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## Using a Therapeutic Music Curriculum to Improve the Social and Academic Skills of Students with Optic Nerve Hypoplasia/Septo Optic Dysplasia

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USING A THERAPEUTIC MUSIC CURRICULUM  
TO IMPROVE THE SOCIAL AND ACADEMIC SKILLS OF STUDENTS WITH  
OPTIC NERVE HYPOPLASIA/ SEPTO OPTIC DYSPLASIA

By

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A capstone submitted in partial fulfillment of the requirements for the degree of Master  
of Arts in Education.

Hamline University

Saint Paul, Minnesota

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## **CHAPTER ONE**

### **Introduction**

#### **Overview**

In the fall of 2012, I accepted a position working as a paraprofessional for a second grade girl with visual impairment, who we will call for the purposes of this paper, Mary. Though I had twenty years of experience in the classroom as an elementary teacher and later as a high school music teacher, this was my first time dealing with the world of special needs education.

Mary was charming and assertive. Spending time with her, I soon became aware of her challenges in communicating. In fact, it became apparent after only a day or two that her needs were broader than just not being able to see. In fact, the vision specialist in the district began to suspect Mary was on the autism spectrum, and, as a result, would need special education services for difficulties in communicating and relating to others as well.

In this chapter I will describe Mary's behaviors and how I learned to control them in the classroom. I will explain why I became interested in helping her and others with similar disabilities. I will also share how, even with Mary's challenging and sometimes-unacceptable social reactions, and her various other health complications related to optic nerve hypoplasia/septo-optic dysplasia (ONH/SOD), she was blessed with an extra measure of musical ability. As I struggled to help manage Mary's behaviors, I realized

that her musical potential could be leveraged to help her other behaviors. My focus question then became, could a therapeutic music curriculum be used to improve the social and academic skills of students with optic nerve hypoplasia/septo-optic dysplasia?

### **Getting to Know Her**

Mary appeared to not know how to interact normally with the world around her. If you spoke to her directly, she might or might not answer you or say something completely inappropriate or off-topic. Mary brazenly questioned each person she met asking how old they were. When something didn't happen the way she thought it should she might refuse to move or she would yell. Out of frustration, she threatened to strike other students or teachers at least weekly, (although I never did observe her carrying through on her threat).

Each day became a new challenge that left me exhausted. The smallest actions, such as climbing the stairs to the second floor where the Vision Specialist waited for her and their one-hour, twice day sessions, became an exhausting exercise in cajoling and promises and threats. Every transition was a painful ordeal. Once Mary was settled in her vision classroom, she didn't want to leave. After she did leave, it was another ordeal to make the trek to the first floor again where her mainstream teacher waited. Into this room's contented hum of activity my charge would uncooperatively barge in with loud fanfare.

### **What Could We as Professional Educators Do?**

Many who observed Mary made comments about how she behaved, and unfairly connected Mary's school behavior to how discipline must be lax at home. I listened to their helpful suggestions and tried to keep an open mind, but I knew after a week spent with Mary as her one-on-one paraprofessional, that this was not just a spoiled child. I'm certain some people dreaded seeing and hearing us barrel down the hallways, destroying the peace. Mary might be yelling, twirling her cane (a definite no-no in the world of the visually impaired), loudly singing or talking, and generally creating havoc wherever she went.

It could take her an hour in the restroom to take care of her daily needs. I would stand outside the door, and hatch new methods of bribery to encourage her to finish so we could go on to the next activity. Once out of the restroom, we might need to take 15 minutes to walk the 10 feet to the next classroom where the vision specialist waited. Whole class periods and recreation breaks were spent in this fashion.

The vision specialist, who was only in her second year in her position, and I, put our heads together and tried to develop ways to channel her appropriately. We used the usual special education tools of earning stars and "special", which was a time apart from the regular classroom doing her favorite thing as a reward. We had a notebook where each day's activities were spelled out in detail, and where Mary would be able to look ahead to see what the day held.

Finally, the Vision Specialist and I started using a method where Mary started out with 10 small candy treats each morning, which could be lost one at a time for

inappropriate behavior. The immediate consequence for her actions seemed to resonate with her by comparison with earlier reward methods. I had found it less effective to promise a reward at the end of the day or in two hours. The effect of losing a candy stopped her in her bad-behavioral-tracks. And, of course, sometimes she was able to earn back those lost candy by being very good and doing exactly what she knew all along was expected of her.

It was a very good day when she had all ten candies still in her possession, which she was allowed to pocket or eat on the spot at the end of the day. This seemed to work the best of all the things we tried, and for the longest stretch of time. She needed the immediate consequences, combined with other incentives and "specials" spread throughout the day, to keep focused enough to improve her behaviors.

### **Music and its Place**

I became interested in her diagnosis, ONH/SOD, a type of congenital blindness where the optic nerve does not develop normally. This abnormal development results in an undersized optic nerve, which limits or precludes sight. In addition, in Mary's diagnosis, health concerns focused on the pituitary gland, which is responsible for regulating hormones. This led Mary to be very small for her age and require hormone therapy to grow normally. Also, due to the underdevelopment of her pituitary gland, Mary's mother was very concerned with her urine output. She wanted staff to log and report to her if Mary was unusually thirsty and whether she was requesting bathroom stops. Extreme thirst or lack of urination could signal a problem with her pituitary.

## **Special Talents**

One positive and interesting aspect of this type of blindness, however, was the link between it and strong musical aptitude. (Pring & Ockleford, 2005.) In her case, she was almost savant-like. Mary loved to sit down at the piano, play tunes she had heard, and compose new songs. If she heard a song she liked, such as the theme from a favorite children's show, she could easily play it back for you.

Being a long-time music teacher, I was charmed and fascinated by her ability. How could someone who had never seen a keyboard or a note on a page play so effortlessly and musically? Mary used both hands correctly, adding chords in the left hand and quickly correcting incorrect piano chords. I suspect that Mary had absolute pitch after hearing her advise the classroom music teacher what note to play next on a piece the students were composing together.

Her mother informed me that Mary had taken piano lessons the year before, during her first grade year, and she would like her to resume lessons; however, lessons would not be an easy task or option for her piano teacher with Mary's obsessive and demanding nature. Though I didn't feel it would be best for me to teach Mary lessons, I began to conceive of ways to use her special talents to help improve her behaviors.

And indeed, I did use her love of playing the piano as an end of the day-reward for not losing all of her treats. There was a spinet piano buried in the bowels of the school. Luckily, everyone in the school was aware of her challenges and was tolerant of this last 10 minutes of the day disruption because of her unique musical ability. Mary

would sit down at the piano and drift off into a world of her own, making up silly songs and sometimes playing tunes from videos she had “seen” that day. It was always a strong way to end the day with little push back or manipulation involved. After the session, Mary would happily gather her things and make her way to the door.

Many nice comments came her way about her playing: “How pretty it sounded.” Mary didn’t know how to acknowledge the praise, and instead of saying “Thank you” she might bob her head and talk about something else; however, her expressive eyes and her delighted smile revealed she was pleased at the attention. It established Mary as a star in the eyes of the students in her classroom and the larger student body of the school.

### **Another Challenge**

Through research and in discussion with the vision specialist, I found that ONH/SOD also correlated strongly with children being born on the autism spectrum (Fink & Borchert, 2011). As we spent more time with Mary, the vision specialist and I began to believe that this was my student’s diagnosis as well. In fact, the vision specialist began to believe that her primary diagnosis should be on the autism spectrum. She believed ASD had more impact on her behaviors than the vision challenges.

Further reading on ONH showed that students born with this diagnosis often also had learning deficits (Bahar et al., 2003). In Mary’s case, even though it was challenging to get her to accomplish much in a classroom setting because of her disruptive behaviors, she was close to being on the same level academically as the rest of the second grade students. One example highlights her spelling ability: when we worked with her to learn

her spelling words we practiced with her during the week and her mother worked with her on them at home in the evenings. When the day came to “write them” in braille, she would have them memorized and could go ahead and type them before I dictated the words.

Mary also had remarkable skills when it came to recall and memory in playing games specifically tailored for blind children. The vision specialist who came to work with her was often amazed at the level of comprehension she displayed, even when it appeared she wasn’t listening to anything that was being said.

### **And There is More**

One of the other factors in working with Mary was that she was incredibly sensitive to loud noises, which is another common data point with autism spectrum students. Sensory overstimulation is common for those with ASD (Bahar et al., 2003). In particular, she would react when she attended gym class. Normal laughing and screaming of second graders at play was exaggerated by the walls and floor of the gymnasium into a cacophony of sound that triggered screams of frustration and pain. She would plead for me to tell the other students to stop “being so noisy”. I would try to reason with her to no avail.

Another very difficult venue for Mary was any concert or gathering where there was clapping or cheering. It took a great deal of bribery and preparation ahead of time for her to learn to sit in an all school event without screaming in pain, fingers jammed into her ears, and body writhing. Mary, instead, learned to cover her ears and scrunch her face

up until the clapping and hollering ended; consequently, I would affirm how great she did and would reward her with a treat. Mary's pain-indicating screaming behavior was somewhat puzzling for others and me because she was also capable of creating plenty of noise, with no regard for how it affected those around her. It was not uncommon for her to run around with her friends holding her hands, and laughing and screaming uproariously.

### **Conclusion**

I have begun to wonder how to help students with this diagnosis. Would music be a way to engage and motivate students born with ONH/SOD? William Shakespeare said that "music has charms to soothe the savage breast" in us. Are there scientific studies to support what this famous poet/playwright touted? What studies have been done that use the innate musical abilities that many students with ONH/SOD possess, to help them be able to focus, enhance their social interactions, and increase their academic success.

As I am a music teacher myself, I have a strong interest in knowing how music can be used to improve the lives of those who are born with this challenge. In this Capstone Curriculum I will explore the use of therapeutic music in improving the social and academic behaviors for students born with ONH/SOD. In this next chapter, I will explore the literature around the use of music in the treatment of students with ASD and by extension, students with ONH/SOD.

## **CHAPTER TWO**

### **Literature Review**

#### **Overview**

In this chapter I will explore whether visually challenged children are born with a natural talent and affinity for music. I will establish a link between children with ONH/SOD and children with autism spectrum disorder (ASD), and I will research whether studies have shown that therapeutic music can be used to improve the social and academic outcomes of students with ONH/SOD.

While working in a public school as a paraprofessional for a child with ONH, I was expected to find ways to help the student succeed academically. More importantly, though, my student's vision specialist impressed upon me that to help this child succeed, I also needed to help the child navigate socially in the classroom, in the lunchroom, on the playground, and in personal relationships.

As part of the process of getting to know my charge, I discovered the student had a natural ability to play the piano and likely possessed absolute or perfect pitch. Being a former music teacher, I was naturally intrigued by this discovery. Out of this experience my question became, could a therapeutic music curriculum be used to improve the social and academic skills of students with optic nerve hypoplasia/septo-optic dysplasia?

#### **What is ONH?**

Magnus was the first to describe, in 1884, a condition in a small child where there was a pale optic nerve and unilateral retinal vessels (blood vessels leading to the

retina on only one side), which we now know as optic nerve hypoplasia (ONH).

(Magnus, 1884; Bahar et al., 2001). In the next 50 years, only 15 cases of ONH were reported.

In 1941, the absence of the septum pellucidum (a thin membrane located at the midline of the brain), in a seven-month-old infant was reported, along with the underdevelopment of the optic nerve. This was identified as septo-optic hypoplasia (SOD) (Savleen et al., 2013). When there are midline anomalies of the brain like the absence of the septum pellucidum and the corpus callosum, along with neurological impairment including endocrine dysfunction (major glands such as the ovaries, pituitary, and pancreas) and developmental delays, the diagnosis becomes septo-optic dysplasia (SOD) (Fink, 2011).

### **Commonly Observed Behaviors in Children with ONH/SOD**

Though at one time considered very rare, ONH/SOD has become more common and affecting approximately 1 in 16,000 children, (Pring & Ockleford, 2005) or 10.9 per 100,000 in the developed world (Patel et al., 2006). Consequently, due to the increased frequency of diagnosis, vision specialists are becoming more familiar with its special challenges. Commonly observed behaviors in children with these disorders include some or all of the following characteristics:

- Moderate to severe delays in information processing
- Extreme tactual and auditory defensiveness
- Difficulty with transitions

- Rigid adherence to routine
- Strong interest in rhythms and music
- Restricted food preferences and eating problems related to an aversion to textured foods
- Avoidance of social interaction and engagement
- Profound distractibility
- Mild hypotonia (low muscle tone)
- Developmental delays in motor functioning
- Lack of initiative in exploring their environments
- Enjoyment of swinging
- Lack of spontaneity in verbal interactions

(Behar et. al., 2003)

### **Children Who Are Early Blind and Musical Talent**

**An example of early blindness on musicality.** According to Pring and Ockelford (2005), there is evidence that individuals with profound visual impairment have more efficient auditory perceptual processing skills than sighted individuals. Furthermore, musicians and people who are blind have been found to possess increased excitability in the neural systems compared to people who are sighted and non-musicians (Roder & Rosler, 2003). Perhaps this is because in the absence of visual information, children who are blind have a heightened sense of auditory stimuli.

If the child is young when they become blind, there seems to be a distinction that the younger the child the better. (Belin et al., 2004). There has commonly been a belief that those who are blind when very young have a special knack for music (Ockleford, 1988; Craig, 2013), and a significantly higher incidence of perfect pitch. Belin, 2004 was part of a study that provided the first hard evidence that those who are blind from an early age have a higher incidence of perfect pitch or absolute pitch (AP). AP is defined as the ability to identify a particular pitch of the Western musical scale without any external reference tone (Hamilton et al., 2004).

**Students who are blind are better at choosing rising or falling tones.** In his study, where students were given two pure tones and asked to decide if the tones were rising or falling, early blind performed significantly better than those who were later blind or sighted. The results suggest that the lack of early visual input allows the brain to compensate by changing its wiring for sound (Belin et al., 2004).

Oliver Sacks describes an example of this in his book, *Musicophilia*, sharing the effects that blindness had on his friend, Jerome Bruner. In addition to Jerome's many gifts, he was immensely gifted in music. When Dr. Sacks inquired about this special ability, he discovered that Jerome had been born with cataracts and was blind until he was two years old. This, Mr. Sacks thought, forced Jerome to focus on sounds of all sorts, especially voices and music. This focus stayed with him throughout his life (Sacks, O., 2009).

Research seems to suggest that students with ONH/SOD are or may be born

with a natural knack or affinity for music, and research has uncovered that autism spectrum disorder (ASD) children also process ordinary sounds as music, even using music as a proxy language in some cases (Ockleford, A., 2011); Consequently, I will draw a comparison between those who are born with ONH/SOD and those who are born with autism spectrum disorder (ASD).

**Perfect pitch.** It is generally accepted that one out of 10,000 people in the regular population have absolute pitch and that roughly 20% of people in the musical population have perfect pitch. In contrast, it has been discovered that up to 40% of children who are blind possess perfect pitch (Ockleford, 1988). Ockleford states that, “Perfect pitch is not a prerequisite for great musicianship, but it is necessary in the development of exceptional musicality among people with learning difficulties.”

### **Increased Musical Interest**

There are researchers who believe that it is possible that being blind contributes to special musical abilities and there is some data that supports this assertion (PrIng, L., and Ockleford, 2005; Ockleford, 2011). Hamilton’s study, from a sample of 46 early blind students, 21 who had musical training, 12 of the early blind students or 57% reported having absolute pitch, a significantly increased prevalence compared to sighted musicians. (Hamilton et al., 2004). In a study conducted by Pring & Ockleford in 2005, they set about to establish whether children with SOD had a medical condition that also included unusually high levels of musical interest or ability. And if they did, what were the implications for parents, teachers, therapists and others (Wigram, Gold, & Elephant,

2006).

### **Survey of Parents**

As their first step, Pring and Ockleford instituted a series of informal visits to meet some of the children and families they had heard from earlier at a music and early communication workshop. They developed a questionnaire to be mailed or filed electronically so that the parents could self-report their observations.

**Music is important.** In this Pring and Ockleford questionnaire, parents noted select observations repeatedly. First, children who were blind showed a significantly greater interest in environmental sounds than did either the children who were partially sighted or the sighted controls. Second, analysis showed that there was significantly more interest in music by the children who were blind compared to those who were fully sighted (Craig, 2004; Ockleford, Welch, Pring, 2005).

Third, in the view of parents, blind children and young people with septo-optic dysplasia were significantly more likely to find music important for comfort, stimulation, socialization, understanding or to mark out daily events than their fully-sighted peers (Behar et al., 2003; Pring, & Ockleford, 2005). Finally, in the complete absence of vision, as one might expect, sound offers stimulation and pleasure (Craig, 2013; Ockleford, Welch, Pring, 2005; Pring, & Ockleford, 2005).

**Sounds are important.** One mother in the survey commented that her three-year-old daughter who was blind was interested in sounds of ‘anything and everything since this is a huge part of her learning experience’. Since visual things do not distract children

who are blind, their natural inclination may be to focus more on sounds and music (Belin, 2004; Pring, & Ockleford, 2005). Another mother, speaking about her seven-and-a-half-year-old daughter who is blind, put it: ‘Her music is always with her. If there is not music playing, she is singing. She listens to music in the car, when falling asleep, and loves to play the piano and any other instrument. It is definitely her strength in life.’

Some parents expressed that their students spent two or more hours a day in active music making. Though there is no data in this survey to suggest any children with savant talents, it is apparent that there is strong musical interest in these children who are blind (Pring & Ockleford, 2005).

### **Blind Children Share ASD Characteristics**

Autism spectrum disorder (ASD), present in about one percent of children, is characterized by stereotyped behaviors, such as spinning or rocking, impaired communication and impaired social interaction (Boomsma et al., 2008). Although it is difficult to make an accurate diagnosis of ASD in children with ONH/SOD, the similarities are present (Ockleford, 2011; Fink, Borchert, 2011; Jamieson, 2004).

**Is there a link between ONH/SOD and ASD?** There are comparisons made between children with ONH/SOD and those with ASD (Pring, & Ockleford, 2005). Warren (1984) noted that “there has been some attention paid to the possibility that an ‘autistic-like’ syndrome of social withdrawal may be characteristic of some blind children” (p. 219). “Behaviors and characteristics that children with ASD share with children who have ONH/SOD include blindisms; “repetitive behavior, echolalia, (to echo

in parrot-like fashion the words they hear spoken to them) (Gourgey, 1998, pp. 157-162), pronoun reversal, stereotypic motor movements, and delays in developing pretend play, and are often attributed to the vision impairment itself “(Gourgey, 1998, 157-162).

These behaviors have been referred to “blindisms” in the past and have been attributed to the lack of vestibular stimulation, vestibular being the parts of the inner ear and brain that process sensory information involved with controlling balance and eye movements, in children who have less mobility due to not being able to see. Likewise, social interactions and language development may be impaired in children who are blind due to their lack of visual models and concrete experiences (Warren, 1984; Craig, 2013; Ockleford, 2011; Gourgey, 1998; Behar et al., 2003; Edgerton, 1994; Jamieson, 2004).

### **Can We Know For Sure That Early Blind Have Autism Spectrum Disorder**

Because there are a lack of diagnostic tools specifically designed to determine ASD for those with visual impairment, there remains some doubt about whether children with ONH/SOD can be definitively diagnosed as having ASD; in fact, there is some research to support that some of these autistic-like behaviors diminish as the visually challenged children grow older, suggesting they “grow” out of it (Ockleford, 2011; Fink, & Borchert, 2011).

Even though there has not been a definitive ASD diagnosis developed for children who are blind (Dale, Sonksen, 2002), there are enough similarities in the two conditions to entertain the possibility that they share a neurodevelopmental origin (Fink, & Borchert, 2011). There are enough characteristics that overlap between children with ONH/SOD

and those with ASD: “sing-song “ language tone; difficulty engaging in the give and take of interactions; obsessions; hypersensitivity to certain sounds, textures, tastes and smells,” that Fink, (2011) argues ONH/SOD should indeed be considered a spectrum disorder. In addition, she argues that the similarities in the two conditions illustrate the possibility that the neurodevelopmental origin is similar (Fink & Borchert, 2011).

Published data maintains that ASDs are overrepresented in the blind population, with prevalence estimates as high as one case of autism in every four blind persons (Brown, Hobson, Lee, & Stevenson, 1997), compared to 1 out of 110 in the general population (Rice, 2009).

### **Do Students with ASD Respond Positively to Music**

Though at one time it was assumed that people with ASD did not take pleasure in music (Levitin, 2006), authors sympathetic to the use of therapeutic music for students with ASD have done studies that show positive outcomes with its use; consequently, music had a positive influence on communicative skills and relationship building skills in children. There is a wide array of therapeutic music literature for the treatment of children with ASD (Alvin & Warwick, 1991; Nordoff & Robbins, 1971, 1977; Whipple, 2004; Wigram, & Gold, C., 2006). Many of the strategies that have been found helpful for children with ASD, may also help those who share the features of ASD (Jamieson, 2004 ).

## **What is Therapeutic Music**

Music therapy is defined as the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program. As I am designing a music curriculum that can be administered by any person with musical interest and ability and not a trained and licensed clinician, I will hereafter differentiate this by referring to the use of therapeutic music rather than music therapy.

There is less research specifically pertaining to the treatment of students who are blind; however, because therapeutic music works with sound, I would argue that it would be an ideal way to meet the needs of children who are blind. To support my theory I will share with you some of the research using therapeutic music, done on children with ONH/SOD and/or ASD.

**Can therapeutic music improve social and academic outcomes for students with ASD and OHN/SOD?** In many instances, children with ONH and SOD find music to be a great source of pleasure and comfort. In his seminal book *The Anthropology of Music*, Merriam (1964) wrote about music's role as a producer of emotions. He maintains there is a physiological response (Merriam, 1964). Additional research has focused on the neural basis underlying music-evoked emotions, finding that music does indeed impact neural areas implicated in emotion processing (Blood & Zatorre, 2001; Koelsch, 2010).

**Therapeutic music and understanding emotions.** Helping students with ASD learn to encode (breaking down information into something they could understand) and decode (translating signals into meaning or information) was the goal attempted by Katagiri (2009). Instead of just teaching general social engagement using music to increase student's understanding of social situations, Katagiri (2009); conducted individual sessions to teach four emotions: happiness, sadness, anger and fear. In all cases, the music condition instruction, or the instruction where music was included, showed the most improvement, in students with ASD being able to encode and decode these emotions.

**What is emotion regulation?** Music has long been thought to influence emotions and emotion control. We all know how we like to put on mellow music when we feel stressed, or happy music when we feel low. This is known as mood induction. This is different, however, from emotion regulation. Emotion regulation is geared toward the specific goal of maintaining a comfortable state of arousal; similarly, that is what we are hoping to accomplish in students with emotion regulation problems (Blaustein & Kinniburgh, 2010; Craig, K., 2013; Diamond & Aspinwall, 2003; McRae et al., 2010;).

**Therapeutic music and self-regulation.** Playing preferred and familiar music was found to contribute to emotional self-regulation and caused students to be happier, less anxious, and more relaxed (Allen & Heaton, 2010; Bakan et al., 2008; Moore, 2013).

Because of its variability and flexibility, melodious and harmonious music is useful in counteracting the rigid characteristics of ASD (Wigram & Gold, 2005);

however, playing music that was complex or dissonant or even unexpected, caused students to react negatively and made it more difficult to regulate their behavior and struggle with social inclusion (Wigram, T. & Gold, 2005).

**Improvising music contributes to emotional regulation.** In addition to the above discovery, Kim (2009) found that allowing the students to improvise in their therapeutic music class contributes to success in regulating their behavior. In particular, improvisational music engages children and promotes the development and reciprocal and interactive communication and play (Edgerton, 1994; Wigram, 1999, 2000).

This is something to keep in mind when planning therapeutic music for students with ONH/SOD several studies have shown that students were calmer when they were not always teacher-directed, and they could explore the instruments with their sounds and textures with guidance, but not specific direction (Kim et al., 2009; Edgerton, 1994; Gourgey, 1998; Wigram, 1999; Wigram 2000).

### **Social Engagement and Language**

Music may be able to help restructure the environment for children with visual impairments (Ockleford, 1998a; Ockleford, 1998b). Therapeutic music may help promote joint attention (the ability to share a common focus on something) and increase theory of mind development (the understanding of one's own and other people's minds or mental states)(Kim et al., 2008; Ockleford, 1998a; Ockleford 1998b; Simpson & Keen, 2011). Therapeutic music may help blind students develop a way to communicate in a way that doesn't include words. In fact, the music may become a proxy or substitute for language

because music reaches below the level of words for a child, providing a way to communicate close to the child's abilities (Gourgey, 1998).

**Music helps with transitions.** Studies have shown that using music increases success with transitions in the classroom. Behar (2003) shares how teachers in their study used music to increase success with learning and transitions in the academic classroom. The teachers used exaggerated intonation and clapping to the syllables of the word the students were trying to learn. This immediately focused the children's attention on what they were teaching them. It is as if the music allowed the students' brains to become alert and learn. And when it came time for the student to transition to another classroom and teacher, the instructors would clap the name of the next teacher too. Eventually, when teachers would clap and say the name of the next teacher, the students would try to say that teacher's name as well (Behar et al., 2003; Buday, 1995; Craig, 2013; Nordoff & Robbins, 1971a; Nordoff & Robbins, 1971 b).

**Music helps calm and focus.** Buday (1995) conducted a study that confirms the information that Behar offered. Students were taught specifically-selected signs in two different ways: One of the studies was conducted using only rhythm as a reinforcer, while the second study was conducted using music with the teaching of the signs (Buday, 1995). It was discovered that there was a significantly higher incidence of correct answers for the signs learned in the music condition over the rhythm condition (Buday, 1995; Nordoff & Robbins, 1971a; Nordoff & Robbins, 1971b). It has been suggested that because of the positive calming and focusing responses to music by those with ASD,

this can help increase participation in activities that will help them achieve goals in the social and language domain (Behar et al., 2003; Baken et al., 2008; Nelson, Anderson & Gonzales, 1984).

### **Is Therapeutic Music Effective**

I believe therapeutic music is effective because therapeutic music harnesses the musical strengths of the ASD population while alleviating their impairments, (Srinivasan & Bhat, 2013). Whipple (2004) conducted a meta-analysis of nine studies that concluded that music was effective irrespective of the age of participants, type of intervention, treatment, methodology, and profession of the music provider.

In 2009, the National Autism Center agreed when it classified music as an emerging, evidenced-based practice, useful in teaching individual skills or goals by initially targeting the skill through song or rhythmic cuing (Kim et al., 2009). This project reported on six studies that used a range of music techniques. Though there were some weaknesses in the studies, including small sample sizes and studies of short duration, there was a clear improvement, particularly in non-verbal communication in those who were involved in the study (Kim et al., 2009; Gourgey, 1998).

**Communication skills increased.** Edgerton (1994), during individual sessions while using improvisational music theory, found that therapeutic music increased musical and nonmusical communicative behaviors for a group of 11 children aged 6-9 years. They used The Checklist of Communicative Responses/Acts Score Sheet (CRASS) designed specifically for the study to measure non-musical and musical communicative

responses and acts. This assessment predominantly measured musical categories and communicative responses. It was found that if the student loved music, it could be used to initiate communication with the student. Motivating the student with the reward of music could encourage the student's interaction with others, flexibility in situations, adjustment to change, and more ease in decision making (Baken et al., 2008; Craig, 2013; Edgerton, 1994; Srinivasan & Bhat, 2013).

Patel (2003) proposed a hypothesis labelled OPERA (Overlap, Precision, Emotions, Repetition, and Attention) to explain how music may produce such positive effects on communication or language. (1) Speech and music processing centers Overlap in the brain. (2) The Precision required for music is even stronger than that required for speech. (3) Emotions evoked by music are strong and positive. (4) Success in music making requires Repetition and practice. Lastly, (5) Attention is required for the successful performance of music. Taken together, the experience of making music may bring about the most growth in language for those with ASDs (Patel, 2011).

**Social engagement improved.** A number of studies describe the success of music used as an intervention to develop socialization skills in children with autism. Different emotions such as fear, anger, happiness, and sadness can be communicated to the listener through different musical elements such as tempo, intonation, and sound level (Katagiri, 2009; Kern & Aldridge 2006; Kim et al., 2009; Simpson et al., 2011). Music was embedded into an outdoor play context and then the study compared baseline conditions between non-directed music activities and teacher and peer mediated music intervention.

When the teachers and peers composed and sang songs, the play sessions resulted in an increase in positive peer interactions.

**Music and socialization.** Evvard (1978) suggests using music to teach socialization. For instance, he suggests that a song be played and as each student's name is called, they be asked to stand, shake hands with their neighbor, and say hello. He suggests that music class could involve the group as a whole dancing in a circle while holding hands, and class could conclude with a "Goodbye Song," with each child dismissed by name. Taking turns would be an important part of learning to socialize. Another activity included listening games involving instruments played at different auditory levels with the students instructed to move closer to the sound as it grows louder. All of these strategies are included in the therapeutic music curriculum I am proposing.

The music condition was significantly more effective than regular play sessions, increasing eye contact and attention behaviors, and the children engaged in longer periods of turn taking during music playtime. Interestingly, the frequency and duration of 'joy', 'emotional synchronicity', and 'initiation of engagement' was higher and lasted longer during non-directed sessions versus the directed sessions of music. Incidentally, active engagement during singing lessons correlated with improvements not only in singing but also in social inclusion. (Kern et al., 2013; Nordoff & Robbins, 1971a).

### **Therapeutic Music Used to Modify Blindisms and Echolalia**

Auditory defensiveness is one of the behaviors associated with students with ONH/SOD. In order to help the students with ONH/SOD assimilate into their classrooms, it is important to assist them in modifying this behavior. Research has shown some success with the use of therapeutic music to this end. If the student is exposed to music in the classroom, at increasing volumes, it can help to desensitize the child to sounds and make it easier for the student to be in a variety of noisy, stimulating environments (Behar et al., 2003).

**Modifying blindisms.** Blindisms include: repetitive rocking, eye rubbing, hand gestures, head rolling or banging, and/or staring at light sources (Gourgey, 1998). Rocking movements are the most common of the blindisms, and children may respond well to the rhythms of music. If blindisms are indeed related to self-stimulation, the added stimulation of music may, over time, help modify these patterns. The creative use of rhythm in musical improvisations provides the stimulation children seek while also helping them to respond to outside stimulation. (Gourgey, 1998)

**Modifying echolalia.** Another “autistic-like” symptom in children who are blind is echolalia: the echoing in parrot-like fashion the words they hear spoken to them (Warren, 1984). In order to help modify echolalia, the music teacher may use songs that require song completion. As the child becomes more comfortable with the song, which has become very familiar, the child may learn to complete the song without help from the

teacher. Bruscia (1982) described these kinds of exercises as the beginning of the first steps toward the treatment of echolalia (Gourgey, 1998).

### **Music Obsession**

A cautionary note, however, is that sometimes if students are completely immersed in repetitive music, songs, and tapes, to the exclusion of other activities, this focus may prevent further exploration and learning opportunities (Bahar et al., 2003). Since students with ASD can become obsessed with one song or activity, it is important to use a variety of techniques.

### **Guidelines for Choosing Appropriate Music**

Several studies have suggested that when working with students with language deficits, it is important to choose the music carefully and include specific guidelines in the areas of intonation, rhythm, range, and tempo. In practice, the most critical elements are listening, singing, music-making, and rhythmic actions played or sung in time to music, experienced individually or in socially embedded group activities (Edelson et al., 1999; Nordoff & Robbins, 1971a, Nordoff & Robbins, 1971b).

It should be noted that there is value in also choosing music that is developmentally appropriate (Kern et al., 2013; Wigram, 2005) and preferred by the client. We all know that we exercise or work better to music we like. In just this way, preferred music is intrinsically motivating for children. Using music they prefer also builds pride in their accomplishments and in their independence and provides opportunities for increased socialization. (Dockery, 2014).

**Mirror cadence, tempo and pattern of actual speech.** It is suggested that songs should be chosen that closely mirror the cadence, tempo and pattern of actual speech; in addition, the melodic rhythm should be similar to that of speech, wherein a syllable stressed in speech should correspond to a strong beat in a measure of music.

Singing songs with repeated lyrics is also important for helping students practice language. It is easiest for students to learn language through songs where the lyrics are repeated (Nordoff & Robbins, 1971a, Nordoff & Robbins, 1971b).

In addition, as many children with language impediments have difficulties singing high-pitched notes, choosing songs with melodies ranging around middle C is considered best (Craig, 2013).

In one example, while a hello song is played, each child could be told to stand as they were greeted, and then be asked to shake hands with their neighbor as they say hello. Learning to take turns would also be an important part of socialization in which music can play a part (Gourgey, 1998). Other activities could involve the group as a whole with children dancing a circle dance holding hands. Music class could conclude with a “Goodbye Song,” in which each child would be dismissed by name. (Nordoff & Robbins, 1971a).

### **Listening Activities**

In addition to the above exercises, Evvard (1978) suggested other activities that could help students explore their environment. The teacher could play an instrument below the threshold of audibility, gradually increasing the volume until the students could hear it, at which time, they could respond by playing their instrument.

The teacher could also play an instrument such as a chime at a distance from the students and ask the student to move toward the sound. Teachers also might play an instrument and ask the student to move toward them only when they hear a specific tone, thus teaching them about auditory discrimination (Evvard, 1978; Gourgey, 1998).

### **Help Managing Sensory Overload**

In one example, a student who was blind with autistic characteristics found that therapeutic music helped him learn to adjust to changes in his environment. Children with ONH/SOD often “misread” sensory cues and either over-or underreact to noises, withdrawing, covering their ears with their fingers or screaming (Behar et al., (2003). Born with absolute pitch (AP) and the ability to learn music quickly and easily, this student was able to use music as a way to calm himself when he was agitated (Craig, 2013).

### **When a Student is Withdrawn**

When a student withdraws due to overstimulation in the environment, or auditory defensiveness, it can be helpful to attach physical interaction to the music (e.g., clap, fall

down, go up or down), which may maintain the child's attention, while the classroom is modeling appropriate and meaningful language (Behar et al., 2003).

### **A Life Changing Experience for Jerry**

One study, involving a young man named Jerry, showed that music was able to unlock his world of communication (Nordoff & Robbins, 1971a). Though he was born into a highly musical family, and he had shown early interest and talent for music, he was unfortunately not offered therapeutic music until he was 18 years old. Through music, he learned to make eye contact, improvised accompaniment, and even learned to hold hands with the teacher while dancing. (Clarkson, 2001)

Using music and Facilitated Communication (FC), a way of assisted writing developed by Rosemary Crossley, an Australian special educator (Bicklen, 1993), Jerry learned to communicate, and eventually became less violent (Clarkson, 2001). By the fall of 1992, Jerry could maintain good eye contact in music class for 50 minutes at a time. He smiled often and had not thrown a temper tantrum in music classes in three years (Clarkson, 2001).

In FC, a facilitator supports the hand, wrist, or elbow of the individual, who selects letters and forms words on an alphabet board, Canon communicator, electric typewriter, or computer keyboard. As the student becomes more independent, the facilitator gradually fades their support (Clarkson, 2001).

This technique has generated controversy through the years, as some feel that the facilitator may be manipulating the outcome of the student's writing; however, in many

cases, the student uses unique phonetic spellings and mentions names, places, or events about which the facilitator has no knowledge at the time, but later verified, as in Jerry's case (Clarkson, 2001).

The ability of Jerry to type complete sentences with help from his facilitator and, eventually, with help from the music teacher, was amazing. He even went on to express how it felt to be autistic by comparing it to feeling like a dam being plugged up. In his case, it was therapeutic music and FC that allowed the dam to open (Clarkson, 2001).

### **In Conclusion**

In this chapter I have explained what ONH/SOD is and how it affects student's social and academic lives.

Then I have explored whether children who are born with visual impairment are blessed with natural musical interest and ability. Next, in the literature, I discovered a link between children who are blind and those who have ASD. And lastly, I have found research to support the theory that therapeutic music helps improve the academic and social behaviors of students with ASD.

In addition to the above information, I shared the different ways therapeutic music helps to improve academic and social behaviors. Therapeutic music improves the lives of students with ASD and ONH/SOD by helping to calm, focus, and increase socialization skills, along with providing tools to help decrease blindisms and echolalia.

I also discovered and shared what kinds of music are most effective and how it can be used. These included choosing music that mirrors cadence, tempo and patterns of

speech, choosing songs in low and mid-range so they can be easily sung, and choosing songs that show socialization.

After studying the literature presented in this review, it is apparent to me that there is a need for more controlled in-depth scientific studies to be conducted on how music affects children with ONH/SOD, and whether its use can improve the academic and social outcomes in their lives.

In chapter three, I will outline the methods I will use to design and create a therapeutic music curriculum to use in improving the social skills and behaviors of elementary students with ONH/SOD. I will use evidence based instructional strategies including Understanding by Design, (UbD) and Differentiated Instruction, (DI) when creating the curriculum guide (McTighe, 2005). I will also include the curriculum and the assessment tool as designated in the curriculum guide, as well as identify for whom the curriculum will be intended.

## CHAPTER 3

### Methods

#### Overview

In this chapter I outlined the methods that I used to design and create a therapeutic music curriculum to improve the academic and social behaviors of elementary students with ONH/SOD. I used evidence-based instructional strategies when creating the curriculum guide. I described the curriculum model, as well as identified for whom the curriculum is intended.

During the 2012 school year I worked as a Paraprofessional for a student with ONH/SOD in a public elementary school, which had limited experience working with students with visual impairment. They had no experience with students with this specific diagnosis. The vision specialist was in her second year in that position. I was also new to the experience of working with a vision challenged student; thus, this was a very difficult task. In order to help this student adjust to the classroom, the classroom teacher, the vision specialist and I had to invent ways to motivate the child. As time went on, we learned that the student loved music and could be encouraged to be compliant with the educational plan in place by rewarding the student with musical exploratory time. This experience with musical exploratory time led me to question, could a therapeutic music

curriculum be used to improve the social and academic skills of students with optic nerve hypoplasia/septo-optic dysplasia?

### **Participants**

The curriculum I have designed is intended for kindergarten through third grade students who meet the criteria for being identified with ONH/SOD. The curriculum is designed for students who spend varying amounts of time between the general education classroom setting and with classroom specialists. It is intended for students who are considered to be in need of social skills instruction and academic instruction, based on their Individualized Education Plans (IEPs). The curriculum is intended for students falling within a large range of academic and social abilities.

### **Consent Policy**

The short form exempt human research subject review was completed and accepted from Hamline University. All agreed that this therapeutic music curriculum project is valid and that the results are desired. As this curriculum will not be implemented at this time, I will not need to acquire consent from student, parents, or school administrators and staff.

### **Procedures**

The curriculum guide I have created contains nine weeks of music lessons to be taught in thirty to forty-five minute sessions. The lesson plans in the guide use a variety of evidence-based strategies that have been found to be effective in teaching music concepts to students with ONH/SOD. The lessons in the curriculum guide contain a

combination of evidence-based strategies and interventions including: pitch recognition, interval training, rhythm exploration, melody creation, instrumental introduction, piano exploration, tone studies, ear training, and music appreciation.

### **Curriculum Model**

The nine-week curriculum guide (Appendix A) focuses on the skills necessary for students to be successful in school. These skills include social skills and transition coping skills. The curriculum aims to blend instructional best practices and proven intervention methods to teach these skills. The curriculum is designed around the Understanding by Design instructional model combined with Differentiated Instruction (UbD/DI) (McTighe, 2005).

**Why choose understanding by design?** UbD/DI seeks to teach the desired outcomes by focusing on “backward design”: the practice of looking at the outcomes in order to design curriculum, performance assessments, and classroom instruction. Differentiated Instruction (DI) involves providing individual students within the same classroom with different avenues to learning in terms of acquiring content; consequently, processing, constructing, or making sense of ideas results in developing teaching materials and assessment measures so that all students within a classroom can learn.

**Why choose differentiated instruction?** In this situation I felt it was particularly important to use DI because of the significant variability of each student with ONH/SOD.

It was important to choose a model that recognizes the diverse needs of these students, while remembering that student environments and opportunities are also different.

### **Design**

The general format for each lesson is to present the musical concept, model the musical concept, allow exploration of the concept, monitor concept progress, and support concept mastery. Each lesson begins with introducing that day's musical concept. The concept is explained and demonstrated by the music instructor. Students are then given the opportunity to practice the skill through a class activity.

When the students have practiced the skill, the class or individual student will reflect verbally on the activity or concept with the instructor. Student progress will be monitored both after the lesson is presented and in daily situations by properly oriented and trained teaching and support staff. It is important that the skills taught in the music session be recognized and corrected or practiced in behaviorally-specific terms throughout the day in all settings.

### **Assessment**

Improvement in behavior will be subjective and will be measured by the use of the Autism Social Skills Profile (ASSP) (Bellini, 2005). The ASSP is a rating scale designed to identify specific deficits and assist with targeting intervention, in this case with music therapy.

**Why am I using an autism assessment tool?** Even though students with ONH/SOD are not necessarily diagnosed with autism, the behaviors they exhibit are close enough in characteristics that I thought this assessment, already adopted by scientists as effective, could be used to help in assessing these students with ONH/SOD.

**How will it be used?** The classroom teacher and Individual Education Plan (IEP) Team members will complete the Autism Social Skills Profile (ASSP) to indicate how often the child exhibits each behavior independently. The IEP team includes the student's parents, general education teacher, special education teacher, and any related service providers such as a music therapist, school or county social worker, and adapted physical education teacher. The members of the child's IEP will complete the ASSP because they work with the student in so many different environments and settings.

It is important to complete the pre-assessment profile as a means to not only inform instruction, but also as a way to measure the effectiveness of the therapeutic music curriculum.

After the therapeutic music curriculum is taught, the IEP team members will complete a post-intervention assessment to establish just how effective the lessons were. Ideally, there will be on-going assessment and follow-up with the classroom teachers, the therapeutic music instructors, and parents.

### **Summary**

I have designed a music curriculum that uses research-based instructional strategies and interventions as a way to develop positive behavior and social skill, to

prepare students with ONH/SOD for academic and behavioral success. I have done this by creating a nine-week music curriculum. This music curriculum guide is intended for kindergarten through third grade students with optic nerve hypoplasia/septo-optic dysplasia during a thirty to forty-five minute block of instruction. I have created these lessons and objectives in the curriculum guide based on the characteristics that are included in the criteria for the diagnosis of ONH/SOD.

This instructional guide will follow the backward design or Understanding by Design curriculum model of choosing the desired outcome and designing the activities and assessments based on that desired outcome. The components of each lesson will include: introduction, modeling, practicing, monitoring, and support. I aim to design a program of therapeutic music that will be employed to improve the social and academic skills of students with ONH/SOD.

## CHAPTER FOUR

### Results

#### Overview

In this chapter I will describe the curriculum that I developed in Chapter 3. I will show how it meets the goals of increasing social interaction, teaching transition skills, and providing academic tools to children with ONH/SOD. I will describe the assessment plan and how it fits into the successful implementation of this process.

Optic nerve hypoplasia/septo-optic dysplasia are developmental disabilities that affect the academic and social progress of students who are diagnosed with them. Along with vision impairment, there are difficulties in reciprocal social interactions, trouble with transitions during the school day, and difficulty focusing on schoolwork.

As successful transitioning and the ability to focus are necessary to succeed in the classroom, it was important that tools be available to teachers, staff, and administrators to help these students develop successful skills.

While working as a paraprofessional assisting a blind second grader, who for the purpose of this paper I will call Mary, I noted the lack of tools offered by the school to the staff, including myself, for dealing with Mary's disability. As a former music teacher, I noticed a lack of music instruction geared toward the student's special abilities even though the student demonstrated strong musical ability and interest. Believing that this

student was extraordinarily musical, this seemed to me to be a glaring omission, causing me to wonder, could a therapeutic music curriculum be used to improve the social and academic skills of students with optic nerve hypoplasia/septo-optic dysplasia?

### **Curriculum Framework**

An essential part of creating an effective therapeutic music curriculum for students with ONH/SOD was to identify what skills were necessary to teach them. It was important to recognize that many students with an ONH/SOD diagnosis might benefit from the same instructional strategies because they shared common characteristics: delays in information processing, extreme tactual and auditory defensiveness, and difficulty with transitions. Each student would benefit from a combination of objectives from the curriculum guide, as well as objectives that are unique to the individual's needs.

**Strategies and interventions.** The purpose of this capstone was to design and create a therapeutic music curriculum that would increase appropriate social and academic behaviors of kindergarten through third grade students with ONH/SOD. The first step in creating this therapeutic music curriculum was to research evidence-based strategies and interventions that have proven to be successful with these goals. For example, as explained in Behar et al. (2003), tapping out rhythmic beats to words and using an exaggerated vocal intonation were appealing to children with ONH and SOD; consequently, musical instruction using these tools would be helpful in securing their attention and helping the children focus. Sammy, a child at a center for children who are blind, enjoyed imitating certain sounds that he heard. The teacher clapped out each

syllable of a word as she said it therefore holding his attention. As he headed to his orientation and mobility class, his classroom teacher would clap out the name of the teacher he was going to, and eventually he was able to say the name of that teacher. Also, at this same center, the teachers learned that if they sang the lesson, the students were able to pay attention, as if the music turned on the student's brain (Behar et al., 2003). Because of this study, the curriculum I propose will include music and rhythm during all instructional class periods. Therapeutic music teachers will be encouraged to sing and clap the directions for the day, the names of the students, and the transition instructions.

**Studies show success.** A number of studies have shown the success of music used as a tool to develop social skills in children with autism. Katagari (2009) and Simpson et al. (2011) conducted individual sessions to teach the four emotions of happiness, sadness, anger, and fear. In the study by Katagari (2009), 12 students from Japan, with the mean age of 11.5 who had been diagnosed with autism, were taught four emotions to decode and encode: happiness, sadness, anger, and fear. There were four conditions in the treatment: (a) no contact control (NCC)—no purposeful teaching of the selected emotion; (b) contact control (CC)—teaching the selected emotion using verbal instructions alone; (c) background music (BM)—teaching the selected emotion with verbal instructions with background music representing the emotion; and (d) singing songs (SS)—teaching the selected emotion by singing specially composed songs about the emotion. Participants were given a pre-test, and a post-test followed eight individual sessions. The results

showed significant improvement in all four areas of understanding emotion. Incidentally, background music was significantly more effective than the other three conditions in improving participants' emotional understanding. This study suggests that background music can be an effective tool in teaching emotional understanding in children with autism and likewise in children with ONH/SOD. Consequently, my curriculum incorporates background music during instruction, aimed at improving social and academic skills.

**Music and play sessions.** Kim (2009) conducted studies embedding music into an outdoor play context and found that the music condition was significantly more effective than regular play sessions without the music. Eye contact was increased; positive social behaviors, and increased turn taking were engaged in for longer time periods. These are the behaviors I would like to see developed in students with ONH/SOD; consequently, my therapeutic music curriculum includes music listening periods where social skills activities are practiced as part of playtime in the session. Also, as is pointed out in this study, it was discovered that undirected music sessions produced more 'frequency of joy', 'emotional synchronicity', and 'initiation of engagement' that lasted longer and were stronger than in sessions that were directed. Therefore, my curriculum includes, periods of undirected musical enjoyment in a safe environment for the students (Kim et al., 2009).

**Understanding by Design/Differentiated Instruction.** As previously mentioned, I have used the Understanding by Design instructional model combined with

Differentiated Instruction (UbD/DI). UbD seeks to teach the desired outcomes by focusing on backward design: the practice of looking at the outcomes desired in order to design curriculum, performance assessments, and classroom instruction. It was important that the outcomes in this curriculum be intentionally sought. In particular, the social and academic abilities of these students would be improved; in addition, transitions and interactions with others would become easier for the student with ONH/SOD such that the student would be able to concentrate and improve academically, as well as socially.

Of course, it was important to design the curriculum to keep in mind the diversity of abilities and interests represented by these students. In Differentiated Instruction, this curriculum strived to provide the individual students with different avenues to learning in terms of acquiring content and making sense of ideas; ultimately, DI drove developing teaching materials and assessment measures so that all students within a classroom could learn.

**Methods variety was important.** I drew on a variety of methods to ensure the required skills and competencies would be learned. Some of these methods would include: presenting the musical concept, modeling the musical concept, allowing exploration of the concept, monitoring the learning, and supporting concept mastery. This was a fairly straightforward way to teach a music class in a regular setting. The difference would be in the goals each exercise would include: practicing transitioning smoothly, interacting appropriately with other students, learning math and reading concepts with

rhythm based instruction, learning music history, and learning music appreciation while playing.

The students would be immersed in music during the entire class, beginning with entry songs and ending with exit songs. Students would learn to take turns and would have an opportunity to explore their own musical gifts individually, through using a variety of instrumentation.

### **Pre and Post-Assessment Tool**

Along with a curriculum guide, I have provided a pre-assessment and post-assessment tool (Appendix D), designed by Scott Bellini and known as the Autism Social Skills Profile (ASSP), to both identify social skill deficits specific to individual students prior to the therapeutic music lessons and to help with targeting intervention. (Bellini, S. 2005). Though this assessment was specifically designed for use with autistic students, because of the strong similarities in traits between autistic students and those who have ONH/SOD, this seemed like an appropriate tool to adopt and adapt for students with ONH/SOD challenges.

One or more members of the student's IEP (Individual Education Plan) team, who works directly with the student, would complete the checklist. It is important that this person has observed this student over a significant period of time and can report on how they function in a variety of settings. It would be imperative that there be a careful assessment using the ASSP done prior to the first therapeutic music classes; without this assessment, there would be no baseline and no way to know if progress had been made.

## Summary

I have designed a social skills and academic improvement therapeutic music curriculum. This curriculum has used UbD/DI to develop strong social skills and improve academic outcomes. This nine-week curriculum guide focuses on the skills necessary for students to be successful in school, including social interaction skills and transition skills. Each day will begin with the teacher introducing the concept and then modeling that day's musical concept. The students will be given the opportunity to practice the skill either through a class activity or alone if that is the best or most appropriate setting. Afterward, the student will reflect on the activity or concept through discussions with the therapeutic music teacher.

Ideally, the music teacher will closely monitor student progress, as will the classroom teachers and staff, with the social and transitional concepts learned and shared by the music teacher recognized and emphasized throughout the day.

The therapeutic music curriculum guide has been designed for ONH/SOD students with social, behavioral, and academic deficits. The lessons in this guide are divided up into nine weeks and cover the following topics: interval training, rhythm exploration, melody creation, instrumental introduction, piano exploration, tone studies, ear training, and music appreciation. Instruction regarding social skills, enhanced transitioning, and academic improvement have been incorporated into the topics above and taught as part of the therapeutic music classes.

In the next chapter, I will share the things I learned while preparing this curriculum. I will share what the literature review showed me about children with ONH/SOD, and the effectiveness of using music to improve their social, and academic outcomes. I will share the limitations of the curriculum. Finally, I will recommend further implementation and study using the therapeutic music curriculum for students with ONH/SOD.

## CHAPTER FIVE

### Conclusion

#### Overview

In this chapter I will reflect on what I have learned about the connection between children with ONH/SOD and musicality. I will share what I have learned about the behavioral similarities between children with autism spectrum disorder (ASD) and those with ONH/SOD. I will show how therapeutic music can be used to improve the outcomes of children with ONH/SOD and will describe the curriculum that I developed using UbD/DI. I will also discuss the limitations of the curriculum and will suggest further study using it in a setting with vision challenged students.

Optic nerve hypoplasia/septo-optic hypoplasia is a diagnosis that, along with vision impairments, significantly affects social interactions and academic success in the classroom. To students with this disorder, the simplest activities can be upsetting and prevent positive learning interactions. Thus it becomes important to develop meaningful interventions to facilitate successful learning.

As a paraprofessional working in a second grade classroom as an aide for a student who was blind due to an ONH/SOD diagnosis, I found it very challenging to find ways to address Mary's nonconforming behaviors, both social and academic. In this mainstreamed setting, with a classroom full of other second grade students, the student's tantrums and difficulty transitioning from one activity to another, made learning a

laborious process that took second-place to the student's inappropriate behaviors. The classroom teachers and staff struggled to improve this student's experience without diminishing the total classroom experience.

After much experimentation, I discovered that using music as a motivating activity made a significant difference in the way the day went. Because of that experience, I began to wonder, , could a therapeutic music curriculum be used to improve the social and academic skills of students with optic nerve hypoplasia/septo-optic dysplasia?

In the literature review, I learned that there is a connection between children who are born with ONH/SOD and unusually strong musicality, just as there is in children with ASD. Additionally, because studies have established that therapeutic music is effective in helping students with ASD and because those with ASD share similarities in music interest and ability with students with ONH/SOD, I have developed a therapeutic music curriculum specifically tailored to use to improve the outcomes of these students.

### **Therapeutic Music Curriculum**

I have designed a therapeutic music curriculum that uses research-based instructional strategies and interventions as a way to develop positive behavior both socially and academically. I have done this by creating a nine-week therapeutic music curriculum to be taught in thirty to forty-five minute sessions. This therapeutic music curriculum guide is intended for kindergarten through third grade. I have created the

lessons and objectives in the curriculum guide based on the characteristics that are included in the criteria for the diagnosis of ONH/SOD.

There are therapeutic music curriculums available; however, there are a limited number of qualified music therapists available to school districts. My goal with designing this curriculum was to create a guide that could be implemented by any music teacher in the district to help improve social and academic outcomes for students with ONH/SOD. I also wanted to create lessons for any educator to use that would apply to an entire classroom of students, which could be adapted for the special needs of those students with ONH/SOD.

### **Limitations**

Through my own experience as a music teacher, and the research I did when developing this curriculum, I reaffirmed that it was difficult to create lessons that would work for all students. Teachers will find that it is still important to support students with ONH/SOD by modifying the curriculum and adapting it to match the abilities of the students being taught. Not only does each student function at different levels, but each student has their own temperament and unique profile of skill deficits and strengths. Some students might become overwhelmed at a lesson using mostly verbal explanations or reference to abstract concepts, while a higher functioning student may grow impatient, bored, and angry about instruction that doesn't acknowledge their intellect.

Because of this limitation, it may be necessary to implement this curriculum in an individual rather than a group setting. This therapeutic music curriculum should match

the student and not the other way around. There is room for adaptation in the curriculum, which allows it to be employed in the best way possible for optimum results.

**Tailor the session to the child.** Research has not yet shown how a therapeutic music curriculum's duration and intensity should be designed for the most positive outcomes; however, experience as a music teacher in an elementary classroom has shown me that the younger the student, generally, the shorter the session should be. When this curriculum is used with kindergarten students, I would recommend the shorter twenty to thirty minute session. As the students advance in grades one through three, the sessions can be increased to forty-five minutes. Of course, the duration of the lessons should be adjusted to suit the abilities of the individual students. The units are divided into nine sections that include the study of pitch recognition, interval training, rhythm exploration, melody creation, instrumental introduction, piano exploration, tone studies, ear training, and music appreciation.

### **Recommendations**

It would be such a positive thing if there were more music funding across the board in our public schools. In the case of students such as Mary, the use of therapeutic music could make a difference between success and failure in a classroom. As students with ONH/SOD may be born with musical strengths, along with behavioral and academic difficulties, it makes sense that therapeutic music would be used to help overcome those challenges.

In addition to implementing this curriculum guide based on the needs of the student, it would be desirable when appropriate to use music throughout the day as a calming and regulating influence for those with ONH/SOD. Music is a helpful tool to motivate students to exhibit positive behaviors throughout the school day and creates an environment that promotes positive interaction.

Because students use social skills in nearly all aspects of their day, every moment has potential to be a teachable moment for the classroom teacher and other staff who interact with the ONH/SOD student. Easing transitions throughout the day by using musical cues and prompts could make the academic aspects of the student's day more productive.

Further implications for this therapeutic music curriculum would include presenting my findings at a teacher's conference in my district or perhaps presenting my paper to a school-funding meeting, when the role music plays in education, is being discussed.

In addition, I would like to study further how the use of this therapeutic music curriculum would impact the social behavior and academic outcomes of students with ONH/SOD. It would be interesting to see how the use of therapeutic music helped calm the student and allowed for improved social outcomes and academic improvement. A research study in a setting for teaching students, who are blind, would be an interesting opportunity.

**Reflection**

After spending a school year working with Mary, I mulled over how to best help someone with her diagnosis. She was an obviously bright and attractive child with potential to do well in school, but her own behaviors were getting in the way of her success. Teachers and staff were exasperated and mom was exhausted. Though this therapeutic music curriculum offers no magic fix, its consistent use over a school semester may offer hope for a more compliant student with improved social skills and the ability to focus on academic goals.

Using Ubd/DI, I have created a therapeutic music curriculum for use by therapeutic music teachers to improve the social and academic outcomes of students with ONH/SOD in grades K-3. My hope is that this therapeutic music curriculum will aid teachers and researchers in their pursuit to improve social behaviors, and academic success for students with ONH/SOD.

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**APPENDIX A**  
**Curriculum Guide**

## UNIT PLAN

<b>Kimberly Wooster</b>	<b>Therapeutic Music Lesson</b>
<b>Grade Level: K-3</b>	
<p><b>Students will learn how to identify notes, rhythm, sounds and instruments.</b></p> <p><b>Students will learn to appreciate different kinds of music and will learn to tell stories through their music.</b></p> <p><b>Students will learn to express themselves through the music they play.</b></p> <p><b>Students will learn to play music, both improvised and written.</b></p> <p><b>Students will practice transitioning from one activity to another.</b></p> <p><b>Students will practice interacting with other students and the teacher.</b></p>	
<b>Content Standards: Minnesota State Standards for the Arts</b>	
<p><b>0.1.1.3.1: Identify the elements of music including melody, rhythm, harmony, dynamics, tone colors, texture, form and their related concepts.</b></p> <p><b>0.1.2.1.1: Demonstrate replicated and improvised movement using control and coordination.</b></p> <p><b>0.1.2.3.1: Read and notate music using a system of notation such as solfege,</b></p>	

numbers or symbols.

**0.1.2.3.2: Sing and play with accurate pitch, rhythm and expressive intent.**

**0.1.2.4.1: Demonstrate skills such as improvising, creating character and selecting costumes for dramatizations.**

**0.1.3.5.1: Improvise or choreograph dance ideas that communicate an experience or theme.**

**0.2.1.2.1: Create original media artworks to express ideas, experiences or stories.**

**0.2.1.3.1: Improvise or compose to express musical ideas using the voice or an instrument.**

**0.3.1.1.1: Interpret and perform sequences of movement with a beginning, middle and end that communicate a life experience, theme or idea.**

**0.3.1.3.1: Sing and play a varied repertoire that includes simple rhythms and melodies.**

**0.3.1.4.1: Interpret and perform a variety of characters using voice, movement and props.**

**0.4.1.3.1: Compare and contrast the characteristics of a variety of musical works or performances.**

**Content Objectives:**

**Students will be able to demonstrate their knowledge of music concepts by playing and singing with the other students in the classroom.**

**Students will learn to listen to music and show what they learn by talking about it and reflecting on what they heard.**

**Students will demonstrate what they have learned by creating original music of their own.**

**Students will show their mastery by copying the rhythms and notes they hear.**

<b>Academic Language/Language Objectives:</b>
<p><b>Students will be introduced to quarter notes, half notes, dotted quarter notes and half notes, and whole notes along with their corresponding rests.</b></p> <p><b>Students will learn what a staff and a grand staff is.</b></p> <p><b>Students will learn what a treble and bass clef is.</b></p> <p><b>Students will learn the names of the eight notes. Students will also learn what the words piano and forte mean along with other dynamic terms.</b></p> <p><b>Students will learn to compare and contrast different kinds of music. They will listen to stories told through music and be able to describe how it makes them feel.</b></p>
<b>Formative Assessment:</b>
<p><b>As the objective in the lessons is to enhance social and academic skills in children with vision challenges, the assessment will be given in the form of the Autism Social Skills Profile which will be administered prior to beginning the therapeutic music classes and again when the nine weeks of music classes are completed. The therapeutic music teacher will conduct informal assessment during each class period by observing behaviors.</b></p>
<b>Summative Assessment:</b>
<p><b>Students will complete the Autism Social Skills Profile (ASSP) to assess whether the objectives were met.</b></p>

<b>Provisions for Learning Differences:</b>		
<p><b>It will be essential to adapt the therapeutic music curriculum to each group of students. Those students that are more advanced will need to be accommodated with additional challenging music or instruments. Those who are just being exposed to music for the first time may need more time to explore musical instruments and absorb new concepts. The teacher needs to be ready to either move faster or pull back. Music class should be a pleasant experience that allows students to go at their own pace.</b></p>		
<b>Materials:</b>		
<p><b>I will need CD players and access to the internet.</b>  <b>I will need simple musical instruments such as drums, bells, percussion and access to a piano.</b>  <b>It will be helpful to also have poster board, assorted construction paper and art materials such as markers. See Figures A1-A41.</b></p>		

<b>Learning Activities</b>		
<b>Time</b>	<b>Learning Activities</b>	<b>Rationale</b>

	<b>Lesson Launch</b>	
	<p><b>I will play music as students enter the room that has to do with the lesson we will be doing for the day.</b></p> <p><b>I will discuss briefly what we did the day before as an introduction for the coming information.</b></p>	
	<b>Instructional Task(s) Sequence</b>	
	<p><b>What learning experiences will you engage students in that will help them build the understandings and skills needed to meet the content and language objectives?</b></p>	
	<p><b>Students will listen to music and copy what they hear when asked to.</b></p> <p><b>Students will improvise music using a variety of instrumentation or their own voices.</b></p> <p><b>Students will learn to cooperate and wait their turn.</b></p> <p><b>Students will learn how to share instruments and music and interact with other students and the teacher in the class.</b></p>	

	<b>Lesson Summary and Closure</b>	
	<b>I will summarize each lesson at the end of each class period and briefly share what the next lesson will be.</b>	
<b>Management and Safety Issues: Are there management and safety issues that need to be considered when teaching this lesson? If so, list them. What will you do to prepare students for these issues?</b>		

## **Appendix B**

### **Suggested Activities for the Students with the Following Challenges**

#### **Verbal Interaction and Lack of Spontaneity**

A1 Title: Matilda the Gorilla

A2 Title: Out of the Egg

A3 Title: Onomatopoeia Rita

A4 Title: Little Mozarts

A5 Title: Emotion, Exploring Feelings

A6 Title: Staff Twister

A7 Title: The Tale of the Mountain King

A8 Title: Rhythm Telephone

A9 Title: Human Composition

A10 Title: It's Time to Say Goodbye Now

A11 Title: Silence

A12 Title: Speechy Hot Potato

A13 Title: Janice's Hello Song

A14 Title: March in Time

A15 Title: Quick Lining Up Song

## Appendix C

### **Social Interaction Avoidance**

A16 Title: Here's My Name and What I Like

A17 Title: My Music Tells You How I Feel

A18 Title: Singing with Feeling

A19 Title: Hangman

A20 Title: Share the Drum

A21 Title: Let's Sing Hello

A22 Title: Dance and Sit

A23 Title: The Princess

A24 Title: Carnival of the Animals

A25 Title: Boomwhackers-If You're Happy

**Appendix D****Profound Distractibility**

A26 Title: Listen, Listen to a Clue

A27 Title: Introducing Math Through Music

A28 Title: Scribble Music

A29 Title: Dynamic-Create Your Own Rainstorm

A30 Title: Colorful Vivaldi

A31 Title: Move and Freeze

## Appendix E

### Tactual and Auditory Defensiveness

A32 Title: Music Conductor Game

A33 Title: One Potato, Two Potato

A34 Title: Spin the Musical Dreidel

A35 Title: Beach Ball

A36 Title: Letters in the Air

A37 Title: Two Little Blackbirds

A38 Title: The Bird Song

A39 Title: Good Morning Song

A40 Title: Telling Folktales with Music

A41 Title: Using a Song to Teach Rhythm

A42 Title: Introduction to School Band Instruments

A43 Title: Finding the Singing Voice; An Introduction to Vocal Control

A44 Title: String Thing

## Verbal Interaction and Lack of Spontaneity

Figure A1 Title: Matilda the Gorilla

Minnesota Standard: 0.1.2.3.2

Subject:

Grade Level: K

Objective: Expressive language and vocalization. Kids will sing the vowels “ooh” and “ah.”

Materials: lyrics and children

Method: Sing and encourage any vocalization

Adaptations: Children can jump or clap, or any movement during the verses.

Melody: CGFCCFCG

Lyrics:

- I had a pet gorilla and her name it was Matilda. Matilda loved to sing songs every day.
- We went walking through the park. The people would laugh and the dogs would bark. They never understand what Matilda would sing; cause she was singing her gorilla thing. This is what Matilda sang. mi...fa mi re re mi fa fa fa solfami so...la sol fa fa mi...re

- Finally, the circus man came along. He said, “Matilda, I know where you belong. Now in the circus, you can see Matilda and her gorilla family.

LaBella, M. (2012). Matilda the gorilla. *Musictherapytunes.com*. retrieved from <http://www.musictherapytunes.com/wp/783>

Figure A2 Title: Out of the Egg

Standard: 0.1.2.1.1

Subject: Language

Grade Level: K

Objective: Improve vocabulary of body parts, expressive language, vocalization, awareness of low sounds to high and back down to low sounds.

Materials: Song, possible pictures and /or puppets or stuffed animals

Method: sing and do. We begin crunched down on the floor and work our way up to standing phrase by phrase. At the end we peep/crunch down to the ground/floor again.

Adaptations: (optional) Stop singing at the end of the phrases and wait for the children to fill in the last word. Allow the student to hold a stuffed baby chicken and an egg to explore what happens when a chicken is hatched. Then practice going from being near the floor to standing up slowly. Also, assign a student to stand nearby to help the student to know when to go down and go up, with a hand on the blind student's elbow.

Melody: Each line goes up a scale note.

Lyrics: Peck, peck, peck on the warm brown egg...Up comes a neck...Out comes a leg. Here comes a wing with a...flap, flap, flap...Happy Easter/spring...everybody...what do you think of that?

Then sing down the scale: peep, peep, peep, peep, peep, peep, peep, peep. Shhhhhhhhh (You can use bak, bak, or any other adaptation).

Labella, M. (2012). Out of the egg. *Musictherapytunes.com*. Retrieved from <http://www.musictherapytunes.com/wp/two-cute-easter-spring-music-therapy-songs-for-preschoolers/>

Figure A3 Title: “Onomatopoeia Rita”

Subjects: Art, Language Arts, and Music

Minnesota Standard: 0.1.2.3.2

Grade Level: 3-5

Objectives: Students will recognize the different sounds associated with the percussive instruments.

Materials: The poem, “Onomatopoeia Rita” by Mary A. Mills

Method: Introduction:

This poem is a great way to have kinesthetic and auditory learners participate in active poetry, which features onomatopoeia. Each segment of audience/class can recognize the different sounds associated with the percussive instruments and maybe even guess what the percussion instruments are called (no one’s guess is wrong, of course) while a narrator observes and directs the action, relating the last part of the poem in a dramatic way.

Lyrics: Poem “Onomatopoeia Rita”

Ta ta tum, tum, tum,

Ta ta tum, tum, tum,

Ta ta tum, ta ta tum, ta ta tum, tum, tum!

Chee, chee, chee, chee,

Chee, chee, chee, chee!

Ding, ding, ding, ding a ling,

Ding, ding, ding a ling,

Bong, bong, bong!

Clippety, clop, clippety, clop,

Clippety, clop, clop, clop!

Percussionist, percussionist,

Your rhythm repeats

The metronome beat,

Crescendos increase,

Then retreat,

Until finally...

The cacophony ceases.

Adaptations for sight challenged students: It is a priority to have explored and named the percussion instruments in the classroom before employing this lesson, preferably in a one-on-one environment.

Assessment

- Grades 3-5 might like this poem the best because of the more difficult multi-syllabic words and the pure fun of playing percussion instruments.
- Music teachers might also like to use the idea with 1<sup>st</sup> and 2<sup>nd</sup> graders using musical instruments, instead of reciting the verses.
- This poem may also be of use to English teachers for grades 6-8, in which poetic devices and literary terms such as onomatopoeia, alliteration, repetition, and cacophony are first introduced. Similarly, music teachers in grades 6-8 might also use this poem to reinforce the words percussion, crescendo, rhythm, metronome, and cacophony.

Mills, M. (1999). Onomatopoeia rita. *Hotchalk music lessons*. retrieved from [http://lessonplanspage.com/onomatopoeia-rita-is-an-active-percussion-poem-for-kinesthetic-and-auditory-learners/http://lessonplanspage.com/?s=this lesson on Playing How you Feel is called /%22Little Mozarts/%22&paged=1&search-token=558c8313aeb6e4.95884379](http://lessonplanspage.com/onomatopoeia-rita-is-an-active-percussion-poem-for-kinesthetic-and-auditory-learners/http://lessonplanspage.com/?s=this%20lesson%20on%20Playing%20How%20you%20Feel%20is%20called%20Little%20Mozarts%22&paged=1&search-token=558c8313aeb6e4.95884379)

Figure A4: Little Mozart's

Minnesota Standard: 0.2.1.3.1

Subject: Language Arts, Music

Grade Level: 3-5

Objective: Creating/ Composing Music. Students will improvise and create variations and harmonic accompaniments for songs and will create poetry (Music 6th AL General Music 22). Students will compose and arrange songs, as well as, use a variety of sound sources when composing. Students will express meaning through writing sentences in an organized manner and write in a variety of modes to express meaning

Materials: Essential Recordings From Wolfgang Amadeus Mozart Euchida, Tate 1995

Beethoven: 9 Symphonies / Zinman, Tonhalle Orchestra Zurich

Other media used: Computer internet sites:

<http://www.island-of-freedom.com/MOZART.HTM>

<http://www.openmozart.net>

CD player, pencils, and paper, keyboards, braille and standard, and guitars

Method: Have you ever felt an emotion that you just couldn't describe using words? Did you have to jump in the air because you were happy, or just sit there and cry because you were so sad? There are other ways of expressing emotions, and one of them is writing music. We are going to do just that today.

Step 1: Everyone please brainstorm how you are feeling right now. Are you feeling good? Bad? Confused? Just write it down. Pass out pencils and paper, or position child at the braille or standard keyboard.

Step 2: The music you write doesn't have to be complex like Mozart's. Play Ode To Joy by Beethoven. This is another composer's music. Does anyone know who it is? Right, it is Beethoven. This was his simplest piece, and one of everyone's favorite.

Step 3: Now try to fit your words that you wrote about your feelings into the rhythm of the music. It helps to have the same number of syllables as notes.

Step 4: Now, play the song and sing along to it. It's okay if you mess up, because even the best composers in the world can't get their piece perfect in one day. But that was a long time ago. I'm sure your pieces will be wonderful.

Step 5: Now let's take turns playing for the class.

Assessment: Teacher should observe each child's participation in the process, observing their performance, enthusiasm, and their nervousness, as the kids who are especially nervous might have performance anxiety, which is understandable.

Adaptations: Standard and braille keyboards will be available to express emotions.

Other art or curricular ideas: Children can do research on Mozart at the sites given above.

They may write a paper on Mozart's life

Ayers, W. (n.d.). "Little mozart's". *Hotchalk lesson plans*. Retrieved from <http://lessonplanspage.com/?search-token=558c8313aeb6e4.95884379&s=little+mozarts&grp=1>

Figure A5 Title: Emotions, Exploring Feelings

Minnesota Standard: 0.4.1.3.1

Subject: Art, Language Arts, and Music

Grade Level:: 3-5

Objectives: Exploring feelings through music and art

Materials: *My Many Colored Days* by Dr. Seuss, poster w/colors. Art supplies per group: colored pencils, crayons, markers, colored chalk, and multi-colored paper.

Mozart's Piano Concerto No. 17 in G, K453 III (7:48), Mahler's Symphony No 11. III, Funereal March (10:56), Robert Schumann's Perfect Happiness (: 45), Chopin's Prelude in E Minor Op. 28 (2:01)

Methods: Read *My Many Colored Days* by Dr. Seuss. Use as a tool for discussion of different emotions. Question how they were portrayed in book. Present poster with colors and ask children to name an emotion for each color. Fill in poster with emotion children decide on.

Adaptation:

Discuss what colors are and how they make some people feel. Present the visually challenged student with tactile representation of colors. Perhaps a hard plastic block could stand for red, a fuzzy triangular shape could stand for blue, a steel triangle from the band room could be yellow, etc. Students could then use these representations of color to assemble a sculpture that expresses how they feel.

Assessment:

- The students will demonstrate through art an understanding of emotions as heard in music.
- The students will discuss the differences found between major and minor keys in terms of emotions.
- Explain how emotions can also be found in music. Listen to short examples (Robert Schumann's Perfect Happiness, & Chopin's Prelude in E Minor Op. 28). Have students call out emotions and colors as felt. Discuss, relating emotions to colors.
- Listen to Mozart's Piano Concerto No. 17 in G (major key). Children draw pictures using any available supplies. Teacher also participates, while observing and monitoring the class. Adaptation: Visually challenged student can take part in creating and coloring with chalk on a chalkboard, crayons on paper or by making sculpture with playdoh.
- At the end of the music, break students into small groups of 2-3. In these groups, they must explain how they felt, and why they used the colors they did. Teacher goes first as an example for all.
- Repeat step 3 for Mahler's Symphony No 11. III, Funereal March.
- Whole group discussion of what was different in the two pieces of music.

- Student picks favorite of the two pictures done and explains it to the class in terms of emotions and colors.

Ansley, B. (n.d.). Emotions, exploring feelings. *Hotchalk lesson plans*. retrieved from <http://lessonplanspage.com/musicartlaoemotionsinmusicart35-hm/>

Figure A6 Title: Staff Twister

Minnesota Standard: 0.1.2.3.1

Subject: Musical staff

Grade Level: 1-4

Objective: To learn the names of the lines and spaces.

Materials: Masking Tape

Method: Make a staff on the floor using several layers of masking tape to make it tactile for the visually challenged students. I find a distance of approximately 12" between lines works fine for grades K-4. Several children play at one time. I call out either right or left hand randomly, and the children put their hands or feet on the corresponding line or space. The more difficult the more fun they have!

Adaptations: I have used the same staff to teach and identify chords. For visually challenged or blind children, I recommend creating individual staffs to use at seats using stiff cardboard and several layers of Elmer's glue for the lines and notes. The aide can assist the student in putting their finger on the right line or space.

Morin, P. (n.d.). "Staff twister" *Hotchalk lesson plans*. Retrieved from  
[http://lessonplanspage.com/?search-  
token=558c8313aeb6e4.95884379&s=staff+twiste&grp=1](http://lessonplanspage.com/?search-token=558c8313aeb6e4.95884379&s=staff+twiste&grp=1)

Figure A7 Title: The Tale of the Mountain King

Minnesota Standard: 0.1.2.3.2

Subject: Music

Grade Level: 1-3

Objective: After hearing *The Tale of the Mountain King* students listen to a recording of *In the Hall of the Mountain King* from Edvard Grieg's *Peer Gynt Suite* and then play this beat keeping game. This is a lesson in teamwork, self-control, coordination, keeping a steady beat, tempo and dynamic change, folktales, and history of classical music.

Materials:

Recording of the *In the Hall of the Mountain King* from the *Peer Gynt Suite* by Edvard Grieg,

Find approximately six soft squishy balls that are easy to handle with little hands and don't hurt if noses get bonked, and the *Tale of the Mountain King* below.

Method: Sit the class in a circle and tell them the story of the mountain king. After the story is told, listen to the music. Tell them that the music begins right after the unpleasant man wakes up in the dark forest. Interject where other key parts of the story are happening in the music – especially the chase!

When the music ends, ask what happened to the music as the story progressed.

(It got louder and faster.)

Then tell them they will listen to the music again, but this time they will be playing a game. Instruct them to pass the ball to their neighbor by putting the ball in their lap

on the beat. This is really the only way to see a clear beat; passing hand to hand just doesn't do it as well. You might want to practice this with them before you start the music. (At this point, I would set some ground rules, such as if the ball is dropped, only the person it was meant for can go get the ball. This will prevent five or six of them diving into the circle!)

Start the music and encourage them to listen very carefully for the beat. If they have trouble, it sometimes helps to whisper the word "pass" on the beat for them. Of course, when the music gets faster and faster, it gets harder to pass on the beat, let alone hear it, for all the squeals and giggles. Warn them about the part toward the end that sounds like the man tripping and tumbling. It is more of a challenge if you ask them to get the ball back in your hands before the last beat.

Adaptations: Add more balls to the circle if you play it again to make it more challenging.

Story: *The Tale of the Mountain King*

Once in a little village below a great mountain, there lived a very unpleasant man. He was quite fond of himself and insisted that people treat him with great respect for surely he deserved it! Well, the people of the village were not amused. They knew he was not a nice person. He never spoke kindly about anyone, he never helped when someone had a problem, and he never even offered a "hello" when passing in the street! You can imagine how the villagers felt when the very unpleasant man announced to them that he should be their king!

Well, after the villagers finished laughing, the man went off to pout. When he did, he took a very long look at the huge mountain that stood above the village. He decided that if he couldn't be king of the village, then he must be king of the mountain. After all, it is much taller, much bigger, and certainly more important than the puny little village! Yes, the mountain must be his... but to be a proper king he must have a queen! He must have a plan to find himself a queen.

On a very pleasant Saturday, the very unpleasant man snuck around the village until he came upon a wedding just about to begin in the chapel. You would never believe what he did! He snuck into the chapel, stole the bride away and ran off toward the mountain! The whole village heard about his awful deed and ran off after him.

When he came to the forest on the mountain, the thief tripped on a rock, fell, and hit his head, knocking him unconscious. When he woke up, the bride was gone and the forest was very dark and spooky. Then, from far away, he heard some strange music and followed the sound until he came to a bluff overlooking a very strange sight!

There below the man, a group of very ugly trolls was dancing around a fire. Their dance was very clumsy and the rags that they wore were dirty and smelly. This made the man believe that they were very stupid creatures. "Aha!" he thought. "I could certainly be their king and this would make me King of the Mountain! So the man made his way down to the circle of dancers and announced his intention to be their king.

Well... the only reason those trolls didn't eat him right then and there was because the true king of the trolls had a daughter that he was trying to find a husband for.

He had been King of the Trolls for a very long time and didn't think any of the trolls he knew could take his place. Why not give this creature a try? He certainly thinks a lot of himself. So the king told the very unpleasant man that he could be king IF he agreed to do as the trolls do and become one himself. Then he would marry the king's daughter and become the King of the Trolls! The man agreed and began to do as trolls do so that he could become a troll himself.

The first thing he needed was to look more like a troll, so the lady trolls made him a coat of stinky fur with a tail attached. When he put the coat on it was very heavy and it made him bend over a bit from the weight. It was also very smelly, but it certainly helped him look more like a troll!

The second task was to act like a troll. He snuck around in the shadows like the other trolls and he danced around the fire like the other trolls. This made the king very happy, because the man seemed very close to becoming a troll worthy of marrying his daughter! There was only one more task the man had to complete... he must eat troll food!

The Troll King ordered food to be brought before the man so that he could eat like a troll. You can only imagine what kind of food was served! (Here's where I ask my students to give their guesses on what the trolls ate. This is lots of giggly fun!) When he saw the platters and bowls and trays of the yuckiest food coming toward him... it was more than he could bear. Off came the troll coat, up came his posture, and away he ran! He would not be a troll king or even a mountain king, and certainly not a troll husband!

Down the mountain he ran, with the pack of trolls close behind him. Faster and faster he raced until his feet were moving faster than his body could handle. Suddenly, he tripped and tumbled, then gained his balance, but tripped again and again and again until he landed hard and hit his head... again!

When he woke up this time, there were no trolls around him, no deep dark forest, just a crowd of villagers and a very upset bride glaring down upon him. What happened to him then? That's for you to decide! The End.

Nummy, N. (n.d.). "Peer gynt suite". *Hotchalk lesson plans*. Retrieved from <http://lessonplanspage.com/?t=squishy+balls&s=squishy+balls&search-token=558c8313aeb6e4.95884379>

Figure A8 Title: Rhythm Telephone

Minnesota Standard: 0.1.1.3.1

Subject: Music, rhythm concepts

Grade Level: 2-3

Objective: This is another great way to keep students quiet when lining up.

Method: I tap a rhythm on the shoulder of the person at the end of the line (eg. ta ta ti-ti ta), and then they tap it on the shoulder of the person in front of them, and so on until it gets all the way to the front of the line. Then we check and see if the rhythm stayed the same or changed. The goal is for the rhythm to travel through the entire line without changing.

Adaptations: You can use more difficult rhythms for older grades and easier for younger.

They love when they get it and they are learning to recognize rhythms too!

Haugland, B. (n.d.). "Rhythm telephone." *Hotchalk lesson plans*. Retrieved from <http://lessonplanspage.com/?t=Rhythm+telephone&s=Rhythm+telephone&search-token=558c8313aeb6e4.95884379>

Figure A9: Human Composition

Minnesota Standard: 0.1.2.3.1

Subject: Music

Grade Level: 1-3

Objective: Teach the notation of notes on lines and staff.

Materials: Masking or floor tape, large sheets of paper or cardboard.

Method: First, using masking tape or floor tape, make a giant sized staff on the floor, using multiple layers of tape to make it more tactile for visually challenged learners. Out of stiff/thick paper or cardboard, make a treble and bass clef to put to the side to determine which line and spaces you will be identifying.

Divide your students up into small groups. First, have them make human notes, using all people in their group to make the note/notes. Then lying down on the staff let them display their note representations. This covers the rhythm element. Next, you can have their group decide on a line or space that each child will stand on. The teacher using the piano or bells will play the human composition that they have formed by standing on the different lines and spaces. They absolutely love this and students always ask to show their classroom teachers.

Adaptation: Assign a student to buddy with the visually challenged or blind student to help them know when to lie down or stand up. Also, it may be beneficial for the blind student to be given the opportunity to “see” the staff and notes by feeling this layout while the students lay there quietly.

Another twist, I have lined them up on the lines and spaces to make “Twinkle, Twinkle Little Star” I have them squat down and when I call out their line or space then they pop up and go back down. It’s like following the bouncing ball. This has been a great way to assess their knowledge of lines and spaces.

Assessment: Use the above adaptation to assess their knowledge of lines and spaces.

Slupski, D. (n.d.). “Human composition. *Hotchalk lesson plans*. Retrieved from <http://lessonplanspage.com/?t=Human+Composition&s=Human+Composition&search-token=558c8313aeb6e4.95884379>

Figure A10: Title: It's Time to Say Goodbye Now.

Minnesota Standard: 0.3.1.3.1

Subject: Language and social skills, transition difficulty

Grade Level: 1-3

Objective: Clients will give eye contact to the therapist, sing the word "goodbye", and wave.

Materials: Adapted version of *I got a Feelin'* by Black Eyed Peas (you can hear the melody on YouTube).

Method: Sing and do.

Adaptations: Allow the visually challenged or blind student to face in your direction, sing the word "goodbye", and wave in the direction of the teacher.

Mellow it up for preschool kids. The song is also good for sign language and to help kids give eye contact and wave.

Melody and Lyrics:

C F

I've got a feelin' that it's time to say goodbye now.

Am

Yes, it's time to say goodbye now.

F C

It's time to say good, good-bye.

LaBella, M. (2012). "It's time to say goodbye". *Musictherapytunes.com*. Retrieved from <http://www.musictherapytunes.com/wp/ive-got-a-feelin-goodbye-song-to-teach-social-skills/>

*"City Sounds" music therapy sound poem for children, adolescents, and adults*

Figure A11 Title: Silence

Minnesota Standard: 0.2.1.3.1

Subject: Language Arts, music

Grade Level: 3-5

Objective: Cooperation, group contributions and participation.

Materials: Instruments to represent the different objects in the poem such as bells, car horn, radio, squeaky toy, TV sounds, and car sounds.

Method: The group creates background music/sound effects after each line of the poem is read.

Lyrics: Hark, Hark the dogs do bark. The neighbors yell. The babies cry. The busses grind. The bongs bong. The telephones ring. The jet planes fly. The car horns honk. The taxis screech. The radio's on. The TV's high. The rock and roll pours from the CD stores. The subway roars. The old women mutter in the gutter. The rats squeak. The flies buzz. Only the roaches quietly crawl.

Adaptations: Visually challenged or blind students can read the poem using braille. Have the group read it emphasizing the last word of each sentence in a way that relates to that word. Certainly, you can create your own image and sound poem. Compose free form background music for the poem. Listen to different compositions and select the best one for the poem.

LaBella, M. (2012). "Silence, a sound poem". *Musictherapytunes.com*. Retrieved from <http://www.musictherapytunes.com/wp/ive-got-a-feelin-goodbye-song-to-teach-social-skills/>

Figure A12 Title: Speechy Hot Potato

Minnesota Standard: 0.1.2.3.2

Subject: Language and auditory processing

Grade Level: Pre-K - K

Objective: Children take turns being it: answering questions and playing the xylophone

Materials: Xylophone and maraca. Questions appropriate to the group you are working with.

Method: Play a song meaningful to the group, and have the children pass a maraca around the circle. When the music stops, the child holding the maraca must answer a question. Invite the speech therapist into this process if you can. (If the group is non-verbal, have the child follow a direction.) That child then goes to the center of the circle and plays the xylophone while the process is repeated. Continue until everyone has had a turn answering questions and playing the xylophone.

Adaptation: The visually challenged or blind student may need someone to hold the xylophone so that they can strike it more easily with the mallet.

LaBella, M. (2012). "Speechy hot potato". *Musictherapytunes.com Retrieved from*  
*<http://www.musictherapytunes.com/wp/speechy-hot-potato-music-speech-therapy-activity/>*

Figure A13 Title: Janice's Hello Song

Minnesota Standard: 0.2.1.3.1

Subject: language arts and social ability

Grade Level: K

Objective: Children will establish and maintain eye contact, wave, and sing hello to the teacher. Materials: Hello, Hola! By Janice Buckner (On her "*Learning Skills for Little One's*" CD see [Janicebuckner.com](http://Janicebuckner.com)) MOVE materials????

Method: Sing the following words to any age-appropriate song.

Melody: An example tune is as follows: *The Wheels on the Bus*, or any other kid song.

C G C Shake the maraca and pass it down. Pass it down. Pass it down. Shake the maraca and pass it down. G C Until the music stops.

Adaptations: Use to improve physical skills or any other skills by changing the words and/or tempo. The words below are changed slightly.

C F C G C F G C Hello, hello (rest rest). Hello, hello (rest rest). Hello, hello (rest rest).

It's music time. MI do mi fa mi do mi re mi do mi fa fa mi re do

- General cattle call: (Come on up and take one, everybody.)
- Call up children by names – teaches name awareness, identification, attention, turns, waiting...
- Call up children via their addresses – safety skills, general-self knowledge, awareness of self in the neighborhood and community.
- Call up children by phone-numbers; same goal as above. This is considered general pre-K knowledge.
- Hold up pictures of the children or cards with their names written on them. Good for representation of self, self-image, word recognition. Again, this is expected of all children entering kindergarten.
- Hand out a number card to each child and call them up by the numbers.
- Do the same for shapes. Again, this is considered part of the general knowledge fund expected for all pre-K children.
- Do the same for colors or positions/prepositions: come up if you are on the end, in the middle, wearing blue...
- Have a student hold the instrument basket. Let each child select an instrument. Great for leadership, strength, language and other social skills.

- Have a student call up their classmates by name. My kids love to call the names into a little microphone. The auditory feedback provided via the amplification motivates even shy children to speak up at our school.
- Call children up by describing their clothing. This fosters self and peer awareness.
- Call the kids up by saying the first letter of their name, or first syllable/consonant.
- Call them up by rhyming their names. This is a good pre-literacy, auditory skill. (Fiddle dee diddle. Fiddle dee Andrew. Come on up if your name is. Andrew!)
  
- How about calling the kids up by conceptual categories such as boys, girls, long sleeves, short sleeves, eye color, long and short hair. Good for self and other awareness, language concepts and generalization of such knowledge.
- By age/ birthday month
- By town.
- Ask the children “who wants this name of instrument?”
- Ask the children “whose turn is it to take one?”
- Make cards with pictures of instruments on the back. Have the children come up, choose a card and take the related instrument. The symbolic visual representation communicates a meaning and is a precursor to reading. Make other devices with pictures of instruments on them and use for the same purpose. For example, tape

pictures to a large cube box and roll as a dice. Do the same with a dreidel at Chanukah time.

- Make a picture board with black and white line drawings, colored line drawings and actual pictures of instruments.

Adaptations: For any visually challenged or blind students, any concrete, visual examples as described above can be adapted using small, play instruments, string glued to cardboard, or layered glue on cardboard to represent the instruments.

LaBella, M. (2013). Janice's hello. *Musictherapytunes.com Retrieved from*

*<http://www.musictherapytunes.com/wp//?s=Janice%27s+Hello>*

Figure A14 Title: March in Time

Minnesota Standard: 0.2.1.3.1

Subjects: Music, P.E. & Health

Grade Level: K-4

Objective: Kids will learn difference between left/right and walk/march in time.

Materials: CD of a short march (1:30). I use the *White Cockade on the US Marine Band's Liberty for All* CD.

Method: Have students raise left hands. Once students can demonstrate raising their left hands, have them stomp their left foot in time.

Next, have them march in a circle in the military fashion of left right left right.

To help them know the difference between left and right, I have them hold up their left hand. Their hands should all be pointing either outside or inside of the circle.

Once they've marched one direction, have them turn around and march the opposite direction.

I use this as a warm-up for K-4 grades, before doing any seatwork or other activity.

Adaptation: For visually challenged or blind children, assign them a music class buddy to march and walk with.

Lars, L. (n.d.). March in time. *Hotchalk lesson plans*. Retrieved from <http://lessonplanspage.com/musicpeomarchleftrightintimek4-htm/>

Figure A15 Title: Quick Lining Up Song

Minnesota Standard: 0.1.2.3.2

Subject: Music

Grade Level: K-4

Objective: Lining up, following directions, transition

Method: I use this at the end of my music class, but it could be used in a regular classroom as well. It is to the “tune” of the typical military call-response cadence (the type that at the end says “sound off 1-2, sound off 3-4, cadence count 1-2-3-4, 1-2...3, 4!). I sing/chant and then they echo after me as they are lining up.

“Third grade fall into your line”

(They echo)

“Talking now would be a crime”

(They echo)

“Cross your arms and face the door”

(They echo)

“Or we’ll do this more and more”

(They echo)

“I am”

(Echo)

“Ready”

(Echo)

“I am ready for the...hallway!”

(We all sing/chant this together)

Adaptations: For visually, challenged or blind students, assign a music buddy to help them march and walk to line up. As a music teacher, you can apply all kinds of elements of music into this and have them sing exactly how you sing (p, f, largo, allegro, add crescendos/decrescendos, acce. /rit., legato/staccato, etc.) Then ask them questions about the way you sang it.

Assessment: Once they know this song and line up with it consistently, I let my “helper” sing it and the class echoes. This gives me another chance to hear the class sing without me and an individual voice/solo (and they feel like it’s an honor to get to lead it).

Woodrow, C. (n.d.). Quick lining up song. *Hotchalk lesson plans*. Retrieved from

<http://lessonplanspage.com/?search->

[token=558c8313aeb6e4.95884379&s=lining+up+song&grp=1](http://lessonplanspage.com/?search-token=558c8313aeb6e4.95884379&s=lining+up+song&grp=1)

**Social Interaction Avoidance**

Figure A16 Title: Here's My Name and What I Like.

Minnesota Standard: 0.2.1.3.1

Subject: Emotional expression and social skills

Grade Level: 1-5

Objective: Students will fill out a song form with their name and things they like/dislike.

Materials: Pages with song and blank spaces provided, pens, a variety of age-appropriate instruments. Braille translations of this page may be made available for visually challenged or blind students, and their answers may be typed on a braille typewriter.

Method: Students fill out form, choose an instrument to accompany it with and perform their verse.

Lyrics and Chords: Kids can rap this or jam to any popular chord progression.

Examples: Em-C- D repeated. Em-Dm repeated. Blues progression. Words: My name is \_\_\_\_\_ . I said \_\_\_\_\_ is my name. \_\_\_\_\_ is my favorite game. I like \_\_\_\_\_ think \_\_\_\_\_ is bad. My song is \_\_\_\_\_ the best that I had.

Adaptations: For visually challenged or blind students, the teacher also may take down their answers orally and sing them if students are not able.

Assessment: NA

LaBella, M. (2014). Here's my name and what I like. *Musictherapytunes.com Retrieved*  
*from <http://www.musictherapytunes.com/wp/?s=Here%27s+my+name>*

Figure A17 Title: My Music Tells You How I Feel

Subject: Emotional expression and social skills

Grade Level: 1-5

Objective: Students tell you how they are feeling, and portray that feeling on an instrument.

Materials: Paper and pencil, braille typewriter and worksheet, various instruments

Method: Students fill out the form and perform it for the class. Example: I feel real mad when they fight. Or I feel better when I play on my guitar. Do an introductory verse on “My music tells you how I feel” then get person-specific. Make a class verse. My music tells you I feel \_\_\_\_\_. My music tells you I feel \_\_\_\_\_. Feeling come and feeling go. But I’ll tell you this I know. My music tells you I feel\_\_\_\_\_.

Adaptations: Class jams along with the student leader. Change up the words to reflect feeling toward a situation.

LaBella, M. (2014). My music tells you how I feel. *Musictherapytunes.com*. Retrieved from <http://www.musictherapytunes.com/wp/?s=Here%27s+my+name>

Figure A18 Title: Singing with Feeling

Minnesota Standard: 0.1.2.3.2

Subject: Language and emotional expression

Grade Level: 1-5

Objective: Emotional expression and language. Kids name feelings and then act out bodily, facially, and vocally.

Materials: Any familiar kids song (*ABC's*, *We All Live in a Yellow Submarine*, *Bingo-It's up to you and/or the kids.*)

Method: Kids can pick an emoticon face or feeling and then sing the song while acting out the emotion, either positive or negative.

Adaptations: For visually challenged and blind children, create emoticons they can feel on flashcards that have the faces made out of string or glue applied in several layers.

This activity works well with younger kids too. We don't get to express certain emotions much in our culture in a positive way. This activity also tends to activate and focus a fidgety bunch of kids.

LaBella, M. (2012). Singing with feeling. *Musictherapytunes.com*. Retrieved from <http://www.musictherapytunes.com/wp/sing-with-feeling-emotional-expression-music-therapy-activity-for-preschoolers-school-age-children-and-older/>

Figure A19 Title: Hangman

Minnesota Standard: 0.1.1.3.1

Subject: Auditory skills (instrument discrimination) and

Grade Level: Pre-K - K

Objective: Kids listen to recorded instruments, name the instrument, guess a letter, and listen to a favorite song. The social skills needed to play the game are turn taking, waiting and impulse control.

Materials: Board to write on, CD of recorded instruments, a song to listen to as a reward.

Method: Music teacher thinks of a word related to something the students are learning about, and puts one horizontal line for each letter on the top of the board. Students take turns listening to an instrument and naming it. The other kids can help, if that is best.

When this is done, the student guesses a letter. If correct, the teacher puts the letter where it fits on the word. If incorrect, she draws a circle on the board and begins to draw the body part by part.

Adaptation: Students who are visually challenged or blind may do best in a one-on-one situation where the teacher can create hangman cards on whiteboard with layered glue or string that can be used over and over.

LaBella, M. (2012). Hangman. *Musictherapytunes.com*. Retrieved from  
<http://www.musictherapytunes.com/wp/?s=Hangman>

Figure A20 Title: Share the Drum

Standard: 0.1.2.3.2

Subject: Social skills: parallel and cooperative play

Grade Level: K-5

Objective: Children will share the drum, (wait for, take, and relinquish turns.)

Materials: Drum, possibly two sticks. (I use pencils or plastic spoons.)

Method: Place one large drum between two children

Adaptations: Use homemade drums, or a large tambourine.

Melody: *Froggie went a-courtin'* (Check out the melody on YouTube.) C

F G C F C

Name and Name you share the drum. Boom-boom. Boom-boom. (Or any sound you'd like them to create.) C F C G C G

Name and Name you share the drum. Boom-boom. Boom-boom. C F C D7 F7

Name and Name you share the drum. Make that thing go bum-bum-bum.

C F G C F C

LaBella, M. (2012). Share the drum. *Musictherapytunes.com*. Retrieved from

<http://www.musictherapytunes.com/wp/?s=share+the+drum>

Figure A21 Title: Let's Sing Hello

Minnesota Standard: 0.1.2.3.2

Subject: Social (waiting, sharing, relinquishing turn.)

Grade Level: K-2

Objective: Kids will share and play instruments when the teacher sings their name.

Materials: Guitar, lyrics, and interesting rhythm instruments.

Method: The therapeutic music teacher puts instruments in the center of the song circle.

Children come to the center and share instruments (or an instrument) when their name is sung. Children all sing during the chorus.

Adaptations: (optional) An easy articulation drill.

Chorus: C F C F C F C C

Let's sing hello to every-one. Now \_\_\_ and \_\_\_\_, let's have some fun.

C Bb F G

Singing na na na na na na. Na Na na na na na. (Repeat nas.)

LaBella, M. S. Cindy, (2012). Let's sing hello. *Musictherapytunes.com Retrieved from*  
*<http://www.musictherapytunes.com/wp//?s=Let%27s+sing+hello+Cindy>*

Figure A22 Title: Dance and Sit

Minnesota Standard:0.3.1.1.1

Subject: Auditory awareness, impulse control

Grade Level: K

Objective: Children will dance when the music plays and sit down when the music stops following verbal and nonverbal directions.

Materials: lyrics, guitar, children, and chairs

Method: The therapeutic music teacher sings the words and encourages the children to jump. Children hurry to their seats when the music suddenly stops.

Lyrics, chords, melody used: tune – *Mexican hat dance*. (Check out the melody on YouTube.) Words: D A7 We are all jumping beans, and we really like to jump! A7 D We are all jumping beans, and we really like to jump! D A7 We jump and jump and jump. All over the place we jump. We jump and jump and jump. All over the place we jump.



Figure A23 Title: The Princess

Minnesota Standard: 0.1.2.1.1

Subject: Socialization (also great for expressive/receptive language)

Grade Level: Pre-K - K

Objective: Kids act out the story and learn expressive/receptive language.

Materials: Lyrics and hats for the princess, witch(es) and prince(es), bells for the bushes (bushes will stand around and pretend to grow).

Method: Act out these lyrics and see what ensues! Adjust the story as need be.

Adaptations: Draw or create pictures (Use clay or Playdoh if visually challenged) and sing the words as a language activity. Have kids put the pictures in order (sequencing).

Let the kids make up a few verses.

Lyrics, chords, and solfege, melody used: Possible seated motions.

- There was a lovely princess, a princess, a princess. There was a lovely princess- a long time ago. (Point to hair and show it's beauty.)
- She lived up in a castle, a castle, a castle. She lived up in a castle – a long time ago. (Hold hands overhead, touching fingertips.)
- An old witch came to see her, to see her, to see her. An old witch came to see her – a long time ago. (Make a face, slump over, and wiggle fingers.)

- She makes her prick her finger, her finger, her finger. She makes her prick her finger- a long time ago. (Act this out.)
- The princess fell asleep, asleep asleep. The princess fell asleep- a long time ago. (Act this out. You may snore.)
- The bushes grew around her, around her, around her. The bushes grew around her- a long time ago. (Act like a growing bush: with arms/ hands.)
- A handsome prince came riding.....  
.....a long time ago. (Tap knees.) He cut down all the bushes..... a long time ago. (Kids tend to make pretend buzz saws)
- He woke the sleeping princess..... a long time ago. (Shake your arms, or blow kiss/say ew.)
- They had a happy party.....  
...a long time ago. (Do a raise the roof motion with arms.)

Chords: G C G7 C

Melody: 1. There was a lovely princess, a princess, a princess. Sol la so  
fa re do mi mi re fa fa mi sol G7 C G7  
C

There was a lovely princess a long time ago. Sol la so fa re do mi  
me sol sol sol do.

LaBella, M. (2012). The princess. *Musictherapytunes.com Retrieved by*

<http://www.musictherapytunes.com/wp//?s=the+princess>

Figure A24 Title: Carnival of the Animals

Minnesota Standard: 0.4.1.3.1

Subjects: Language Arts, Music

Grade Level: 1-3

Objective: Auditory awareness. Music enjoyment.

Materials and adaptations: This activity uses “Carnival of the Animals” by Camille Saen-Saints. I have taught this to kids as young as 2nd grade and as old as 6th grade, making slight modifications for grade level.

Method: First, find pictures of each of the things listed below. You could use photos, but I found Print Shop to have most of these, and they ended up being cute cartoons.

- royal lions
- hens and/or roosters
- wild horses
- turtles

- elephants
- kangaroos
- fish/aquarium
- donkey
- cuckoo bird (any single cartoon bird will do)
- aviary (I used pictures of several birds)
- pianos
- fossils/bones/dinosaurs
- swan

Then I talk about how each animal is portrayed using the music. (The turtle one is slow....) Sometimes it's great to ask the kids what they think the music will sound like. Then play the segment for them, one at a time. For the younger grades, I would simply tell them which animal it was. For middle school kids, I wrote out a list of clues (to make it a detective game) that they had to match up with the music. Then they could pick the animal out of the line-up. Correct answers were rewarded with a small piece of candy. This really helps kids to focus on the music (without words) and relate musical ideas to a particular picture or character. This lesson would fit well in a sequence using *Peter and the Wolf*, Vivaldi's *Four Seasons*, and other program music!

Adaptation: For visually challenged or blind students, create or buy flashcards that include a variety of tactile pictures of animals and objects to use for this activity.

Mendenhall, H. (n.d.). Carnival of the animals. *Hotchalk lesson plans*. Retrieved from <http://lessonplanspage.com/musiclacarnivaloftheanimals-musictostoryactidea37-hFigure>

A25 Title: Boomwhackers – If You’re Happy

Minnesota Standard: 0.3.1.3.1

Subject: Music

Grade Level: 2-4

Objective: Music enjoyment and auditory enjoyment

Method: Seat children in a boomwhacker circle, and pass out boomwhackers in diatonic order. (If there are 24 students, for example, the first three get low C, the next three D, and so on around the circle.)

Begin “*If You’re Happy*” by just playing the melody on a keyboard and asking students to clap when they think they should. This is a piece of cake, and they will all be so very pleased with themselves. Ask them next to sing the traditional “If you’re happy and you know it, clap your hands” words.

Then, referring to a chart, which is on the board, ask them to sing, “If you’re happy and you know it, play an A”, and so on. If you use three keys, all students will get a chance to play.

Here is the chart:

- A-B-G (key of G, modulate to C)

- D-E-C (key of C, modulate to F)
- G-A-F (key of F)

Adaptations: For visually challenged and blind students, make sure the Boomwhackers have braille letters attached to the ends. Once this is well learned, I teach chords, singing; “If you’re happy and you know it play chord five”, and then one, and one again.

Only two keys are need for this, and they are (on the board):

- Five: CEG
- One: FAC (key of F, modulate to C)
- Five: GBDF
- One: CEG

Shaw, R. (n.d.). Boomwhackers – if you're happy. *Hotchalk lesson plans*. Retrieved from <http://lessonplanspage.com/musicnoteschordswithboomwhackersidea34-htm/>

**Profound Distractibility**

A26 Title: Listen, Listen for a Clue

Minnesota Standard: 0.1.1.3.1

Subjects: Language Arts, Music

Grade Level: K-3

Objective.....Do you have students who have a problem listening? This will quickly get their attention and they will be finding the beat of the rhyme as well as thinking about what they are supposed to be doing.

Methods

1, 2, 1, 2, Listen for a clue

Then you'll know just what to do.

1, 2, 1, 2, Hands in the air when I say 2

1, 2, 1, 2, isn't this easy and fun to do?

Now, let's try some other tricks,

Clap your hands when I say six.

123, 456, 123, 456

Now, let's count to number 7

Then find me a word that rhymes with "7"

1, 2, 3, 4, 5, 6, 7 rest.

You have done your very best, now sit down and take a rest.

Rest in music means quiet time.

While you're resting, can you make up a rhyme?

Adaptations: (See how creative the students can be, and then start all over again. You may all hear the rhythms and the beat and they will listen! Try it; you will have great fun with this!)

Kilpin, N. (n.d.). Listen, listen for a clue. *Hotchalk lesson plans*. Retrieved from <http://lessonplanspage.com/musiclaolisteningandrhymegoodsongandideak3-htm/>

Figure A27 Title – Introducing Math through Music

Minnesota Standard: 0.1.1.3.1

Subject: Music, Math

Grade Level: K- 4

Objective: This “Math through Music” lesson encourages mental math and quantity analysis while educating students musically

Materials:

- Small drum or tambourine representing the number 1.
- An agogo bell representing the number 2.
- A triangle represents 3.
- A wood block represents 4.

Method:

- Begin by telling the children the names of the instruments and letting them hear the different sounds. (Visually challenged or blind students should be allowed to hold the instrument and hear its sounds).

- Then ask the children what number they think the drum represents; they will instinctively tell you number one and then realize the other instruments' numbers without any help.
- Choose a child and tell them to listen to two sounds, i.e. the drum (1) and the triangle (3).
- Ask them to hit the instrument that is the sum of both numbers. They should hit the woodblock (4).
- After a short amount of practice, this can be done without speaking or involving numbers, so that when you hit two instruments, the children can hit the answer.

Adaptations:

- For nursery school children and for visually challenged and blind students:
  1. Simply hit the drum and ask them to hit the instrument that matches the number of times you strike it.
  2. If you hit the drum three times, the child will work out that three is the triangle.
- For older children:
  1. Use this idea for multiplication tables, subtraction, etc.
  2. The four instruments add to ten.
  3. If you hit the triangle times the woodblock – the answer is 12.

4. The child then has many options of instruments to answer with, i.e. the woodblock three times, the drum twelve times, the triangle four times and so on.
- This method takes away the need for numbers and encourages mental math, quantity analysis, different variations and sequences of numbers and also encourages and educates students musically.

Figure A28 Title: Scribble Music

Minnesota Standard: 0.2.1.2.1

Subjects: Art and Music

Grade Level: K – 5

Objective: Self-expression

Materials: Hand out one large piece of construction paper for each student. One large handful of crayons placed in a pile next to the paper. One engaging piece of instrumental music with a variety of tempos and dynamics OR a CD or record with several different pieces of music that you can switch between.

Method:

- Have your students find a comfortable place to sit or lie down so that the paper is nice and close to them. The crayons should be right next to the paper where they can easily reach them. (Don't even try to keep the crayons in a box or to have the students share a pile.)
- Instruct your students to place an arm on the paper so that it doesn't move when they are coloring.
- There are only two rules to this activity:

1. They must scribble to the music they hear. They cannot draw anything – no bunnies, no flowers, no sun, no houses, no racecars, etc. If the music moves quickly, their crayons must move quickly, and the opposite for slowly.
  2. They must do all this scribbling and listening with their eyes closed.
  3. (I hereby apologize for any scribble marks you may find on your floors or tabletops!)
- Just to make the pictures even more interesting, tell them you will occasionally say: “switch!” At that time they must drop their crayon and pick up a new one – without looking! (The switching part is loads of fun, especially if you change the amount of time between crayons!)
  - Look out for peekers!
  - Play the music and switch (or *not*) so that the students hear a variety of tempos, dynamics, and styles.
  - This activity is good for about 5 to 8 minutes at a time. When the music is over, have them open their eyes and look at their beautiful works of art. If you have them hold them up so that everyone can see each other’s, it’s a great demonstration of how music affects each of us differently.
  - Younger students may ask to do it again. I usually have them take their “scribble music” home and explain it to their families. I have also been

known to display them in the hall in a unique fashion so that their work together becomes another piece of artwork, i.e., in a fan, collage, or a backdrop for interesting photos of musicians.

Adaptation: For visually challenged or blind children, create a space where they can color freely without coloring the carpet or wood floors.

Figure A29 Title: Dynamics, create your own rainstorm!

Minnesota Standard: 0.3.1.1.1 and 0.1.1.3.1

Subject: Music

Grade Level: K - 3

Objective: This lesson plan teaches loud and soft to K – 1. Afterward, you can teach crescendo, and decrescendo to the older students.

- 1 Read the story “*Listen to the Rain*” or any other story that has to do with a rainstorm.

Talk about how before the rain there is silence, and then it starts off softly and grows louder gradually (crescendo), then as it dies down gets softer gradually (decrescendo).

- 2 Using a wind chime or a single triangle, have one student play by himself or herself. Then add rain sticks. Then add maracas, and tambourines. I love to add thunder with cymbals and drums. After this, let the storm get very loud. Then take away the drums and cymbals. Then take away the maracas and tambourines. All that is left playing now is rain sticks and the wind chime or triangle. Finally take out the rain sticks. All that is playing is the wind chime or triangle. Take that away leaving only silence. They have just created their very own rainstorm! The kids will want to do this over and over again.

- 3 Make sure to ask questions like, “Did our storm start off loud or soft?” “What does crescendo mean?” To gradually get louder. “What does decrescendo mean?” To gradually get softer.

Dianna, (n.d.). Dynamics – Creating a rainstorm. *Hotchalk lesson plans*. Retrieved from <http://lessonplanspage.com/musicdynamicscreaterainstormideak3-hm/>

Figure A30 Title: “Colorful Vivaldi”

Minnesota Standard: 0.3.1.1.1

Subject: Music, Science, and Social Studies

Grade Level: 6-10

Objectives:

- Students will learn to identify music by Antonio Vivaldi.
- Students will learn to listen for the “form” of the music
- Students will learn about the composer Antonio Vivaldi and his life.
- Students will correlate music with weather and history.

Materials

- A copy of Antonio Vivaldi’s “*Spring*” from “*Four Seasons*” (CD or cassette tape).
- Colorful scarves or ribbons streamers (6 reds, 6 blues, 6 yellows, 6 greens – you can do with less of each color if you have a small class).

Methods:

- 1 Class will discuss the life and times of Antonio Vivaldi, composer. Show a picture of him if there is one among your materials.
- 2 Students will talk about the signs of spring.
- 3 Students will listen to “Spring” and identify the signs of spring in the song – with teacher’s help if needed (first section is the trees, when music changes, it is the birds, then the trees again, then the river, then the trees, then the thunderstorm, then the trees, then the sun, then the trees, then the sun, and the song ends with the trees). You can hear these things in the music.
- 4 Students will be grouped into 5 groups (approx. 4 to a group – sometimes five, depending on the number of students you may have). I have found that if you call on a student that behaves very well to be the team captain to chose members of their group, the groups are more manageable.

- 5 Give each group a title. Group 1 is trees, Group 2 is birds, group 3 is the river, group 4 is the thunderstorm, group 5 is the sun.
- 6 Group one (trees) will receive green scarves or streamers, each person in group two (birds) will receive a different color, group three (river) will receive blue, group four (thunderstorm) will receive red, and group five (sun) will receive yellow.
- 7 Have students spread out in the room, staying in their groups. Have students discuss how their group can move their scarves – or streamers – so it looks like their group name (trees, sun, etc.).

Start the music and call out the sections of the music. The groups only move their object when they hear the music for their group.

**Adaptation:** Visually challenged and blind students will love the freedom of this activity but may benefit from being assigned a music buddy to help them be safe as they move around.

**Assessment:** Start the music again and do not call out the group names. If a group moves their scarves at the incorrect time, they sit down. At the end of the song, the groups remaining on their feet are winners!

Taylor, P. (n.d.). Colorful vivaldi. *Hotchalk lesson plans*. Retrieved from  
<http://lessonplanspage.com/musicsciencessmdvivaldihistoryandspringweather15-htm/>

Figure A31 Title: "Move and Freeze" Games

Minnesota Standard: 0.2.1.3.1

Subject: Language Arts

Grade Level: K-5

Objectives: Impulse control, waiting

Materials: Musical recording of your choice

Method: Teachers invite the students to move and dance according to how the music makes them feel.

Move to the music and sit when it stops.

Dance and freeze in place when the music stops.

Dance minimally when the music is soft and grandly when loud.

Dance and put a specific body part on a chair when the music stops.

Freeze like an animal or character you are studying or reading about.

Freeze and connect to a partner same part to same part. (Elbow to elbow...)

Freeze like an object in the room like a chair, or pencil, or flag for instance.

Freeze like the something that rhymes with a word, like something that starts with a specific letter, or near to a particular color....

Freeze by the function of an object. This is great to increase conceptual and language learning in all kids, certainly including those with special needs. It looks like this: “freeze by the thing you sharpen pencils with.” “Freeze by the thing come in and go out from”... or “the thing we can look out through!” Freeze like a preposition under something, over something, on the side of your chair, putting your right hand on your right foot.

Bonus: Freeze like the leader. Freeze games have stood the test of time and there is a reason. They are nutritious and great for our brains. Brains always seek more sophisticated stimulation. Here are some of the frozen benefits: Freeze are great games because they require the recognition of sound versus silence, give and take, interest in the “other,” listening, auditory processing, concentration and attention, bodily control and coordination, imagination, and expectancy. The game is also good for waiting and

impulse control, building all types of language, conceptual and pre-academic skills, social skills and more. These skills are all used for higher emotional and academic intelligence.

All of that — and they're fun to play.

Adaptations: For visually challenged or blind students, assign them a music buddy to help them move safely around the room.

LaBella, M. ( 2012). Move and freeze variations. *Musictherapytunes.com Retrieved from*  
*<http://www.musictherapytunes.com/wp/teaching-active-kids-the-top-ten-variations-of-move-and-freeze-games/>*

**Tactual and Auditory Defensiveness**

Figure A32 Title: Musical Conductor Game

Minnesota Standard: 0.1.2.4.1

Subject: Music

Grade Level: K

Objective: Social skills: leading, following, attending, contributing

Materials: Instruments interesting to the students. I like to use tone bells or resonator bells with the fourth removed.

Method: Each student selects an instrument and one student is chosen to be the conductor. The conductor points to the different instrumentalists and they play until he puts his arm down or behind his back. Related movements can signify fast, slow, long and short (poking the air) music. Exaggerated movements can mean to play loudly, small movements can mean soft. The game can also be done vocally, which is a blast and can help with expressiveness.

Adaptations: For visually challenged or blind students, the game can be led or conducted vocally, by the conductor calling out to play fast, faster, slow, slower, and stop.

LaBella, M. (2012). Musical conductor game. *Musictherapytunes.com Retrieved from*  
*<http://www.musictherapytunes.com/wp/leader-follower-musical-conductor-game-music-therapy-with-children/>*

Figure A33 Title: One Potato, Two Potato

Minnesota Standard: 0.1.2.3.2

Subject: Music

Grade Level: K-5

Objective: Listening skills

Materials: Drum or tambourine, lyrics.

Method: Therapist chants the rhyme singing either loudly or softly. Child taps instrument at same dynamic level.

Adaptations: (optional) You can keep the potato lyrics or substitute any name or character you want. For holidays, tape a picture of an associated character on the drum.

Lyrics: Chant: One potato, two potato, three potato, four. Five potato, six potato, seven potato more!

Adaptations: Visually challenged or blind children may need someone to hold the drum or tambourine for them as they strike it.

LaBella, M. (2013). One potato, two potato. *Musictherapytunes.com*. Retrieved from <http://www.musictherapytunes.com/wp/?s=One+Potato%2C+Two+Potato>

Figure A34 Title: Spin the Musical Dreidel

Minnesota Standard: 0.1.1.3.1

Subject: Music

Grade Level: 1-5

Objective: Socialization and following directions.

Materials: A dreidel with pictures of instruments taped to it.

Method: Children spin the dreidel and then take the corresponding instrument.

Adaptations: A dreidel can be created with instrument pictures made out of string or multi-layered glue for tactile learners. For a larger class, have 2 dreidels. I sometimes call this activity the spin of acceptance game. So if the kids really want to totally choose their own instruments, I tell them they can do so next time - in a few minutes. If your kids can't physically spin a dreidel, then stick some pictures to a cube shaped box and spin like a dice game.

LaBella, M. (2011). Spin the musical dreidel. *Musictherapytunes.com Retrieved from*  
*<http://www.musictherapytunes.com/wp/34-pages-of-music-therapy-activities-and-lesson-plans-the-first-collection-by-margie-la-bella-of-music-therapy-tunes-children>*

Figure A35 Title: Beach Ball

Minnesota Standard: 0.1.1.3.1

Subject: Music

Grade Level: 1+

Objective: social/emotional, cognitive/academic growth. This is a dressed up, therapeutic music variation of “hot potato” music meaningful to the group and its purposes.

Materials: Age appropriate music, and a beach ball, iPod and speakers, Whiteboard, dry/erase

Method: When music begins, clients will toss ball back and forth. When the teacher stops the music, the ball stops moving. The person left holding the ball when the music stops will be asked a question. The question asked will depend on the functioning level of the patient and the goals you are working on in that group. I may ask questions like, “What kind of things can you find at the beach?” or “Name another song that the Beach Boys sang.” If I am working on self-concept with children, I might ask them to name one thing they like about themselves.

Adaptation: Assign a music buddy to visually challenged or blind students to help them catch the ball. Also, coach the thrower to call out when they are throwing the ball.

Michelle, R. (2010). Beach ball. *Beyond the music*. Retrieved from <http://beyondthemusicmt.blogspot.com/2010/06/beach-ball-game>

Figure A36 Title: Shapes in the Air

Standard: 0.1.2.1.1

Subject: Language Arts, Creative writing

Grade Level: K-1

Objective: Children will either make pre-letter shapes in the air.

Materials: props (see adaptations) children's recorded song that offers a karaoke version, or familiar instrumental music.

Method: Come up with a movement or sequence of movements to do during the chorus and make letter shapes during the verses.

Sing/chant what you're doing. Pre-letter shapes can include: horizontal lines, vertical lines, dots, circles, "bounces," curves, crisscrosses, and more. (Ask the OT or classroom teacher.)

Adaptations: Use maracas or scarves. Use this activity to help the children so as to improve their skills such as crossing midline, following a shape, moving weaker muscles, following patterns and more. Again – ask the teacher or therapist what the child's needs are.

LaBella, M. (2012). Letters in the air. *Musictherapytunes.com*. Retrieved from <http://www.musictherapytunes.com/wp/letters-in-the-air-pre-writing-activity-for-special-education-lessons-plans/>

Figure A37 Title: I had a Little Froggie

Minnesota Standard: 0.1.2.4.1 and 0.3.1.4.1

Subject: Language (correction of absurdities.)

Grade Level: K-1

Objective: Children will correct the impossibilities mentioned in the song lyrics.

Materials: Kid's song of your choice

Method: Sing. Discuss what's silly with the song. Discuss healthy things to eat and drink, and hygiene.

Adaptations: Write you own silly song about a pet. To stimulate vocalization, make all the sound effects the song suggests.

Melody: Miss Lucy had a baby/steamboat

Lyrics: D...Em...AI had a little turtle. His name was Tiny Tim. A

D I put him in the bathtub to see if he could swim. D...Em

He drank up all the water. He ate up all the soap...A7 D And he burped last night from a  
bubble in his throat.

LaBella, M. (2012). I Had a Little Froggie. *Musictherapytunes.com*. Retrieved from  
<http://www.musictherapytunes.com/wp/i-had-a-little-froggie-music-therapy-song-for-kids-teaches-absurdities-language-skill/>

Figure A38 Title: Two Little Blackbirds

Minnesota Standard: 0.1.2.3.2 and 0.1.2.4.1

Subject: Understanding of opposites

Grade Level: 1-5

Objective: Kids will sing and dramatize the lyrics along with the therapist.

Materials: Song. Objects (puppets, toys, concrete examples) with the qualities mentioned in the lyrics can help foster understanding of the concepts involved.

Method: Sing. Act out. Have the kids come up with their own opposite verses. Any animal will do. Use puppets, too. Make up your own verses and have the kids help.

Melody: ABC song. Two little blackbirds sitting on a hill. One named Jack and one named Jill. Fly away Jack. Fly away Jill. Come back Jack. Come back Jill. (I actually teach Goodbye Jack, Goodbye Jill...) Two little blackbirds sitting on a cloud. One was quiet and the other was loud. Fly away quiet. Fly away loud. Come back quiet. Come back loud. Two little blackbirds shopping at the mall. One was large (big) and the other

was small...were getting very old. One was hot and the other was cold... \_\_\_\_\_ sitting on a stick. One was healthy and the other was sick... \_\_\_\_\_ sitting on a kite. One was heavy and the other was light.... \_\_\_\_\_ Henry and Moe. One was fast and the other was slow \_\_\_\_\_ Buffy and Brad. One was happy and the other was sad. \_\_\_\_\_ doing the hop. One liked to wiggle and other liked to stop. \_\_\_\_\_ Feeling rather grand. One liked to sit and the other liked to stand.

LaBella, M. (2012). Two little blackbirds. *Musictherapytunes.com Retrieved from*  
*<http://www.musictherapytunes.com/wp/two-little-blackbirds-teaches-opposites-music-therapy-education-activity-for-children/>*

Figure A39 Title: The Bird Song

Minnesota Standard: 0.1.2.3.2

Subject: Music

Grade Level: K-5

Objective: Quieting and focusing song. Up in the Sky Song Activity. This is a nice quiet centering song that tends to focus and calm the children. It's good after a more active activity or toward the end of a session.

Method:

Way up in the sky (jump high)

The little birds fly (flap arms)

While down in the nest (form nest with arms)

The little birds rest (hands next to head like napping)

Shhh! They're sleeping. (stage whisper shh! Say quietly they're sleeping)

With a wing on the left (fold left arm under)

And a wing on the right (Fold right arm under)

The little birds sleep (hands next to head like napping)

All through the night.

Shhh! They're sleeping. (stage whisper shh! Say quietly they're sleeping)

The bright sun comes up (as in *Itsy Bitsy Spider*)

The dew goes away (hands like tinkering on a keyboard)

Good morning, good morning, the little birds say (point to class members)

Optional 3rd stanza:

Up comes the sun. Down comes the dew.

Good morning, good morning, good morning to you!

Or good afternoon to you, you and you.

Melody: <https://www.youtube.com/watch?v=D2IfK86PZvI>

I learned the melody with a variation in the second line that goes like this:

g c e a, d d c d c or sol do mi la, re re do re do where the 5th and 6th go lower than  
1/do/c

I've been working on the Farm Yard / barn yard music therapy activity song for children (helps with vocalizing and vocal play.)

Adaptations: Visually challenged and blind students would find it helpful to have a music buddy assigned to them to help them know what the actions are and how to move around safely in the classroom. This song would work quite well with youngsters needing to discover and experiment with their voices and vocal abilities. Older tykes needing to associate animal sounds with animals and those needing experience in producing certain sounds (C-V, and CVCs) would also benefit from this one.

D G D

I've been working on the farmyard all the live long day.

D E7 A

I've been working on the farmyard to pass the time away.

A7 D G F#7 OR D7

Can't you hear the cows all mooing; moo moo moo moo moooo.

G D A7 D

Can't you hear the cows all mooing; moo moo moo moo mooo.

(Then - in place of "Dinah won't you blow," simply add in your own mooooooic and moo your heart out.)

Chords are: D/D/G/G/A/A/D/D/ D/D/E/E/A7/A7/D//

Switch animals and related sounds until your group is all sung out.

LaBella, M. (2012). The bird song. *Musictherapytunes.com Retrieved from*

*<http://www.musictherapytunes.com/wp/the-bird-song-a-quieting-calming-activity-song-f-music-therapy-education-for-young-children-by-margie-la-bella-of-music-therapy-tunes/>*

Figure A40 Title: Greg and Steve's "Good Morning" Therapeutic Music Hello Song

Minnesota Standard: 0.1.2.4.1

Subject: Language and music

Grade Level: K-5

Objective: Socialization and easing transitions

Materials: Song "Good morning to you" by Greg and Steve on the CD "We all live together. Vol 2." Hear a sample at Amazon, iTunes or YouTube.

Method: Therapeutic music teacher sings the first greeting and the kids sing the second. Repeat and continue.

Adaptations: (optional) Share an instrument and sing in pairs, change the words to "Good afternoon, good afternoon to everyone. Our class is beginning so let's have some fun. Good afternoon. Good afternoon to everyone. Substitute a name exchange back and forth, i.e., "Good morning to Gregory" "Good morning Miss Margie." (Repeat) Gregory you can play it then pass it to Elizabeth.

Lyrics, chords, solfege, melody used: “Good Morning” by Greg and Steve in “We all live together. Vol 2 ”D G D G D” a good morning. Good morning. Good morning to you. (Repeat) Bm F#m Asus A D G D D G D A. Our day is beginning there’s so much to do. Good morning. Good morning. Good A D morning to you.

Greg and steve’s good morning song. *Musictherapytunes.com Retrieved from*  
*<http://www.musictherapytunes.com/wp/greg-and-steve-good-morning-music-therapy-hello-song-intervention-for-kids>*

Figure A41 Title: Telling Folktales with Music

Minnesota Standard: 0.2.1.1.1 and 0.3.1.1.1

Subject: Music

Grade Level: 2-3

Objectives: Students will be able to identify the action of the story and relate it musically, composing the music themselves.

Materials: Using hand drums, rhythm sticks, tambourines, and any other kinds of classroom instruments, have the students discuss ideas on how to represent characters and actions with instruments.

Methods: To set up this lesson, the student should watch/listen to Serge Prokofiev's *Peter and the Wolf* (From the 1946 Disney production, *Make Mine Music*).

Discuss how music can help to tell a story, represent characters, and move the action. Choose a folk tale (such as *The North Wind and the Sun*, *The Tortoise and the Hare*, or *The 3 Little Pigs*).

Tell the story to the students, and then discuss what happened.

Example: Here's an example of how we told the story of the *Tortoise and the Hare*:

Play the hand drums slowly and steadily, representing the Tortoise. Rhythm sticks "hopping" quickly represents the Hare. We used maracas to emulate the Hare snoring (while the hand drums continued as the Tortoise moved on). The triangle woke the Hare

from his nap as he saw the Tortoise moving to the finish line, where the crowd—tambourines—cheered him on to victory!

Adaptation: Allow the visually challenged or blind student to hold the instruments and explore their sounds before playing the activity begins. A continuation of the activity could be creating a full on production with musicians playing instruments and performers acting out the scene, with masks and/or costumes, and even background sets.

Mathey, H. (n.d.). Telling folktales with music. *Hotchalk lesson plans*. Retrieved from [http://lessonplanspage.com/music\\_telling\\_folktales\\_with\\_music23-htm/](http://lessonplanspage.com/music_telling_folktales_with_music23-htm/)

Figure A42 Title: Using a Song to Teach Rhythm

Minnesota Standard: 0.1.2.4.1

Subject: Music

Grade Level: K-3

Objectives: Students will learn how to keep a beat with music.

Materials: Rhythm instruments (shakers, maracas, rain stick, wood block, finger cymbals)

Copy of the “What Would I Do” song available for free at:

[http://www.reverbNation.com/play\\_now/song\\_3329056](http://www.reverbNation.com/play_now/song_3329056)

Method: Have the students watch “Peter and the Wolf” and talk about how each character was represented by a certain instrument.

Tell students they will do a song where they select an instrument that will represent an action that happens in the story.

- Play the song “What Would I Do?” for the students so they can hear where their action in the story happens in the song.
- Select six students at a time and have each student choose an instrument to represent their sound in the song/story. (1<sup>st</sup> student: action of rain, 2<sup>nd</sup> student:

action of jumping in a puddle, 3<sup>rd</sup> student: action of walking in the mud, 4<sup>th</sup> student: action of hopping in grass, 5<sup>th</sup> student: action of skipping in the driveway, 6<sup>th</sup> student: action of running in the backyard)

- While these 6 students are using their instruments during the song, have the rest of the class do the actions in place (i.e. jumping, walking, hopping, skipping, and running).
- In the last part of the song, have all the students play their instruments all at once.

Adaptations: Assign a music buddy to help the visually challenged or blind student move safely around the room.

Assessment: Encourage the students to be creative in coming up with their instruments and rhythms but also ask them why they chose the instrument they did.

Unknown. (n.d.). Using a song to teach rhythm. *Hotchalk lesson plans*. Retrieved from <http://lessonplanspage.com/using-rhythm-instruments-with-a-story/>

Figure A43 Title: Introduction to School Band Instruments

Minnesota Standard: 0.1.2.3.2

Subject: Music

Grade Level: 1-5

Objective: Students will learn about various instruments in a school band.

Materials: Piccolo, Flute, Soprano Clarinet, Alto Clarinet, Alto Sax, Tenor Sax, Baritone Sax, Trumpet, Trombone, Tuba, Oboe, French Horn, Snare Drum, etc.

Method:

- Teacher will first give a brief overview on the many roles of a school band.
- Teacher will then explain the three different instrument families in a band (Woodwind, Brass, Percussion).
- Starting with the Woodwinds, the teacher will introduce each instrument explaining its purpose, sound and construction. A sound demonstration will be given.
- For Brass, repeat above.
- For Percussion, repeat above.

Adaptations: Visually challenged and blind students should be allowed to feel and hold the instruments, ideally while they are grouped into their three instrument families.

Assessment: The students will be able to answer different questions about the instruments they have witnessed.

Students are to pick two separate instruments and list their similarities and differences in a short essay.

Harper, A. (n.d.). Intro to school band Instruments. *Hotchalk lesson plans*. Retrieved from <http://lessonplanspage.com/musicintrotoschoolbandinstrumentsoutlinek12-htm/>

Figure A44 Title: Finding the Singing Voice, An Introduction to Vocal Control

Minnesota Standard: 0.1.2.3.2

Subject: Music

Grade Level: 2-12

Method: Teacher will demonstrate and describe how to sing correctly.

The importance of sitting up:

What is the first thing we need to sing a note? (Breath)

Everyone bend over and rest your elbows on your knees, like this.

Now take a deep breath.

You can't do it. Your pipes are bent.

It's like kinking the water hose, nothing can get out, or in.

You're pushing your belly into your chest, so the lungs are trapped.

Now sit up and take that breath again.

See now, wasn't that easy?

The better the breath, the better the sound!

First Rule? Sit up!

Making room for sound:

Everyone close your mouth and let your tongue rest on the top of your mouth.

Close your teeth too.

Now hum. Let's do that again and this time try to feel where the sound is vibrating.

Go...

Stop. How many of you could feel your nose vibrate.

That's because the air is coming up, vibrating your vocal cords, then this vibration is being cut off by your tongue.

We need to get the tongue out of the way.

Let your tongue lay flat and do it again.

Well, listen to that!

Now what is vibrating?

Do it again, tongue down, teeth together, now hummmm.

Did you feel your teeth vibrate?

That's because the air is now moving past your tongue and, hitting the back of your teeth.

Let's get the teeth out of the way too.

Do not do this. (Teacher demonstrates stretching mouth wide with lips closed.)

(Allow the visually challenged and blind student or students to feel what this feels like).

Just relax your jaw and your teeth will separate.

Keep your tongue down; relax your jaw, teeth apart, now hmmm.

Now what is vibrating? (Lips)

That's because the only thing between the sound being made is your lips.

That is the correct way to hum.

Tongue flat, relax jaw, teeth apart, lips barely touching.

If your lips tickle, you're doing it right!

Second Rule: Tongue flat!

Third Rule: Relax Jaw!

Fourth Rule: Teeth apart!

Focusing the hum! Head voice

I'm going to hum, and while I hum, you will hear the hum start in my chest, move up to my neck, around my nose, and come out the front of my forehead.

(Teacher demonstrates a hum from a very low pitch, sliding slowly upward to a high pitch, coming out the head)

(Allow the visually challenged or blind student to feel the hum move up the teacher's neck).

Did you hear the vibrations move?

Now you do it, and concentrate on the vibrations as they move to your forehead.

Remember to keep your tongue flat and your teeth apart.

Now hum...

Did you feel the vibrations?

That's what we call a head voice, it sounds like the vibrations are coming out your head.

Rule number five: vibrations should be focused in your head!

Matching pitch:

Now we need to find the same pitch.

I'm going to hum again, to find the head vibrations as I go up, this time I will stop on a specific pitch.

Listen and do the same thing after me, stopping on the pitch I stop on.

Hum... (example)

Now you do it with me.

(Time to match everyone is not needed. As pitch drills are introduced and practice is increased, most students will learn to match pitches, without the stigma of everyone knowing they can't. Reminders to sing higher are fine! Some will sing too high, reminders not to go too high are fine too. When most are on pitch, so that the pitch can be distinguished above the others, move to next step)

Turning the hum into a voice.

I have my tongue flat,

my teeth apart,

The vibrations are focused in my head,

What is the only thing I need to do to make a voice?

(Open my mouth, right?)

This will make the hum become the sound ah.

(Demonstrate with the matched pitch.)

Now you do it, just open your mouth.

Wasn't that a nice sound? No stress, no straining, just a nice pleasant sound!

Let's do it again!

That is the voice we want to use as a chorus.

Whenever we are singing as a group, that is the voice we use.

Now let's learn another vowel sound.

This time I will hum,

Turn the hum into an ah,

Then I will turn the ah into an "oo."

To do this I will only move my lips! Watch!

Now you do it! Don't pucker! Keep it relaxed.

Now, do it again and notice the sound seems to sound like one voice.

Did you hear it?

The ah was coming out of your mouth and spreading all around the room.

When we made the oo it focused the airflow to a smaller opening and the sound wasn't able to spread, it became a straight airflow so we sound like one voice. Do it again.

That was wonderful!

We have now added the vowel ee – and learned to raise our soft palate and keep the tongue flat. This makes the ee sound "darker" (another neat concept, colors to describe

sound) and keeps the ee from sounding nasal! All of which is learning to produce quality sound – or voice timbre. We used the song. “*A Sailor Went to Sea, Sea, Sea*” to practice the ee’s.

Buice, J. (n.d.). Finding the singing voice. *Hotchalk lesson plans*. Retrieved from <http://lessonplanspage.com/musicintroductiontovocalcontrol-findthesingingvoice39-htm/Figure>

A45 Title: String Thing

Minnesota Standard: 0.1.1.3.1

Subject: Music

Grade Level: K-5

Objective: Creating a musical instrument. Experimenting

Materials: You will need a sturdy container and a bunch of different sized, different colored rubber bands. The container must be rather strong since it needs to hold up to the pressure of the rubber bands around it. Containers like metal cookie tins, cigar boxes (without the lid) or sturdy plastic shoe boxes work well.

Method: Simply place your rubber bands around your String Thing in an order that is pleasing to your ear. The thicker, shorter ones will sound deeper. The larger, thinner ones will sound higher. If you want to emulate a guitar or dulcimer, you may wish to put them from lowest sound to highest sound, experimenting as you go. What sounds best to you?

Then – play! Pluck the strings and see if you can find songs or make up melodies with the notes on your new instrument. Missing a note – or don't like the sound?

Experiment with changing rubber bands, trying a different sound box, or tightening or loosening rubber bands. You might be surprised to find your String Thing sounding like an early lute or a beautiful folk instrument from another country.

With a little effort, you can have a unique instrument and be creating simple melodies all your own! I like to imagine that this is how someone got the idea for more complex instruments like the guitar or dulcimer!

Daria. (2016). String thing. *Daria music*. Retrieved from [http://www.dariamusic.com/make\\_String.php](http://www.dariamusic.com/make_String.php)

## APPENDIX C

### Definitions

**Auditory Defensiveness:** A clinical condition in which the child is highly sensitive to sound.

**Individualized Education Plans (IEPs)** The individualized Educational Plan is a plan or program developed to ensure that a child who has a disability identified under the law and is attending an elementary or secondary educational institution receives specialized instruction and related services.

**Unilateral Retinal Vessels:** Blood vessels leading to the retina on only one side.

**Vestibular:** The parts of the inner ear and brain that process sensory information involved with controlling balance and eye movements

**APPENDIX D****Helpful Song Lists**

- Music Therapy Tunes *Hey, Mr. Monkey* by Margie La Bella PRO version 03:32
- *Matilda the Gorilla* - straight off video: for learning purposes 01:59
- *Three Kids Went Sailing* - quick home studio version by musictherapytunes 03:09
- *Stand Still by Yo Gabba Gabba*: quick studio version by musictherapytunes  
01:39
- *Let's Go Swimming* - straight off the video 03:21
- *Hunny, it's Cold Outside*: home studio version 01:32
- *12 music therapy Goodbye Songs* - straight off the video 11.54
- *15 Hello Songs* - from the video 08:43
- *"Love Grows"* great song for V-Day or Grad. Quick home studio version 03:14
- *Old MacDonald* (unfinished but good) by Margie La Bella 03:42

LaBella, M. (2013). Helpful song lists. *Musictherapytunes.com Retrieved from*

<http://www.musictherapytunes.com/wp/?s=helpful+song+lists>

### More Helpful Song Lists

These are good pop songs with appropriate lyrics.

- Kick - "Push"
- Lupe Fiasco - "Welcome Back"
- Mase - "Switch"
- Will Smith - "Kiss Kiss"
- Chris brown - "The Way I Are"
- Timbaland - "Come To Me"
- Diddy - "You Make Me Better"
- Fabolous - "Fresh azimiz"
- Willow Smith - "Bow Wow, Whip My Hair"
- Chamillionaire - "Good Morning"-
- Chris Brown featuring T-Pain - "Kiss, Kiss"
- "Dangerous" -Ying Yang Twins featuring Wycle
- Wyclef, Akon - "Sweetest Girl"
- Lil Wayne - "I Got It From My Mama"
- Will.I.Am - "Let's Get it started"
- Black Eyed Peas - "I Want You"
- Common -"Seed 2.0"

- The Roots -"Quality Control"
- Jurassic 5 "The Way You Move"
- Outkast -"Feel Good Inc."
- Gorillaz -"Control Myself"
- LL Cool J feat J - Lo "Money Maker"
- Ludacris - "You Make Me Better"
- Fabulous featuring Ne-Yo - "Lose Control"
- Missy Elliot - "The Good Life"
- Kanye West - "Blow Ya Mind"
- Eve feat Gwen Stefani - "Kick, Push"
- Lupe Fiasco -"She Wants To Move"
- N.E.R.D. - "Dilemma"
- Kelly Rowland -"Nelly"
- "Unwritten" by Natasha Bedingfield
- "Video" by India.Arie
- "You Gotta Be" by Des'ree
- "Fifteen"by Taylor Swift
- "Gone"by Switchfoot " Who I am"

Michelle, R. (2012). Helpful song lists. *Beyond the music therapist*. Retrieved from <http://beyondthemusicmt.blogspot.com>

**APPENDIX E**

**Assessment**

## Autism Social Skills Profile/Assessment

Adapted from Scott Bellini

Child's Name: \_\_\_\_\_

Birthdate: \_\_\_\_\_ Age: \_\_\_\_\_ Sex: Female Male Today's Date \_\_\_\_\_

School: \_\_\_\_\_ Grade: \_\_\_\_\_

Your Name: \_\_\_\_\_

Relationship to Child: Mother Father Guardian Other \_\_\_\_\_

School Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

### Instructions

The following phrases describe skills or behaviors that your child might exhibit during social interactions or in social situations. Please rate **HOW OFTEN** your child exhibits each skill or behavior independently, **without assistance from others** (i.e., without reminders, cueing and/or prompting). You should base your judgment on your child's behavior over the last **3 months**.

**Please use the following guidelines to rate your child's behavior:**

Circle **N** if your child **never** or **almost never** exhibits the skill or behavior.

Circle **S** if your child **sometimes** or **occasionally** exhibits the skill or behavior.

Circle **O** if your child **often** or **typically** exhibits the skill or behavior.

Circle **V** if your child **very often** or **always** exhibits the skill or behavior.

**Please do not skip any items.** If you are unsure of an item, please provide your best estimate. You may use the "Brief Description" section to provide additional information on the particular skill or behavior. For instance, if your child will exhibit a particular skill or behavior more frequently when cueing or prompting is provided, or when interacting with adults rather than peers, please make note of this in the "Brief Description" section.

Never=Never, S=Sometimes, O=Often V=Very often or always

<b>Skill Area</b>	<b>How Often</b>				<b>Brief Description</b>
Invites Peers to join Him/Her in Activities	N 1	S 2	O 3	V 4	
Joins in Activities With Peers	N 1	S 2	O 3	V 4	
Takes Turns During Games and Activities	N 1	S 2	O 3	V 4	
Maintains Personal Hygiene	N 1	S 2	O 3	V 4	
Interacts With Peers During Unstructured Activities	N 1	S 2	O 3	V 4	
Asks Questions to Request Information About a Person	N 1	S 2	O 3	V 4	
Engages in One-On-One Social Interactions With Peers	N 1	S 2	O 3	V 4	
Interacts With Groups of Peers	N 1	S 2	O 3	V 4	
Maintains the “Give-and-Take” of Conversations	N 1	S 2	O 3	V 4	
Expresses Sympathy for Others	N 1	S 2	O 3	V 4	
Talks About or Acknowledges the interests of Others	N 1	S 2	O 3	V 4	

Skill Area	How Often				Brief Description
Recognizes the Facial Expressions of Others	N 1	S 2	O 3	V 4	
Recognizes the Nonverbal Cues, or “Body Language” of Others	N 1	S 2	O 3	V 4	
Requests Assistance From Others	N 1	S 2	O 3	V 4	
Understands the Jokes or Humor of Others	N 1	S 2	O 3	V 4	
Maintains Eye Contact During Conversations	N 1	S 2	O 3	V 4	
Maintains an Appropriate Distance When Interacting With Peers	N 1	S 2	O 3	V 4	
Speaks With an Appropriate Volume in Conversations	N 1	S 2	O 3	V 4	
Considers Multiple Viewpoints	N 1	S 2	O 3	V 4	
Offers Assistance to Others	N 1	S 2	O 3	V 4	
Verbally Expresses How He/She is Feeling	N 1	S 2	O 3	V 4	
Responds to the Greetings of Others	N 1	S 2	O 3	V 4	

N=Never      S=Sometimes      O=Often      V=Very often or always

<b>Skill Area</b>	<b>How Often</b>				<b>Brief Description</b>
Joins a Conversation With Two or More People Without Interrupting	N 1	S 2	O 3	V 4	
Initiates Greetings With Others	N 1	S 2	O 3	V 4	
Provides Compliments to Others	N 1	S 2	O 3	V 4	
Introduces Self to Others	N 1	S 2	O 3	V 4	
Politely Asks Others to Move Out of His/Her Way	N 1	S 2	O 3	V 4	
Acknowledges the Compliments Directed at Him/Her by Others	N 1	S 2	O 3	V 4	
Allows Peers to Join Him/Her in Activities	N 1	S 2	O 3	V 4	
Responds to the Invitations of Peers to Join them in Activities	N 1	S 2	O 3	V 4	
Allows Others to Assist Him/Her With Tasks	N 1	S 2	O 3	V 4	
Responds to Questions Directed at Him/Her by Others	N 1	S 2	O 3	V 4	
Experiences Positive Peer Interactions	N 1	S 2	O 3	V 4	

<b>Skill Area</b>	<b>How Often</b>				<b>Brief Description</b>
Compromises During Disagreements With Others	N 1	S 2	O 3	V 4	
Responds Slowly in Conversation	N 1	S 2	O 3	V 4	
Changes the Topic of Conversation to fit Self-interests	N 1	S 2	O 3	V 4	
Makes Inappropriate Comments	N 1	S 2	O 3	V 4	
Engages in solitary Interests and Hobbies	N 1	S 2	O 3	V 4	
Ends Conversations Abruptly	N 1	S 2	O 3	V 4	
Fails to Read Cues to Terminate Conversations	N 1	S 2	O 3	V 4	
Exhibits Fear or Anxiety Regarding Social Interactions	N 1	S 2	O 3	V 4	
Experiences Negative Peer Interactions	N 1	S 2	O 3	V 4	
Engages in Socially Inappropriate Behaviors	N 1	S 2	O 3	V 4	
Exhibits Poor Timing With His/Her Social Initiations	N 1	S 2	O 3	V 4	

Is Manipulated by Peers	<b>N</b> <b>1</b>	<b>S</b> <b>2</b>	<b>O</b> <b>3</b>	<b>V</b> <b>4</b>	
Engages in Solitary Activities in the Presence of Peers	<b>N</b> <b>1</b>	<b>S</b> <b>2</b>	<b>O</b> <b>3</b>	<b>V</b> <b>4</b>	

