder. This review included publications from 2013-2019 in order to examine research that reflects the current diagnostic criteria. I adapted the original search terms utilized by Parsons et al. (2009) and Bond

et al. (2016) to identify empirical research of best practices for the education of school aged children with ASD (see Appendix H-Supplemental Table 1). I further bracketed the search to only include terms pertaining to classroom education and school-based experiences for K-12 students with ASD. Two databases were searched (PsycInfo and ERIC) using "and/or" Boolean combinations of terms (as detailed in Appendix H-Supplemental Table 1). This resulted in an initial collection of 787 publications (PsycInfo=314, ERIC=472) of which 670 remained after the removal of duplicates. To determine inclusion in this review, I applied criteria adapted from Bond et al. (2016). For inclusion, the studies were required to: be published in English between 2013-2019; include at least one school-aged child with ASD; take place in a school setting; and be a qualitative or quantitative study reporting at least one finding or outcome measure about the student(s) with ASD. In addition, Parsons et al. (2009, 2011) noted the importance of incorporating the voices of people with ASD when discussing research pertaining to them, and as such, care was taken to include research from the perspectives of students with ASD. Studies examining specific educational curricula (e.g. reading intervention packages, math curriculum series) were excluded. As with Parsons et al. (2009), there was some variability in the research among these papers. Since this review focused on potential directions for future music education research, I did not scrutinize rigor. After screening all 670 titles and abstracts according to the inclusion criteria, 78 studies remained.

I reviewed the purpose and discussion sections of each of the remaining studies removing an additional 45 because of previously identified exclusion criteria, resulting in 33 empirical publications retained from the original search. The reference lists of these 33 studies and the Google Scholar "cited by" feature were used to discover any publications not initially identified,

adding an additional 14 studies for a total of 47 articles included in this review. I read and organized the 47 papers into categories based on topics including: *Teacher Directed Approaches to Instruction, Intervention Tools, Peer-Mediated Instruction,* and *The Autistic Voice.* In the following sections, I synthesized the studies in each category and explored potential implications for future music education research.

Findings

Teacher Directed Approaches to Instruction

I identified seven research studies examining two related teacher directed approaches to instruction for this review: *Explicit Instruction* and *Schema-Based Instruction*. These approaches are considered Evidence Based Interventions (EBI) which are educational interventions with empirical evidence of efficacy (Suhrheinrich et al., 2014). The use of EBIs for the education of students with disabilities is a legislative requirement of the Every Student Succeeds Act (ESSA) (PL 114-95). Explicit Instruction and Schema-Based Instruction are distinct EBIs, however both are designed to provide direct instruction and scaffolded support in learning a task or skill.

Explicit Instruction (EI)

Explicit Instruction (EI) is an unscripted approach in which content is logically selected, sequenced, and broken down into manageable units for instruction based on the students' cognitive abilities (Archer & Hughes, 2011). Teachers use clear descriptions for each step and model the target skill. Students are then given opportunities to practice with feedback. Teacher involvement is faded and ultimately withdrawn during the practicing phase as the students demonstrate success and eventual mastery.

Three studies in this review examined EI for students with ASD. In two of the studies (Root, 2019; Schenning et al., 2013), EI consisted of (a) modeling, (b) guided practice which included prompts, error correction, and behavior specific praise, and (c) test trials without error correction or feedback. In the third study (Smith et al., 2013), the EI was provided via Computer Aided Instruction (CAI) that used a model-test format. Explicit Instruction was found to be effective for teaching math concepts in the elementary context (Root, 2019) and science terms and their application to middle school students with ASD (Smith et al., 2013). Schenning et al. (2013) determined the use of EI was effective in teaching strategies that helped increase high school students' comprehension of grade level social studies content and its application to real-world scenarios. Results in all three studies generalized[15], although the generalization was variable for the participant in Root (2019).

Schema-Based Instruction (SBI)

Schema-Based Instruction (SBI) was examined in four studies included in this review. This EBI uses a series of steps to teach the conceptual and procedural knowledge required to solve word problems (Root, 2016). A schema is a framework or outline for problem solving that is represented using pictures, diagrams, equations, or numbers sentences (Marshall, 1995). In SBI, students (a) identify the type of problem, (b) choose a schema that helps to organize the information, and (c) receive EI on the schema-based problem-solving method (Jitendra et al., 2015).

Root and colleagues have established a line of research that utilizes a variety of multimodal strategies as part of a Modified Schema-Based Instruction (MSBI) procedure (For

[15] Generalization, like transfer, is a student's ability to use a newly learned skill in a different environment.

strategies, see Table 3-1). Researchers determined MSBI to be effective for helping students with ASD to solve mathematical word problems (Root et al., 2017), acquire and maintain math content (Cox & Root, 2018), and develop algebraic problem solving skills (Root & Browder, 2019). Fading of visual supports resulted in a loss of maintenance (Cox & Root, 2018) and difficulty solving word problems in generalization (Root & Browder, 2019).

Table 3-1

Modifications to Schema-Based Instruction

Root et al. (2017)	Cox & Root (2018)	Root & Browder (2019)
• Task analysis with pictures in each written step • Color-coded graphic organizer • Virtual and Concrete Manipulatives • Explicit/systematic prompting to teach each step of the task analysis	• EI on task analysis • Enhanced visual supports on graphic organizer • Systematic prompting and feedback	• Task analysis and chant with hand motions • Enhanced visual supports on graphic organizer • Systematic instruction with EI

Discussion

In these studies, the two Evidence Based Interventions (EI and SBI) had varying levels of effectiveness. All of the studies reported success with specific, structured teacher directed instruction in a task or skill and had some level of generalization. These approaches are examples of general education teaching practices that were researched to provide empirical evidence of

their effectiveness in educating students with ASD. The field of music education has a multitude of practices that could be examined for their effectiveness in the musical development of students with ASD in the same way. Music education researchers have examined EI for musical development in the form of sequential patterns in elementary music (Bowers, 1997), in applied lessons (Benson, 1989), and in secondary choral and instrumental ensembles (Yarbrough & Price, 1989), but this line of research has not been applied to students with ASD. Replication and building on previous research were strategies educational researchers used to examine the effectiveness of an EBI for ASD (e.g. note the line of research by Root and colleagues: Cox & Root, 2018; Root, 2016; Root, 2019; Root & Browder, 2019; Root et al., 2017). In music education, only one study has identified conditions that support musical development of students with disabilities in a community music program (Gerrity et al., 2013). Music education researchers may consider building on the findings from that study to examine the effectiveness of the conditions with students with ASD and/or apply them within school settings.

Intervention Tools

Twenty research studies since 2013 have featured investigations of various concrete and technology-based intervention tools used to support EBI including *Graphic Organizers, Manipulatives, Video Modeling,* and *Computer Assisted Instruction.*

Graphic Organizers

Graphic organizers are "procedural facilitators" that use visual and spatial displays, diagrams, or outlines to help students organize key concepts and vocabulary for comprehension of text (Baker et al., 2002; Darch & Eaves, 1986). Studies for this review found graphic organizers to be an effective tool for reading comprehension (Bethune & Wood, 2013), for

history comprehension (Zakas et al., 2013), and for supporting persuasive writing (Bishop et al., 2015). They were also found to be effective when used with systematic EI in the acquisition and generalization of science concepts (Knight et al., 2013) and were used in support of systematic EI for comprehension of social studies content in Schenning et al.'s (2013) study.

Manipulatives

In the context of the studies reviewed here, manipulatives were defined as physical or virtual objects used to explicitly and concretely represent abstract mathematical concepts or properties (Bouck & Flanagan, 2010; Moyer et al., 2002). Studies comparing the two forms of manipulatives found them both effective but students were more efficient with app-based manipulatives (Bassette et al., 2019) and they preferred virtual manipulatives over concrete (Bouck et al., 2014). Two studies examined manipulatives as part of a concrete-representational-abstract (CRA) sequence for teaching computation (Flores et al., 2014) and math skills (Stroizer et al., 2015) with elementary students with ASD. The CRA sequence involves first using concrete manipulatives to master the operations, then pictures and drawings to represent the numbers instead of manipulatives, and lastly abstract representation using numbers only (Flores et al., 2014; Stroizer et al., 2015). Findings in both studies found this process to be effective and researchers highlighted that students made gains within a short amount of time, gains attributed to the use of manipulatives by Stroizer et al. (2015).

Video Modeling

Video modeling is a tool in which students with ASD view a video of an actor performing a target behavior before trying it themselves (Bellini & Akullian, 2007). Video self-modeling (VSM), in which students view previously recorded videos of themselves completing a

task, has been an effective tool for math skill acquisition with middle school students with ASD (Burton et al., 2013). A series of three studies (MacFarland & Fisher, 2019; Plavnick, Kaid et al., 2015; Plavnick, Sam et al., 2013) implemented video-based group instruction (VGI) with high school students with ASD. Plavnick and colleagues (Plavnick, Kaid et al., 2015; Plavnick, Sam et al., 2013) found VGI to be an effective strategy for teaching novel social behavior although generalization was mixed. MacFarland and Fisher (2019) extended this work by implementing Peer Mediated Instruction (PMI) with the participants of the 2015 study to promote generalization. MacFarland and Fisher (2019) determined the pairing of PMI with VGI was effective in increasing performance of all original participants in generalized settings.

Computer Assisted Instruction

The prevalence of computers in classrooms makes them a useful tool for instruction with students with ASD. Computer Assisted Instruction (CAI) uses computers or other hand-held devices as a way for students to learn or in support of the learning process (Anohina, 2005). Slideshows were used to effectively implement CAI in teaching map skills for elementary students with ASD (McKissick et al., 2013) and science terms and their application for middle school students with ASD (McKissick et al., 2018). This process offered individualization for students, enabling them to work independently. The slideshows were easily created by teachers making them a viable intervention for schools with limited access to resources. In the previously reviewed research by Smith et al. (2013), the explicit instruction was provided via CAI on an iPad2. The use of iPads/iPods and other hand-held devices may be useful for promoting independence for students with ASD (Spooner et al., 2014). Two studies found the use of iPods

(Carlile et al., 2013) and iPads (Brodhead et al., 2018) as activity schedules effective in promoting independence in play variation and structured leisure time.

Discussion

These studies highlight the benefits of intervention tools in supporting the learning of students with ASD. Although the research regarding these tools indicated that students with ASD benefited from the concrete and virtual tools, all participants in these studies reported preferring the virtual tools. This may be why students respond so favorably to CAI (Bouck et al., 2014). Bassette et al. (2019) posited that the use of virtual manipulatives may reduce the distraction that can be caused by concrete manipulatives. With the pervasiveness of computers in classrooms and hand-held devices in society today, technology-based tools may also be a less stigmatizing approach for offering instruction and support for students with ASD across K-12 contexts.

Music educators, particularly in general music, use a multitude of tools for teaching including musical manipulatives, visuals, and listening maps, as well as technology which has widespread use within schools. Of all of these tools, the use of technology in music is the only one to be studied empirically (see Webster, 2012 for a review). Music education researchers have examined video modeling in home practice (Linklater, 1997) and CAI to develop rhythm reading skills (Smith, 2002), guitar performance and general music achievement (Green, 2003), and benefits of the CAI software Smartmusic[16] (Glenn, 2000; Perry, 2014; Tucker, 2016). Best practice literature has advocated for the use of manipulatives and visual aids to support the experiences of students with ASD in music classrooms (Adamek & Darrow, 2018; Hammel & Hourigan, 2013; Hourigan & Hourigan, 2009) and for using technology to enhance the

[16] https://www.smartmusic.com

experiences of students with ASD as an assistive device and in promoting musical interaction and expression (Hammel & Hourigan, 2013). However, similar to music education research among typically developing populations, only technology has been examined empirically. One study found social benefits of touch screen technology (iPads) in music activities for students with ASD (Hillier et al., 2016). Future research may examine the effectiveness of learning tools and technology for the musical development of students with ASD.

Peer-Mediated Instruction (PMI)

Ten studies were identified for this review that examined the effectiveness of several peer-based instructional approaches and interventions, known as Peer-Mediated Instruction (PMI). This group of EBI strategies, which recruit typically developing peers for social and educational support (Carter & Kennedy, 2006; MacFarland & Fisher, 2019) includes *peer support interventions, peer networks,* and a *peer mentoring program*. Studies within these categories are detailed in depth to illuminate the contextual aspects needed to understand these interventions.

Peer Support Interventions

In peer support interventions, one or more students without a disability is invited to provide academic and/or social support for a peer with ASD (Carter & Kennedy, 2006). The invited peer receives training in ways to provide support for their peer with ASD. Additionally, they are provided with written support plans and guidance from classroom staff as needed (e.g. paraprofessionals, special educators, general educators). Peer support intervention was determined to be effective in improving disruptive, off-task behavior of three elementary students with ASD in general education settings (McCurdy & Cole, 2014). Three peers without

disabilities were nominated by the general education teacher as potential peer supports and the first student to return parent permission was paired with the participant student with ASD. The intervention reduced off-task behavior to the level of their classroom peers and was found to have social validity[17] with teachers, students, and supporting peers. Generalization to other classrooms was not evaluated.

A mixed-methods study examined the effect of cross-age tutoring, a form of peer support, on the behavior of three students (ages 4-5 years old) in a library setting (Gillies, 2013). The tutors were three fourth-grade students who were familiar with the class and the students. The tutors were selected from a cross-age tutoring program in which the researcher provided disability awareness lessons throughout the school year. Results indicated there were positive benefits for all six of the participants. All exhibited and/or shared happiness and excitement about working together. The three students with ASD developed the target skills and maintained them a month later. The tutors expressed feeling important, confident, protective of and connected to their young peers with ASD. In their journaling, the tutors focused on the strengths of their students and celebrated their successes. The researcher noted that this strategy had broader benefits for all the participants beyond the targeted behavior goals as the dyads formed strong bonds and genuine friendships.

A classroom peer buddies approach was used by Hundert et al. (2014) with three Pre-K/Kindergarten aged students with ASD to promote play interactions. All students in the classroom were given instruction in the peer buddies program in part to normalize partnering

[17] Social validity refers to "the acceptability of and satisfaction with intervention procedures, usually assessed by soliciting opinions from the people who receive and implement them" (Luiselli & Reed, 2011, p. 1406).

among the students and avoid stigmatizing the students with ASD. A social script was provided for play sessions that included the student with ASD to support the play interactions with the peer buddy. There was an increase of interactive play and increased peer interaction for the students with ASD when given the social script, but it did not generalize beyond the training sessions without peer buddies or adult assistance. The play social scripts were developed only for the students with ASD because researchers hoped it would encourage typically developing peers to engage with the students with ASD. Researchers noted this as a limitation because it may contribute to further stigmatization of these students in inclusive settings. They recommended that play social scripts be developed for many students in the class to expose students to a variety of theme-related play scripts.

Carter et al. (2017) contributed to the limited research of peer support intervention for high school students with ASD. Peers were nominated by a general education teacher and anywhere between one and six students were partnered with a student with ASD (n=4) in a general education class (Business, Math, Science, and PE). Training and written plans were provided for all peers and in one case, the student with ASD who had not disclosed his diagnosis. There were increased peer social interactions for all four students, and academic interactions increased or maintained for three students. Researchers in part attributed the decrease in academic interaction for one student to "substantially higher levels of 'no instruction'" observed in the intervention condition (p. 216). All participants felt the intervention had social validity, but the researchers indicated it had limited generalizability beyond the intervention sessions.

Peer Networks

A peer network entails creating a social community of peers around a student with ASD to encourage social skills, communication, and other outcomes in a classroom and/or throughout the school day (Carter et al., 2013). Recent reports have indicated its success in high school (Gardner et al., 2014; Sreckovic et al., 2017) and elementary (Kamps et al., 2015) settings.

Gardner et al. (2014) investigated the implementation of peer networks during an advisory period as a strategy for increasing social interactions among two high school students with ASD and their peers without disabilities. Each student with ASD had a network that included an adult facilitator and two or three peers without disabilities. Peers established meeting times and created activities that were engaging for the students with ASD. The researchers found that implementing peer networks in an advisory setting resulted in substantial and sustained increases in social engagement and peer interaction, and all participants found the peer networks beneficial reporting them as a socially valid experience. However, increases were only present when the network was actively meeting. In the withdrawal phase, there were substantial decreases in social interactions for both students despite all members of the network being together in the advisory room. Researchers suggested the implementation of these networks may need to be sustained throughout the entire school year to see more lasting generalization.

A peer network intervention was found to be effective in increasing initiations and responses in social interactions between three high school students with ASD and their peers without a disability (Sreckovic et al., 2017). The social interactions during the lunch period of these three students increased to the level of two randomly selected high school students without disabilities and the total social interactions (initiations and responses both from students with

ASD and from peers) maintained into generalization. This study also provided preliminary evidence of peer networks reducing incidences of bullying for students with ASD. Although exploratory, the decrease in incidences was noted as substantial for these three students.

In an extensive three-year randomized control trial, Kamps et al. (2015) examined the effectiveness of a comprehensive peer network intervention that combined peer training and direct instruction on the social communication, language performance, adaptive communication skills, and teacher ratings of kindergarten and first grade children with ASD. The study included three cohorts of children (95 students with ASD and approximately 4-6 neuro-typical peers for each one) who were included in the study for a two-year period (kindergarten and first grade). Compared to participants with ASD in the control groups, students with ASD that were part of the peer network intervention demonstrated a greater increase in social initiations with a peer during non-treatment social probes which extended into generalization. The biggest increase was found in settings with adult support and there were greater improvements in social communication for students with ASD after the second year of program participation. The social communication skills of four participants from this study were examined in greater detail (Kamps et al., 2014). Acts of total communication (initiation or responses) increased significantly for all four students, and initiation increased for three. These findings generalized beyond the intervention to classroom centers for three of the participants as well.

Peer Mentoring Program

Bradley (2016) indicated that social intervention research for students with ASD primarily focused on the development of social skills, a discrete learned behavior, as opposed to social competence, a collection of skills which support the development of meaningful, emotion-

based relationships and management of social settings (Gutstein & Whitney, 2002). To address this, Bradley (2016) developed a peer mentoring program in five schools in England in which all students, including students with ASD, served as peer mentors. This was a departure from previous studies in which typically developing peers served as one directional mentors for students with ASD. In this study, groups of four students, one of whom was a student with ASD (n=12 students with diagnosis and 36 students without), were organized and trained as peer mentors for one another. Student self-esteem, loneliness and social dissatisfaction, and experiences with bullying were assessed prior to participation in the mentoring groups and semi-structured interviews were conducted to understand the views and experiences of the students with ASD as a result of participation. Significant gains were found for all three of the assessed categories. This unique model of peer mentoring honored an inclusive, asset-based mindset. The findings suggested it positively influenced the sense of being included in school for students with ASD and they became aware that they could be a source of support to their peers.

Discussion

These studies provide evidence of the benefits of Peer Mediated Instruction for both students with ASD and their peers without disabilities that participated in these programs. The generalization of the targeted skills varied in these studies, with the greatest success found in peer networks sustained over multiple years (Kamps et al., 2014; Kamps et al., 2015) and the peer mentoring program (Bradley, 2016). The reciprocal nature of the peer mentoring program in Bradley (2016), in which all students were mentors for each other, could be viewed as more than an inclusive practice but an expansive practice in which traditional models of education are not

just inclusive of students with disabilities but instead have expanded to encompass different ways of approaching learning from a variety of neurodiversities.

Music education researchers have examined peer mentoring among typically developing students in music education settings (see Goodrich, 2018 for a review) and that research has also noted reciprocal benefits of peer learning. A small body of work has examined peer-interaction activities in general music classrooms among students with disabilities and peers without disabilities (Draper, 2017; Draper et al., 2019; Jellison et al., 1984). These areas of research could be expanded to provide empirical support to the recommendations of PMI as a best practice in music education for students with ASD (Adamek & Darrow, 2018; Hammel & Hourigan, 2011, 2013; Hourigan & Hourigan, 2009). Music education researchers could also examine peer-based intervention strategies already being implemented in general music classrooms and ensembles for their effectiveness with students with ASD. For example, reverse inclusion ensembles, in which students without disabilities support peers with disabilities in ensemble participation, provide excellent opportunities to examine this approach for students with ASD with only minor adjustments and/or a small amount of additional training for peers.

The Autistic Voice

I identified ten studies that featured the important perspectives of students with ASD regarding their school experiences. Students with ASD of all ages shared experiences of feeling anxious, stressed, isolated, bullied and excluded in school settings (Adams et al., 2019; Goodall, 2018; Goodall & MacKenzie, 2019; Healy et al., 2013; Hill, 2014; Myles et al., 2019). Students indicated they felt school environments were unpredictable and overwhelming and reported feeling unsupported, unnoticed, and unwanted by teachers (Goodall, 2018). Students expressed a

desire for friendships just like typically developing peers (Myles et al., 2019) but often felt isolated from and bullied by peers. Students felt this was exacerbated at times by teaching practices that utilized separate classroom and remedial work during social time (Goodall, 2018).

Females with ASD experienced challenges with interpreting "hidden curriculum," which is comprised of implicit understandings regarding things like rules and customs or fashions and trends that are not taught directly yet assumed to be known (Moyse & Porter, 2015). This is likely related to the ways in which ASD presents differently for girls (Gould & Ashton-Smith, 2011). Girls may mask their challenges by developing coping mechanisms such as becoming observers, internalizing anxiety, or behaving like social chameleons (Solomon et al., 2012) making it less likely that educators recognize when girls with ASD are struggling due to impairments associated with this diagnosis (Moyse & Porter, 2015).

School philosophy and class context had impact on the perceptions of students with ASD. Students with ASD in a school with a philosophy of inclusion indicated they felt their experiences and benefits were similar to peers without disabilities (Dillon et al., 2016). The experiences of students in an adaptive physical education (APE) program were primarily positive with students reporting enjoyment in participation, valuing the sensory benefits of physical activity and the use of skills they learned in APE during recess with peers (Blagrave, 2017).

Students made recommendations regarding ways teachers could better support students with ASD including an awareness of sensory issues, recognizing that a "once size fits all" approach is not appropriate for all students, and the social challenges associated with ASD may make situations like choosing a partner difficult and be further stigmatizing for a young person with ASD in school (Goodall, 2018; Goodall & MacKenzie, 2019). In peer-based learning, high

school students preferred recruitment of peer groups based on similar interests over teachers assigning a group or the groups being constructed from preexisting peer groups (Bottema-Beutel et al., 2016). The students with ASD in Bottema-Beutel et al.'s study indicated they would rather meet in peer groups without an adult, much like most high school students, and favored learning social skills via shared activity with peers over direct instruction.

The researchers utilized a variety of creative approaches to "gain authentic knowledge about children's subjective realities" (Goodall & MacKenzie, 2019, p.502). Interviews were conducted using technology-based mediums such as video chat, instant message, and email (Bottema-Beutel et al., 2016; Goodall & MacKenzie, 2019) to eliminate the pressure of face to face interviews. Photo elicitation was a technique in which students took photos of places around the school that were subsequently used as talking points (Hill, 2014; Moyse & Porter, 2015). Students were given drawing prompts regarding their experiences and feelings which were used to guide interview conversations (Blagrave, 2017; Healy et al., 2013). In addition to interviews, researchers used participatory activities to reduce anxiety so that students with ASD felt safe to engage with the interviewer (Goodall, 2018; Goodall & MacKenzie, 2019; Healy et al., 2013; Moyse & Porter, 2015) and supported the students in "accessing and representing different levels of experience" (Bagnoli, 2009, p. 547). Goodall (2018) and Goodall and MacKenzie (2019) developed unique participatory activities which are detailed in Table 3-2.

Table 3-2

Participatory methods of data collection (Goodall, 2018; Goodall and MacKenzie, 2019)

Activity	Description
Beans and Pots Activity	Participants respond to statements by placing a ball in one of three pots to choose true, not true, or unsure. The options are visually supported with a thumbs up, thumbs down, and question mark respectively.
Diamond Ranking	A ranking exercise in which participants utilize a diamond shaped grid to indicate preference.
Good Teacher, Bad Teacher	Participants are given two generic outlines of a figure and invited to draw, add words, feelings, and descriptions to describe the characteristics of a good and bad teacher.
Me at School	Participants are invited to produce a drawing of themselves at school. They are encouraged to add written descriptors and then orally describe the drawing.
Design Your Own School Activity	Participants freely express, through drawing, the kind of school they would like (the ideal school).

Discussion

This body of research illustrates that understanding education for students with ASD is not just doing research *about* these students. To truly understand how education is experience by students with ASD it is critical to include their voices in the discourse. These researchers made use of approaches that provided multiple avenues of expression in order to truly represent the intent of these participants. An important finding was the recognition of differences in presentation of the diagnosis among girls with ASD and how that influences their educational experiences. Student reports of anxiety, stress, feelings of isolation, and disempowerment speak volumes about the ways in which education needs to continue to evolve to support the learning experiences of students with ASD. To ameliorate these challenges, students within these studies offered a variety of recommendations for ways to better support their learning and overall experience in schools. Considering these voices offers valuable insights for changing the landscape of educational experiences for students with ASD, not to normalize, but to offer better educational support for this population.

It is critical that we follow the lead of colleagues in general education and seek to incorporate the perspectives of students with ASD in music education research. First-hand perspectives were collected through the use of technology to mitigate anxiety and stress (Bottema-Beutel et al., 2016; Goodall & MacKenzie, 2019), by using photographs and drawings to elicit conversation (Blagrave, 2017; Hill, 2014; Moyse & Porter, 2015), and through a variety of participatory activities that offered multiple avenues of communication and understanding (Goodall, 2018; Goodall & MacKenzie, 2019; Healy et al., 2013; Moyse & Porter, 2015). In researching Venda children's music, Emberly (2014) utilized similar approaches as children

were encouraged to video and interview one another. Emberly noted, "Giving children a choice in how they participate offers the possibility for comprehensive insight into their musical worlds" (p. 12). The inclusion of the voices of people with ASD has been the focus of ethnomusicologist Bakan's (2018) recent work *Speaking for Ourselves: Conversations on Life, Music, and Autism*. The book offered valuable insights into musical experiences of individuals with ASD. Bakan's flexible approach to interviews (e.g. chat sessions) was similar to the myriad of strategies used by researchers in this review. Adopting these approaches in future research with students with ASD will be valuable for collecting data that more authentically represents the lived musical experiences of this population.

Conclusions

The purpose of this literature review was to examine empirical evidence drawn from general education of best practices for the education of students with ASD and explore how it could inform future research in the field of music education. A key component of the Every Student Succeeds Act (ESSA) (PL 114-95) is the use of Evidence Based Interventions. Educational researchers have answered the call of this legislative mandate, and rigorously examined educational practice in an effort to support the teaching and learning of students with ASD. Although music education has not been subjected to these mandates per se, the field is a part of education at large and there is value in generating research that provides empirical support of best practice for the *musical* education of students with ASD.

Research from the field of education has examined teacher directed approaches, the use of intervention tools to support teaching and learning, and peer-based interventions for students with ASD. Many of these approaches, tools, and interventions have been explored within music

education practice as well and the research efforts of colleagues in general education offer valuable insight into avenues for future research examining music education for students with ASD. The EBIs and tools included in this review may be useful for a variety of disabilities, however given the proclivity towards music for individuals with ASD (Heaton, 2003, 2005, 2009; Stanutz et al., 2014) cultivating empirical evidence of strategies for musical development of this population to support the best practice recommendations will be informative for preservice preparation and in-service practice.

Educational scholars utilized a multitude of techniques to elicit the voices of individuals with ASD in their research. Music education scholars can follow this blueprint to prioritize research that incorporates these critical voices in the discourse. Importantly, if we truly believe that music education belongs to all students, including students with ASD, then it is our responsibility as a field to fully investigate the ways in which we can effectively provide instruction and support that nurtures their musical development. Cultivating a body of best practices that are backed by empirical evidence ensures that music education is accessible for students with ASD, is comparable to that of their typically developing peers, and is considered valuable by the Autistic musicians themselves.

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Appendix A

Supplemental Table 1

WONDER participants, October 2015-June 2018

Student	Age at Time of Interview	Instrument	Parent
Alice*	29	Piano	María*
Sammy	9	Piano	Brad*
Izzy	13	Piano	Alena*
TJ*	17	Piano	Linda*
Caroline	12	Piano	Una*
Louisa*	10	Piano	Julieta*
Sonya*	8	Piano	
Billy*	23	Piano	Alicja*
Carla	31	Guitar	Jess
Katy	18	Piano	Kathy*
Annie	22	Piano	
Ella*	34	Piano	Aleksander*
Michael*	17	Glockenspiel & Boomwhackers	Suzanne*
Clare*	22	Harp	Sharon*
Parker	14	Piano	Allison
Christopher	13	Violin	Maureen
Connor	13	Piano	

*Denotes students and parents who were interviewed for this study.

Volunteers	Major
Bethany+	Integrated Science and Biology
Andy+	Biology/Premed and Saxophone Performance
Meghan+	Horn Performance and Environmental Science
Chrissy+	Psychology, Science and Human Culture, and Integrated Marketing and Communications
Kurt+	Biology
Laura+	Piano Performance and Cognitive Science
Susan+	Violin Performance and Human Development and Cognition
Camille+	Music Cognition and Music Education
Louise+	Neuroscience and Music Theory
Betsy+	Music Education and English
Melissa+	Biology/Premed and Chinese Language
Gregory+	Radio/TV/Film and Premed
Van+	Violin Performance and Biology/Premed
Jodi+	Music Education
Kamaya+	Flute Performance and Neuroscience
Lilly+	French Horn Performance and Neuroscience
Elsa+	Neuroscience and Human Development and Cognition
Brian+	Arts Administration, Commercial Music, and Integrated Marketing and Communications
Jason	Biology/Premed
Kellie	Music Education, Trumpet Performance, and Journalism
Peter	Economics and Saxophone Performance
Jessica	Neuroscience and Legal Studies
Vincent	Mathematics
Malia	Viola Performance and Cognitive Science
Courtney	Music Education, Saxophone Performance, and Social Policy
Ben	Biology/Premed and Music
Emily	Human Development, Global Health, and English
Topher	Music Education
Julie	Psychology and Spanish
Mike	Biology/PreMed
Mary	Saxophone Performance and Biology

+Denotes member of the Executive Board at some point in the 3-year data collection.

Appendix B

Paper 1

Institutional Review Board Approval

Institutional Review Board Office
Northwestern University

Biomedical IRB
750 North Lake Shore Drive
Rubloff Building, Suite 700
Chicago, Illinois 60611
312-503-9338

Social and Behavioral Sciences IRB
600 Foster Street
Chambers Hall, Second Floor
Evanston, Illinois 60208
847-467-1723

NORTHWESTERN
UNIVERSITY

APPROVAL OF NEW STUDY

DATE: May 25, 2016

TO: Dr. Sarah Bartolome

FROM: Office of the IRB

DETERMINATION DATE: 5/25/2016

APPROVAL DATE: 5/25/2016

EFFECTIVE DATE: 5/25/2016

EXPIRATION DATE: 5/24/2017

The Northwestern University IRB reviewed and approved the submission described below:

Type of Submission:	Initial Study
Review Level:	Expedited
Expedited Category:	- (6) Voice, video, digital, or image recordings - (7) Behavioral research/social science methods
Title of Study:	Academy of Music and Art for Special Education: An Ethnographic Exploration of the History, Philosophy and Benefits of an Individual Music Instruction Program for Children with Disabilities
Principal Investigator:	Sarah Bartolome
IRB ID:	STU00202832
Funding Source:	School of Music
Grant ID:	
IND, IDE, or HDE:	None
Documents Reviewed:	• AMASE IRB V6 5-25-16.pdf, Category: IRB Protocol; • AMASE Recruitment Letter.pdf, Category: Recruitment Materials; • AMASE IRB Interview Protocols (1).pdf, Category: Interview; • AMASE Consent Adult.pdf, Category: Consent Form; • AMASE IRB Survey.pdf, Category: Questionnaire/Survey; • AMASE Consent ParentChild.pdf, Category: Consent Form.
Special Determination(s):	Children;

Appendix C

Paper 1

Participant Recruitment Letter

Henry and Leigh Bienen School of Music

Northwestern University
Patrick G. and Shirley W. Ryan Center for the Musical Arts
70 Arts Circle Drive
Evanston, Illinois 60208-2405

Phone 847-491-7575
Fax 847-491-5260
www.music.northwestern.edu

NORTHWESTERN UNIVERSITY

October 1, 2016

Dear Parents and Students of AMASE,

Beginning this quarter, The Academy of Music and Arts for Special Education (AMASE) will be involved with a research study conducted by Dr. Sarah Bartolome and Amanda McClintock from the Bienen School of Music at Northwestern. Over this academic year, we will be observing lessons and ensemble times as well as conducting interviews with volunteers, parents, and students. The goal is to develop a record of the history and philosophy of AMASE at Northwestern as well as understand the impact and benefits of the program for volunteers, students, and families. Observations and interviews will be conducted each Saturday throughout the 2016-2017 school year. Participation in the study is entirely voluntary. Should you have any questions or concerns please don't hesitate to be in contact with Sarah at sarah.bartolome@northwestern.edu or by phone at (617) 755-4616.

Sincerely,

Dr. Sarah Bartolome
Assistant Professor, Music Education
Northwestern University

Amanda McClintock
PhD Student, Music Education
Northwestern University

Appendix D-Paper 1 Semi-Structured Interview Protocol

AMASE Student Semi-Structured Interview Protocol

1. How long have you been in the AMASE Program?
2. When you come to AMASE on Saturday, what do you do here?
3. Why are you in the AMASE Program?
4. Do you like it? Why/Why not?
5. Tell me about your instrument
6. Tell me about your lessons
7. Tell me about your teacher
8. What is special about being in AMASE?
9. To you, what is the most important part of being in AMASE?
10. What is hard/difficult about being in AMASE?
11. What do you get/gain from being a part of AMASE?
12. What have you learned from being in AMASE?
13. Do you have special friendships that have grown out of AMASE?
14. What does being in AMASE mean to you? How has it affected you?

AMASE Parent Semi-Structured Interview Protocol

1. How long has your child been in AMASE?
2. Why did your child join AMASE?
3. Why do you want your child to be involved with AMASE?
4. What do you see as the benefits of AMASE participation?
5. Do you as parent gain from your participation in the AMASE community?
6. What does your child gain from his/her involvement in AMASE?
7. How has the AMASE experience affected your child? (Personally, academically, musically, socially)
8. What challenges does your child experience in participating in AMASE?
9. What do you see as your role as a member of the AMASE community?

AMASE Volunteer Semi-Structured Interview Protocol

1. How long have you been involved with AMASE? Why did you join? Why have you stayed?
2. What so you see as the benefits of participation for the children?
3. What are the goals of the lessons?
4. What is your role in the AMASE community?
5. What is your philosophy with regard to the work you do here?
6. What are your impressions of the AMASE community overall?
7. What do you think of the parent community?
8. What do you see going on socially among the children?
9. Are there any challenges associated with membership in this community?
10. What do you gain from your experience with AMASE?
11. What do you learn from your experience with AMASE?
12. Does participation in AMASE fit into your professional goals?

Appendix E

Paper 2

Institutional Review Board Approval

Northwestern | RESEARCH

Northwestern University
Institutional Review Board
Biomedical IRB
750 N. Lake Shore Dr., 7th Fl.
Chicago, Illinois 60611

irb@northwestern.edu
Office 312. 503. 9338

Social & Behavorial Sciences II
600 Foster St., 2nd Floor
Evanston, Illinois 60208

sbsirb@northwestern.edu
Office 847. 467. 1723

APPROVAL OF NEW STUDY

DATE: February 27, 2018

TO: Dr. Sarah Bartolome
FROM: Office of the IRB

DETERMINATION DATE: 2/27/2018
APPROVAL DATE: 2/22/2018
EXPIRATION DATE: 2/21/2019

The Northwestern University IRB reviewed and approved the submission described below:

Type of Submission:	Initial Study
Review Level:	Expedited
Expedited Category:	- (5) Data, documents, records, or specimens - (6) Voice, video, digital, or image recordings - (7) Behavioral research/social science methods
Title of Study:	Exploring Stakeholder Perspectives of Musical Experiences for Students with Autism Spectrum Disorder in Self-Contained, Inclusive, and Mainstream Contexts.
Principal Investigator:	Sarah Bartolome
IRB ID:	STU00206659
Funding Source:	Name: School of Music
Grant ID:	
IND, IDE, or HDE:	None
Documents Reviewed:	• Teacher Recruitment Email, Category: Recruitment Materials; • Teacher consent, Category: Consent Form; • Parent/Child Consent, Category: Consent Form; • Additional Staff Recruitment Email, Category: Recruitment Materials; • Other Adult Consent, Category: Consent Form; • Music Ed ASD Interview Protocol, Category: Interview; • Music Ed ASD IRB, Category: IRB Protocol; • Parent/Student Recruitment Email, Category: Recruitment Materials; • Other Adults/Students Notice, Category: Recruitment Materials; • Child Assent Script, Category: Consent Form;
Special Determination(s):	Children;

Appendix F

NORTHWESTERN UNIVERSITY

RECRUITMENT EMAIL

Email Subject: Participation in a Study Exploring Perspectives of Musical Experiences for Students with ASD

Project Title: Exploring Stakeholder Perspectives of Musical Experiences for Students with Autism Spectrum Disorder in Self-Contained, Inclusive, and Mainstream Contexts

Principal Investigator: Dr. Sarah J. Bartolome

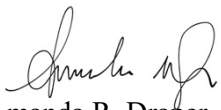
Co-Investigator: Amanda R. Draper

Dear [name of parent],
I am Amanda Draper a PhD Candidate at Northwestern University's School of Music. Your child's music teacher, [music teacher], indicated you and your [daughter/son] may be willing to participate in a study I am conducting examining [music educator's] work with students with autism spectrum disorder. I would like to invite you to participate in this study exploring the purpose, goals, and expectations of music education for students with autism spectrum disorder. I am not offering compensation, but your participation will help me to learn more about parent and student perceptions of music education for students with ASD in various teaching contexts.

I am observing [music teacher] and her/his work students with ASD in self-contained, inclusion, and mainstreamed contexts over a 16-week period. I would like to interview you to discuss your thoughts about music education for your child and other students with ASD. The interviews should take about an hour. Additionally, I would like to observe [music teacher] teaching your student during the 16-week period. If appropriate, I would like to interview your student as well. That interview should take no more than 30 minutes.

If you are willing to participate, please reply to this email. A consent document is attached for you and your child. You may fill it out and return it via email or I can get it from you in person. Participation is voluntary and you may choose to withdraw at any time. If you have questions at any point please contact me at (319) 360-4331 or by email at adraper2014@u.northwestern.edu.

Thank you for your consideration,



Amanda R. Draper
PhD Candidate, Music Education
(319) 360-4331
amcclintock2014@u.northwestern.edu
Research supported by: Bienen School of Music, Northwestern University
Study Number: STU0020665

Appendix G

Tower Semi-Structured Interview Protocols

Questions for Music Educators

1. What is your background in music education? How long have you taught?
2. What is your experience with children with autism spectrum disorder?
3. What objectives do you have for working with a child with ASD?
4. What goals do you have for your work with a child with ASD?
5. What are the benefits (if any) of musical experiences for children with ASD?
6. What is the purpose of music education for children with ASD?
7. What are the benefits for [this child with ASD] in your mainstream/inclusive/self-contained context?
8. What challenges do you or [this child with ASD] face with her/his participation in music?
9. How do you feel the class context impacts your work with a child with ASD?
10. What are your expectations when working with a child with ASD?

Questions for Administrators

1. What is your background in administration?
2. What is your experience with children with autism spectrum disorder?
3. In what ways are children with ASD involved in music in your program?
4. What are your expectations for your staff when working with a child with ASD?
5. What are the benefits of music for children with ASD?
6. What are the goals your program has for music for children with ASD?
7. What is the purpose of music in your program for children with ASD?

Questions for Special Education Teacher/Classroom Teacher

1. What is your background in education?
2. What is your experience with children with autism spectrum disorder?
3. How do you work with the music educator and students with ASD?
4. In what ways are your students with ASD involved in music?
5. What are the benefits of music for children with ASD?
6. What are the benefits/challenges of music for [this child with ASD]?
7. What is the purpose of music education for your students with ASD?

Questions for Parents

1. How long has your child been involved in music?
2. In what ways has your child been involved in music?
3. What are the benefits of music for your child?
4. What are the challenges of music for your child?
5. What do you feel is the purpose of music for your child?
6. How available was the access to music education for your child?
7. What are your expectations of your child's music education?

Questions for Students

1. Tell me about your music class.
2. What do you like/not like about music?
3. What do you like/not like about music class?
4. How does music help you?
5. What have you learned or want to learn about music?
6. Do you think music is something you should do? Why?

Appendix H-Paper 3

Supplemental Table 1

Inclusion and exclusion criteria adapted from Bond et al. (2016) and Parsons et al. (2009)

Subject Area*	Specific Terms	
Terms for ASD's	Autistic spectrum disorder/s or conditions (ASD/s) (Classic) Autism Autistic Atypical autism	Asperger(s) syndrome (AS) High functioning autism (HFA) Kanner's autism/syndrome
Terms for children and young people	Young children Child Middle childhood Pupils Youth Students Pre-adolescents Learners	Adolescents Teenagers Young people Young adults Girl(s) Boy(s) Individuals
Terms for indications of outcomes	Learning Behavior/behaviour Participation Improvement Gains Outcomes Attainment Progress Development Results Benefits Effectiveness Fail Follow-up Longitudinal Success Achievement	Engagement Motivation Attitude Drop-out Confidence Self-esteem Attendance Inclusion Skill Independence Social Generalization/generalisation Increase Decrease Modification

Subject Area*	Specific Terms	
Terms for educational provisions (place/type of provision—not already stated above)	Instruction Pedagogy Multidisciplinary Teaching/classroom methods/approaches Educational practices or strategies Curriculum Classroom or learning environment Comprehensive Mainstream/ing Ordinary Inclusive education Inclusive education/al programme/s	Integrated Reverse integration Reverse inclusion Dual enrolment Individual education plan (IEP) Inclusion Resource teacher Special needs assistant Segregated Special school/class/unit Specialist Teacher/staff/classroom assistant training Outreach Community
Terms for type of study	Intervention Evaluation Training Learning Skills Development	Tutoring/mentoring Tuition Curriculum Program/me Survey Course
Exclusion terms	Pharmacology Psychopharmacology Psychological assessment Clinical Medical Screening Prevalence Epidemiology Immunization/Immunisation MMR	Genetics Eating disorder Sleep disorder Pesticide Peptide Neural Cortical Fragile X XXY

Note that terms within each box are "OR" terms for search purposes, that is papers included for example, (ASD OR autis OR Atypical OR high functioning…etc). Searches for each set of terms within boxes were carried out separately and then the searches were combined, that is searches between boxes are "AND" terms.