Introduction

Our public schools tend to be an elaborate ecosystem of teachers, students, paraprofessionals, administrators, health professionals, aides, therapists of all kind, outside consultants, and numerous other specialists. While some effective systems are in place for collaboration between the numerous professionals working with individual students, there are significant gaps in communication between the various fields that should be changed in order to best help each child meet her/his potential. This review of literature begins with the question: how can music therapists and music educators more effectively collaborate in order to benefit students' physical, social, and cognitive growth?

The American Music Therapy Association defines music therapy 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. Music Therapy is an established health profession in which music is used within a therapeutic relationship to address physical, emotional, cognitive, and social needs of individuals." ¹ While music educators (should) also have goals to help address these same needs for our students, we also have curricular goals for the development of certain musical skills. While the educators' goals may be more focused on musical development and the therapists' goals are more focused on the development of the student themselves, there is significant

¹ "What is Music Therapy?," American Music Therapy Association, accessed June 30, 2017, https://www.musictherapy.org/about/musictherapy/.

evidence that both fields help students grow physically, socially, and cognitively. While there is much research published about the positive effects of music education on students, this review will focus on the field of music therapy, and how the two professions can work together.

Evidence of Growth Through Music Therapy

There are a significant number of case studies, summaries of presentations, qualitative research, action research, opinion pieces backed with research, and anecdotal examples of music therapy helping students develop physical, social, and cognitive skills. Based on an analysis of research by Leslie Bunt, there is significant evidence that music therapy is particularly effective in helping children with profound and multiple learning disabilities develop skills in the following areas:

- Imitative skills
- Ability to initiate a desired activity
- Eye contact with adults
- Turn taking with peers and adults
- Frequency, length, and range of appropriate vocal sounds
- Reducing amount of behavior that is non-attentive²

Based on research that indicates that music therapy seems to help improve preverbal and social skills such as imitation, vocalization, turn-taking, and initiative with children with developmental disabilities, Ulla Holck designed a case study to follow a two-year old with

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² Leslie Bunt, "Music therapy with children: A complementary service to music education?" *British Journal of Music Education* 20, no. 2 (2003): 187.

learning disabilities.³ At the beginning of this study, the child only reacted to attempts to communicate when they were presented in a physical, rhythmic, and playful way during his music therapy sessions. Over the course of the six months of regular music therapy, the child became less dependent on physical movement and props and was able to communicate in several ways musically, as well as develop a simple verbal vocabulary that he used to communicate with his music therapist and his parents.⁴

Another case study video-recorded and analyzed data from a six-year-old's music therapy sessions, as well as typical music class sessions with his classmates over nine weeks. Eye contact during activities where the therapist/teacher expected eye contact increased from 76% to 91% over only five sessions. Children with autism can often relate to objects better than they relate to people. This means that independent (and directed/assisted) instrument exploration is good practice not only for students' motor skills, but also for their ability to maintain eye contact with an object that they're supposed to be focused on, such as a musical instrument.

Another larger study, which was investigating whether or not autistic children's responses would increase when using music during instruction, found that using music tended

³ Ulla Holck, "Turn-taking in music therapy with children with communication disorders," *British Journal of Music* Therapy 18, no. 2 (2004): 45.

⁴ Holck, "Turn-taking in music therapy with children with communication disorders," 51.

⁵ Paige Rose & Karyna Johnson "The effects of structured musical activity sessions on the development of a child with autism spectrum disorder: A case study." *Approaches: Music Therapy Special Music Education*, 6(2) (2014): 88

⁶ Jo Tomlinson, "Music Therapy for Children with Autism in an Educational Context." In *Art Therapies in Schools: Research and Practice*, ed. Vassiliki Karkou (London: Jessica Kinsley, 2010), 236

to increase awareness and attention of the participants more than conventional teaching methods did.⁷ In addition, all students took turns and shared with each other more frequently in the music therapy sessions compared to more traditional therapies. ⁸

The last study of this section followed a five-year-old boy's progress through two years of music therapy. This boy, who has autism, showed significant progress in increasing communication skills, eye contact, and verbal responses over the course of his music therapy sessions, especially after the music therapist took suggestions of songs the student enjoyed from the student's mother. ⁹

Overlap in Goals

Because music therapy and music education share many of the same techniques, it seems to be a fair conclusion that they share goals as well. However, I am far from the first to recognize the similarities and overlaps in goals between music therapists and music educators. There are several experts in both professions who agree there should be a continuum between music therapy and music education instead of a hard line between the two.

⁷ Jane L. Barrow-Moore, "The Effects of Music Therapy on the Social Behavior of Children with Autism" (master's thesis, California State University San Marcos, 2007), 3, accessed June 28, 2017, https://www.tunedintolearning.com/pdfs/SocialBehavior BarrowMoore.pdf.

⁸ Barrow-Moore, "The Effects of Music Therapy on the Social Behavior of Children with Autism," 33.

⁹ Tomlinson, "Music Therapy for Children with Autism in an Educational Context," 239.

It appears that the first (published) author to propose a model for a continuum was

James Robertson in 2000¹⁰. While researching and discussing the therapeutic potential of music education, he proposed the model seen in figure one.

Clinical music therapy	Educational music therapy	Music education	Music profession
Surviving	Subconscious learning	Conscious learning	Training
Coping	Contributing	Refining	Working
Functioning	Growing	Focusing	Informing
Reacting	Responding (aesthetic)	Responding (artistic)	Performing

Figure 1: James Robertson's proposed continuum model 11

Elizabeth Mitchell took Robertson's model and adjusted the wording to reflect both the educational potential of music therapy as well as the therapeutic potential of music education. Her model of a continuum is seen in figure two.



Figure 2: Elizabeth Mitchell's proposed continuum model 12

E. Mitchell seemed to sum up the goal of therapeutic education acutely when she said this: "Within therapeutic music education, there exists potential for a parallel process between the student's musical and personal growth to unfold. Such processes are contingent upon the

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¹⁰ James Robertson, "An Educational Model for Music Therapy: The Case for a Continuum," *British Journal of Music Therapy* 14 no 1 (July 20 2016): 44.

¹¹ Robertson, "An Educational Model for Music Therapy: The Case for a Continuum," 45.

¹² Elizabeth Mitchell, "Therapeutic music education: An emerging model linking philosophies and experiences of music education with music therapy," *Canadian Journal of Music Therapy* 22, no 1 (2016): 21.

presence of an educator who holds a holistic awareness of each student and recognizes unique qualities and potential within musical experiences."¹³

Australian music therapist and researcher Dianne Langan recognized the overlap in goals between music education and music therapy, and in 2009 decided to survey music therapists employed in special education settings, looking for commonalities between music therapy and music education goals. The survey asked about activities typically included in music therapy sessions. The author found enough similarities between music special education goals and music therapy goals that she was able to take the strongest commonalities from the survey results and create an assessment tool for those activities. The assessment tool consisted mostly of a checklist for participant behaviors, all relating to either music therapy goals or education standards, along with room for written notes. ¹⁴

Music Therapists Helping Educators

Other educators, therapists, and researchers have recognized the aforementioned overlap in goals and tried to create situations where each can help the other across professions. While searching the available literature for examples of music therapists and music educators helping each other, there were many suggestions of how to initiate these sorts of collaborations. However, there only exist a few examples of schools and clinics who had

¹³ Mitchell, "Therapeutic music education: An emerging model linking philosophies and experiences of music education with music therapy," 19.

¹⁴Dianne Langan, "A music therapy assessment tool for special education: Incorporating education outcomes." *The Australian Journal of Music Therapy, 20* (2009), 78-98. Retrieved from https://search.proguest.com/docview/1464564?accountid=38223

actually tried to implement such ideas. What follows are the few examples available in the current literature.

Paul Nordoff and Clive Robbins, well-known music therapists in the UK, have written several books about music therapy, but one in particular is designed specifically for people in special education settings. The end of the book has many appendices- each appendix lists different ways that one might adapt instruments, materials, songs, arrangements, environments, and recordings to make them more accessible to students with specific disabilities and limitations. The last appendix even includes contact information for companies that make adaptive instruments.¹⁵

At the 2006 AOSA national conference (a conference for music educators) music therapist Cynthia M. Colwell gave an entire presentation giving examples of different activities that one might see in both a music class and a music therapy session, and what the goals are for each situation. It seemed that the presenter's intent was to make music educators aware of music therapy goals that may be able to be met while using activities already in the general music curriculum. ¹⁶

In Creating Music Cultures in the School: A Perspective from Community Music Therapy, there are two examples of music therapists providing a more enriching experience for music education students. The first was about an instrumental teacher that pulled students for private lessons during the school day. After a two-hour compulsory seminar on "the well-being

¹⁵ Paul Nordoff and Clive A. Robbins, "Appendices 1-5," in *Music Therapy in Special Education*, (Dallas, TX: Barcelona Publishers, 2006) 191-208.

B. Iafigliola, "Orff and Music Therapy: Discovering the Collaboration Seed," Orff Echo 40, no.
 (2008): 48, retrieved from https://search.proquest.com/docview/1235836?accountid=38223
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component of music lessons" facilitated by a music therapist, this teacher began to think about how to be more helpful to his students whose personal challenges seemed to be significant. Using strategies and resources given to him by the music therapist, this instructor worked very successfully with a student with depression, giving him musical tools to improvise and compose songs to help him process and express his feelings. This teacher also tried to open a dialogue with a female student who appeared to have an eating disorder, but was unsuccessful in creating the personal relationship needed to have such personal discussions. The last student mentioned was a child with autism. This teacher did not have any experience with students with autism, so he needed to do a lot of reading and reaching out to others before he felt comfortable implementing any social/well-being goals in his lessons. Through gradually advancing improvisation exercises performed together, the student was able to achieve a level of communication (via music) that had not been observed before. The teacher felt that although he was taking away a few minutes of time each lesson that could have been spent on musical goals, over the long run, students were able to progress more quickly and efficiently due to their own self-discoveries, as well as the trust developed between teacher and student.¹⁷

The second example in this book involved a residential New Zealand School for boys with social and emotional difficulties that had no dedicated music teacher or music therapist.

The school agreed to have a music therapist come in for a few months to help the school establish more efficient and effective ways to incorporate music in their school. Once the

¹⁷ Daphne Rickson and Katrina McFerran, *Creating Music Cultures in the School: A Perspective from Community Music Therapy*, (Dallas, TX: Barcelona Publishers, 2014) 95-101.

therapist came and started interacting with the teachers, the staff were willing, and even eager, to switch classrooms, volunteer for positions, bring in supplies, etc. for this project. Based on the student's interests, they started to develop three projects at the beginning of the music therapist's "residency"- a band, a Filipino music group, and expanding the music selection at an already established school radio station. Due to the success of these programs as staff members gave up lunch breaks and held after school rehearsals, the principal made "World Music" a part of the school day curriculum, and the band played at assemblies nearly every week. The author also mentioned several anecdotal comments by teachers and administrators about the participants' significant social and emotional progress through these programs. ¹⁸

A chapter in *Art Therapies in Schools: Research and Practice* explained a study that was trying to determine if it was practical to implement educational music therapy in the Scottish school system. The study, done in 2005, consisted of a partnership between the Music Therapy Children's Service and two schools. The Music Therapy Service's music therapists helped implement five time-limited projects of music therapy group work within the two schools during a regular school setting. All students included in these sessions were recommended by their teachers as individuals who would benefit from working on communication and language skills, emotional wellbeing, and social development, and included students with and without diagnosed disabilities. The data from this study suggested that when students are contributing

¹⁸ Daphne Rickson and Katrina McFerran, *Creating Music Cultures in the School: A Perspective from Community Music Therapy*, (Dallas, TX: Barcelona Publishers, 2014) 95-101.

authentically in music-making, and taking ownership of their musical choices, those students are able to address both musical and non-musical educational objectives.¹⁹

Music Educators Helping Music Therapists

While there were a few examples of music therapists developing tools and techniques to assist music educators, and there were only suggestions and theoretical examples of the opposite. A few statistics offer one *possible* explanation of this hole in the research and literature. Music education has been a profession much longer than music therapy; focusing just on the United States as an example, the National Association for Music Educators was organized in 1907²⁰, while the American Music Therapists Association was founded in 1950.²¹

In 2005 there were only 293 professional music therapists (7% of AMTA members) employed full time in K-12 schools.²² Conversely, according to the National Association for Music Educators, there are currently 75,000 professional music educators who are members of their organization, which caters to K-12 teachers.²³ Thinking about the history of these professions and these membership numbers, it is possible that music therapists could be

¹⁹ Emma Pethybridge and James Robertson, "Educational Music Therapy: Theoretical Foundations Explored in Time-limited Group Work Projects with Children," In *Arts Therapies in Schools: Research and Practice*, ed. Vassiliki Karkou, (London: Jessica Kingsley, 2010), 142.

²⁰ "Membership Tour," National Association for Music Education, accessed July 5, 2017, https://nafme.org/membership/educators/membership-tour/.

²¹ "History of Music Therapy," American Music Therapy Association, accessed July 5, 2017, https://www.musictherapy.org/about/musictherapy/.

²² Cindy R. Ropp et all, "Special education administrators' perceptions of music therapy in special education programs," *Music Therapy Perspectives*, *24* no. 2, (2006): 87. Retrieved from https://search.proquest.com/docview/1372908?accountid=38223

²³ "Membership Tour," National Association for Music Education, accessed July 5, 2017, https://nafme.org/membership/educators/membership-tour/.

focusing more on integrating themselves within music education settings because it is already a more established profession, and much more widely known among the general public. While I am certain music educators have helped music therapists in varying capacities in the last few decades, it does not seem to be in a well-documented and researched way, at least according to the current literature.

More Options for Assisting Each Other

While there were few well-researched examples of music therapists and educators working together in schools, almost all of the literature on this topic provided either anecdotal examples, suggestions for future collaborations, or both. The following examples are the suggestions that currently exist in the available literature.

Two school districts in the UK (Birmingham and Worcestershire) have created a way for any school to refer a student for music therapy, which has led to music therapy becoming almost as common as clinical psychology in these districts. It was noted that music therapists work with a wider team to assess the student's abilities and circumstances in order to provide appropriate intervention, in the same way occupational therapists, speech psychologists, and other support staff do.²⁴

While this model exists in these two school districts, it has yet to expand to other schools. School administrators in charge of these decisions may not understand (or even know about) music therapy, as it is such a new profession. In 2006 a group of music therapists conducted a research survey that asked special education administrators in Illinois to self-

²⁴ Bunt, "Music therapy with children: A complementary service to music education?" 188.

report their knowledge of, and believed effectiveness of, music therapy. This survey was created by, and peer-reviewed by experts who had doctoral degrees (or were doctoral candidates) in their fields (special education, educational administration, music education, and music therapy). This survey had the largest number of responses compared to other surveys cited in this literature review, although the sample size was still small (78). The vast majority of responses indicated that administrators thought music therapy was helpful for students with autism (82.3%) and emotional disturbances (75.9%). However, only 36.4% of the administrators had any previous personal experience with music therapy, which was the most significant factor regarding positive perceptions of music therapy. This suggests that exposing more special education administrators to music therapy would greatly increase the perceived efficacy of music therapy across all disabilities. ²⁵

Another barrier that may discourage school administrators from employing music therapists is the lack of standardized assessments- an important part in both education and other therapies. A study in 2004 reported on the results of a survey given to practicing music therapists about the types of assessments they give to clients with Developmental Disabilities. While other similar professions (OT, PT, speech therapy) have fairly standardized assessment tools, music therapy does not. The five areas most commonly assessed by those surveyed were (in order of prevalence) motor skills (95%), communication skills (83%), social skills (79%), cognitive skills (64%), and musical skills (35%). 35% of respondents used a "titled" assessment

²⁵ Cindy R. Ropp et al, "Special education administrators' perceptions of music therapy in special education programs," *Music Therapy Perspectives* 24, no 2, (2006), 87-93. Retrieved from https://search.proquest.com/docview/1372908?accountid=38223

(SEMTAP or Boxil), 36% included a non-titled assessment form, and 10% indicated that they did not use an assessment tool at all. When asked about the creation of a standardized assessment tool, only 12% expressed that they were *not* interested in implementing such a tool.²⁶ This shows incredible interest in a new assessment tool from music therapists.

While music educators could assist therapists with developing standardized assessments, music therapists could be a great help to educators who are trying to implement the newer national music standards. James Robertson, a British music therapist, points out that while music educators often have the most difficult time implementing the "Invent" national standard (or "Create" in the U.S.A), creating and inventing are at the heart of what music therapists do, ending with a suggestion that therapists and educators could easily work together to develop a strong curriculum that included creating. ²⁷

There is significant evidence that students benefit from a curriculum created specifically for them. In 2004 a meta-analysis was performed studying music therapy effects on children with a wide range of disorders from the mid 80s-late 90s. Two important conclusions drawn were that the therapy's effects last longer if the patient has more sessions, and an eclectic, individualized approach is more effective than prescribed kinds of music therapy.²⁸

²⁶ Kristen Mei Chase, "Music therapy assessment for children with developmental disabilities: A survey study," *Journal of Music Therapy* 41, no. 1 (2004): 45. Retrieved from https://search.proquest.com/docview/223559495?accountid=38223

²⁷ Robertson, "An Educational Model for Music Therapy: The Case for a Continuum," 43.

²⁸ Christian Gold, Martin Voracek, and Tony Wigram, "effects of music therapy for children and adolescents with psychopathology: a meta-analysis," *Journal of Child Psychology and Psychiatry* 45, no. 6 (2004): 1054-63

While music therapists are well-trained musicians, music education teacher training often leaves preservice music teachers not only unfamiliar with the paperwork involved with teaching non-typical students, but unfamiliar and uncomfortable with these students altogether. A 2008 study followed four preservice teachers as they completed an eight-week fieldwork placement that involved observing, assisting with, and finally teaching a class of students with disabilities. The results showed that students were nervous and felt unprepared to enter the world of special education, but any and all training and information helped ease their worries. Even just a 90-minute orientation led all four students to feel more comfortable with their field placement. While other literature mentions the lack of training in special education for preservice music teachers, this appears to be the only research documenting the benefits of special educator training for music teachers.

Conclusion and Next Steps

If one looks through the available examples in the current literature, you will see that the most effective collaborations have involved bringing music therapists into school settings. Due to this, there should be a focus on finding ways to integrate music therapy within already existing special education and music education programs, educating music educators about music therapy (and vice versa), creating more standardized assessments for music therapists in schools, educating school administrators about music therapy, doing more research on the

²⁹ Ryan M. Hourigan, "Preservice music teachers' perceptions of fieldwork experiences in a special needs classroom," *Journal of Research in Music Education* 57 no. 2, (2009): 152-168.

benefits of already existing music therapy programs within schools, and possibly offering various ways to acquire licensure in music education and/or music therapy.

The example in the UK researched by Leslie Bunt offers an excellent example of how to implement music therapy in schools. ³⁰ This model would be wonderful, and even feasible, all over the world. In the United States, music therapy was confirmed as a related service for Individualized Educational Plans in 2000. ³¹ This means that as a part of federal educational law, music therapy can be offered as a service to treat a wide variety of diagnoses within schools in the U.S. It has even been pointed out that music therapy could be used as a diagnostic tool to help identify certain disabilities, as music therapy offers a variety of ways to communicate, which may help non-verbal students be able to express themselves and show the therapist what they are capable of. ³² If we can quantitatively show that students are more successful in districts that have music therapy available to any student who needs it, it is more likely that districts would be able to "find" the money to fund music therapists in school settings. More districts implementing it could lead to more research, which, if it showed there were positive benefits for students, would help even more districts justify offering music therapy.

One way that nearly all schools in the US help students with disabilities reach their behavioral and curricular goals is through the use of these Individualized Education Plans (IEPs).

³⁰ Bunt, "Music therapy with children: A complementary service to music education?"

³¹ Chase, Kristen Mei, "Music therapy assessment for children with developmental disabilities: A survey study," *Journal of Music Therapy* 41, no 1 (2004), 29. Retrieved from https://search.proquest.com/docview/223559495?accountid=38223

³² Tony Wigram and Christian Gold, "Music Therapy in the Assessment and Treatment of Autistic Spectrum Disorder: Clinical Application and Research Evidence," *Child: Care, Health and Development 32*, no. 5 (2006): 535-42.

While most elementary music educators see the majority of students in the school building, and often for consecutive school years, very few of them are involved with the IEP process at all. According to a survey done in 2006, only 38% of elementary music teachers had ever participated in an IEP meeting.³³ This is simultaneously unsurprising and concerning. Public elementary schools often integrate students with severe special needs in classes such as music, art, and physical education, even when those students are in a self-contained class the rest of the day. This means that the music teacher is one of only a handful of educators who sees these students interacting with their typical peers on a regular basis. Surely this would be a good perspective to include in IEP meetings, where goals, standards, and accommodations for students are decided upon? A music therapist may be able to help bridge this gap between music and special education. Simply exposing the special education staff to music therapy may make them aware of the contributions music professionals have to offer their students. A therapist's training involves more experience with the specialized paperwork for people with disabilities, which is significantly lacking in most teacher education training; having a colleague to help explain procedures would make music teachers more comfortable getting involved in an otherwise foreign process. More research should also be done on the effects of including music teachers on IEP meetings, as well as preservice training about special needs for music teachers. If such research shows positive results, then higher education needs to adjust their programs accordingly, and provide more training for and opportunities for working with students with disabilities.

³³ Laurie P. Scott et al., "Talking with Music Teachers About Inclusion: Perceptions, Opinions and Experiences," *Journal of Music Therapy* 44, no. 1 (2007): 43.

While music educators and therapists can assist each other, they also need to educate each other. A great example of this was music therapist Cynthia M. Colwell's presentation at the American Orff-Schulwerk Association National Conference. This session is a great example of one way music therapists and music educators can more efficiently communicate with each other. If music therapists and music educators are truly interested in assisting and learning from one another, there needs to be a concentrated effort to invite one another to our conferences, workshops, and other professional development opportunities.

The professions of music education and music therapy should not only focus on educating each other, but educating the administrators of our schools. Administrators' views on music therapy undoubtedly have a huge impact on the offerings in a school/district. The research mentioned earlier in this review showed that any exposure to music therapy increases administrators' perceived efficacy of music therapy. This is an issue that the field should be taking seriously and trying to solve right away; music therapists should actively be finding workshops, conferences, and other professional development opportunities to do short presentations with, and for, administrators. Music educators, who often have significantly more contact with school administrators, should try to advocate for training from music therapists, and invite administrators to participate in that training.

³⁴ Iafigliola, "Orff and Music Therapy: Discovering the Collaboration Seed," 48.

³⁵ Ropp, "Special education administrators' perceptions of music therapy in special education programs," 87.

Another strategy to gain trust and perceived efficacy with administrators is to create more common, easier-to-understand assessment tools within music therapy. The standards and procedures that educators (both music and special) are familiar with when assessing students could be of great help to music therapists who are trying to create more standard assessment tools, creating yet another opportunity for music therapists and music educators to collaborate. There should be several different standardized assessments created for various populations regarding ages, disability diagnosis, setting, etc. These assessments would help music therapists receive insurance reimbursement, be seen as more valid in the education world, show growth to school administrators, and create a way for music therapists to more effectively compare and contrast their methods with other professionals in the field. A great example of this was Dianne Langan's survey and subsequent assessment tool. ³⁶ The assessment tool was easy to understand, and is something I am considering using in my classroom in the fall, with a few modifications to adapt to the American education system, as this was designed for Australian and UK teachers.

Another reason to push for including music therapy in schools is that the social skills interventions currently used in schools have varied results. According to a meta-analysis of school-based social skills interventions for children with autism spectrum disorders in 2006, a vast majority of these interventions do <u>not</u> have lasting, positive results. The ones that are more likely to succeed are in locations that are more typical for the school environment (aka

³⁶ Langan "A music therapy assessment tool for special education: Incorporating education outcomes" 78-98.

not resource rooms) and occur more than twice a week.³⁷ If the meta-data has shown us that the current interventions are not working, that they need to happen more frequently, and that they need to be in a more typical environment, music therapy sessions in a familiar music room seem to be an obvious solution that should at least be attempted and researched.

Further research that suggests music therapy may be as effective, or even more effective, than current interventions used in schools includes the meta-analysis done in 2004. These findings support the idea of collaboration between music therapists and music educators; if a student is already receiving both services, that child will benefit more from consistency between those classes, essentially providing more opportunities for reinforcement of desired behaviors and outcomes.

One other change in higher education that needs to be researched, and perhaps attempted, is changing/combining the licensing requirements for music therapists and music educators. One model that I could see working is creating a program for certified music teachers to become licensed in "educational music therapy." This program could be shorter than a full degree, include more training on helping K-12 students with disabilities, and include less training in clinical settings (for patients with Alzheimer's, brain injuries, PTSD, etc). Perhaps an additional student teaching/internship assignment with a music therapist would also be

³⁷ Scott Bellini et al., "A Meta-Analysis of School-Based Social Skills Interventions for Children with Autism Spectrum Disorders," *Remedial and Special Education* 28, no. 2 (May/June 2007): 153-62.

³⁸ Gold "Effects of Music Therapy for children and adolescents with psychopathology: a metaanalysis," 1054-63.

beneficial. This would allow music teachers to gain invaluable training and skills to implement music therapy into their current situations without having to complete clinical hours that are not applicable to their career path.

There could be a similar licensing program for certified music therapists to acquire a "limited special education" teaching license. This could provide a way for music therapists to undergo a student teaching placement, receive training about IEPs and best teaching practices, and become familiar with school administration, thus allowing them to be more qualified to work in public schools.

We already have significant evidence that both music education and music therapy benefit students' physical, social, and cognitive growth and that attempts at collaboration, especially with the non-typical student, have been successful thus far. Since the most successful collaborations have taken place when integrating music therapists within schools, both professions should be focused on implementing and adapting ideas from each other's professions, creating opportunities to teach one another, advocating for programs to administrators, and figuring out ways to change current training programs to better reflect the needs of students. Further research is needed in all of these areas in order to best provide evidence of positive results.

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