

Embedding the Arts into the School's Agenda: Music as an Example

No one should ever think that dance and music and theater are a luxury, ... because for so many of our students, they are necessities, they are the reason these kids show up.
Michelle Obama

Cuts to art and music programs in public schools take place for many reasons, including a misinterpretation that the arts are unnecessary or optional, a misguided reaction to state and national testing pressures that emphasize performance in reading, writing and math and a misunderstanding of the usefulness and value of the arts to both education and the workforce. Unfortunately, according to the National Education Association, arts programs and teachers are in more trouble than ever concerning their survival in public schools, despite clear connections between student success and their studying the arts.
Melissa Goldsmith
California State University, Northridge

Inclusion of the arts in state plans under the Every Student Succeeds Act elevates the critical role that arts teachers play in a well-rounded education for students with disabilities, yet across all art forms, research shows that the vast majority of arts educators are not adequately prepared for this important work.
Jenna Gabriel
The John F. Kennedy Center for the Performing Arts

The arts are a widely recognized societal good. Our focus here is on music as an example of potential benefits to schools and students when the arts are incorporated into a school's agenda for facilitating positive learning and development and addressing learning, behavior, and emotional problems.

Benefits to Schools and Students of Music Participation, Performance, and Education

Music is a global art. Discussions of the benefits to schools and students of music participation and education permeate the literature and the internet. Research has highlighted that music participation, performance, and education in schools can make a significant contribution to school climate and academic, social, and emotional outcomes. Widely cited examples of potential benefits include enhanced student and staff engagement at school, expanded understanding of self, society, culture, increased knowledge, skills, and attitudes related to all facets of human development. Group participation and performance are especially highlighted as playing roles in further enhancing personal discipline, responsible risk-taking, social and emotional development, social communication, and effective collaboration. And it is suggested that teachers who learn to include a focus on music and other arts will increase their ability to effectively and consistently pursue a school's agenda for whole child development, prevention of problems, and preparing students for the future.

See Exhibit A for research examples supporting music's role in the school agenda.

*The material in this document reflects work done by Joshua Manela as part of his involvement with the national *Center for MH in Schools & Student/Learning Supports* at UCLA.

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Exhibit A

Examples of Research Supporting Music's Role in the School Agenda.

In a 2010 article in *Nature Reviews Neuroscience*, Kraus and Chandrasekaran state that:

The effects of music training in relation to brain plasticity have caused excitement, evident from the popularity of books on this topic among scientists and the general public. Neuroscience research has shown that music training leads to changes throughout the auditory system that prime musicians for listening challenges beyond music processing. This effect of music training suggests that, akin to physical exercise and its impact on body fitness, music is a resource that tones the brain for auditory fitness.

They further stress that:

music training results in structural and functional biological changes throughout our lifetime. Such neuroplasticity not only benefits music processing but also percolates to other domains, such as speech processing. The musician's brain selectively enhances information-bearing elements of auditory signals — a process that reflects efficient sound-to-meaning relationships — as well as enhancing the extraction of regularities in the signal. Neural changes such as these have practical implications, as they help to prepare people who actively engage with music for the challenges of language learning and everyday listening tasks. The beneficial effects of music training on sensory processing confer advantages beyond music processing itself. This argues for an improvement in the quality and quantity of music training in schools.

With respect to the importance of music in schools, they note:

a study that controlled for the number of years of music training and practice. In this study, musicians who began training before the age of 7 showed superior sensory-motor integration (reflected in a motor sequencing task) compared with those who began music training later in life.” They also note “studies suggest that the benefits of music training may be accessible to everyone and not just to those who show an aptitude towards music. However, in today's society, musicians are often the product of years of private instruction, a luxury that is possible only for a select few. Taking into consideration what we know about the positive effects of music training, it seems imperative that we afford all children an equal opportunity to improve their listening skills through music training.

They conclude that:

a large-scale effort to provide music training early in life can only be achieved through the school system. However, there is growing concern in the United States that the quality and extent of music training that is provided at schools is on the decline owing to other curricular demands. It is possible that this trend may impair academic achievement in the long term. However, instruction in music and the time that is spent participating in music events do not hamper academic achievement, and we argue that in fact music training may benefit academic achievement by improving learning skills and listening ability, especially in challenging listening environments.”

Hallam (2010) reviewed the empirical evidence relating to the effects of active engagement with music on the intellectual, social and personal development of children and young people. She concluded that musical skills “may transfer to other activities if the processes involved are similar.” This includes language development, literacy, numeracy, measures of intelligence, general attainment, creativity, fine motor co-ordination, concentration, self-confidence, emotional sensitivity, social skills, team work, self-discipline, and relaxation. She emphasized that “the positive effects of engagement with music on personal and social development only occur if it is an enjoyable and rewarding experience.”

Hogenaes, van Oers, and Diekstra (2014) reviewed 21 empirical studies published in peer-reviewed journals from 1995-2011 on the effects of exposure to music and music education on cognitive, social-emotional, and motor functioning of children. They concluded that the studies demonstrated positive outcomes. However, given the methodological differences, no causal conclusions and generalization are warranted.

Music Therapy in Schools

For students experiencing significant problems, some schools include music therapy to embellish efforts to ameliorate problems.* As defined by the American Music Therapy Association (AMTA):

Music Therapy is 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.

The AMTA further states:

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. After assessing the strengths and needs of each client, the qualified music therapist provides the indicated treatment including creating, singing, moving to, and/or listening to music. Through musical involvement in the therapeutic context, clients' abilities are strengthened and transferred to other areas of their lives. Music therapy also provides avenues for communication that can be helpful to those who find it difficult to express themselves in words. Research in music therapy supports its effectiveness in many areas such as: overall physical rehabilitation and facilitating movement, increasing people's motivation to become engaged in their treatment, providing emotional support for clients and their families, and providing an outlet for expression of feelings.

Music therapists mainly work with schools providing (1) *designated special education IEP services* (e.g., music activities designed to foster the development of motor, communication, cognitive, and social abilities) or (2) *specialized assistance interventions* for other students, usually implemented with groups. With respect to the latter, the work often is described as an educational consult. Such “consultation” in the classroom is seen as enabling teachers to learn effective and innovative strategies that “can stimulate their creativity” and lessen their frustration in working with challenging students.

As described by Music Therapy Associates (<https://musictherapyassociates.com/schools>):

As an educational consultant, the music therapist makes regular visits to each designated classroom, conducting sessions which serve as models for the teachers and aides. Those staff then carry out the music therapy program during the time period between visits. The music therapist might come weekly to the classroom or every other week: the frequency of the consult visits is determined by the school district. There is a strong focus in this model on assisting the teacher to use music throughout each day as an effective educational tool. Visual aid patterns, tapes and other materials are provided to the teacher on a regular basis by the music therapy consultant.

Not all students are good candidates for music therapy. A critical consideration is whether the student appears motivated and able to attempt and complete tasks through the use of music.

Therapy sessions may include singing, therapeutic instrument playing, dancing/movement, and musical improvisation, as well as the use of colorful and novel props (e.g., for young students, props may include puppets, toys, musical storybooks, stuffed animals, bubbles, balloons, beach balls, parachutes, scarves). These activities are seen as a means for facilitating academic learning and “increasing cooperation and appropriate social behavior, providing avenues for communication, increasing self-esteem and self confidence, improving motoric responses and agility, and encouraging exploration and examination of issues that impact the life of the student.” (American Music Therapy Association, Inc., https://www.musictherapy.org/assets/1/7/MT_Music_Ed_2006.pdf).

Research on the use of music therapy in schools is sparse. Exhibit B offers a few examples related to therapeutic effects.

*For the Center’s discussion of art therapy, see *About Art Therapy and Schools* (<http://smhp.psych.ucla.edu/pdfdocs/arttherapy.pdf>).

Appendix B

Examples of Research Related to Therapeutic Effects

Pain and anxiety reduction. Medical research has focused on music therapy and anxiety reduction. For example, Nilsson (2008) reviewed 42 randomized controlled trials of the anxiety- and pain-reducing effects of music interventions in perioperative settings. Positive effects were reported in approximately half of the studies. She noted that, while such interventions are used in health care settings to reduce patient pain, anxiety, and stress, the mechanism for the effects remains unclear.

Aggressive behavior. Gholami, Bshlideh, & Rafiei (2013) report that combined relaxation and music therapy significantly reduced aggression mean scores for an experimental group of male students as compared to a control group.

Post-Traumatic Stress. There is interest in the role music intervention can play in coping with stress and treating post-trauma emotional reactions and reducing vulnerability to traumatic events. For example, Felsenstein (2013) reports a case study that highlights the use of music therapy for post-traumatic stress treatment with young children and stresses the way in which the community and family fabric can be harnessed in order to strengthen the coping of the individual. The intervention was short-term music therapy. It was administered to three groups of pre-school children in the aftermath of a forced evacuation from their homes. “The group treatment process is described in the context of Uprooting to rePlanting (UP) model and the broader Basic Ph model of Group Coping developed for dealing with community stress. Initial results point to the role of music in building post-trauma resilience and in reducing the vulnerability of pre-schoolers to traumatic events.”

Improved affect (e.g., emotional expression, emotional regulation). In general, group singing is reported to have a positive effect on affective functioning. For example, better affective responses were reported for participants who sang in a choir compared to those who did not (Şanal & Görsev, 2014), and reports suggest that group singing has positive emotional effects regardless of socioeconomic status and race (Bailey & Davidson, 2005). Interpretations of such data have suggested that group singing involves a mutual trust that everyone will learn and perform their parts and this fosters emotional openness and bonding among group members. Learning and performing music also is reported as increasing self-esteem and confidence and reducing anxiety (Hallam, 2010; Osborne, McPherson, Faulkner, Davidson & Barrett, 2016).

Autism. Recommendations about using music activities in working with psychological disabilities are widespread (e.g., see <https://www.musictherapy.org/>). Such activities are common in responding to autism. Both positive and negative findings have been reported. For example, based on their research on brain plasticity and music training, Wan and Schlaug (2010) report that sensorimotor and cognitive enhancements are associated with music training. They state that such enhancements “suggest the potential for music making as an interactive treatment or intervention for neurological and developmental disorders, as well as those associated with normal aging.” In contrast, Bieleninik, Geretsegger, Mossler and colleagues (2017) report that “Among children with autism spectrum disorder, improvisational music therapy, compared with enhanced standard care, resulted in no significant difference in symptom severity based on the ADOS social affect domain over 5 months.” They conclude that “findings do not support the use of improvisational music therapy for symptom reduction in children with autism spectrum disorder.”

Note: The American Music Therapy Association (2018a) has discussed a plan to improve learning and mental health by having music therapists work with music educators. The AMTA’s view is that such a collaboration has the potential to improve learning and development of all students and promote the cognitive, physical, and social development of students with mental disabilities.

Concluding Comments

Science and technology changed the 20th century in fundamental ways. This led to advocacy for the movement for schools to place an increased emphasis on science, technology, engineering, and mathematics, widely referred to as the STEM movement.

In this century, in addition to STEM, art and design are seen as “poised to transform our economy.” This has resulted in adding art to STEM, creating a new acronym -- STEAM (<https://educationcloset.com/steam/what-is-steam/>).

With the increasing emphasis on STEAM, the arts have a renewed foothold in school policy. At the same time, advocates continue to call for using the arts as therapeutic interventions.

It remains unclear how broad and deep the emphasis will be or how best to embed the arts into a school’s curriculum in ways that facilitate whole child and whole school development. In particular, besides the academic focus, policy makers need to consider how the arts can help enhance school climate, facilitate social emotional development, address barriers to learning and teaching, and re-engage disconnected student.

From our perspective, it is essential for policy makers to think beyond discrete arts education courses and the addition of specialized therapies (e.g., music and art therapy). Too few schools can afford to add yet another professional specialist.

Given sparse resources, schools must embed arts education, participation, and performance into the curricula for science, social studies, history, literature, and so forth. And as with all efforts to address barriers to learning and teaching, activities related to interventions such as music and art therapy should be embedded into a unified, comprehensive, and equitable system of student/learning supports. To enhance resources for all this, community outreach is essential. (See *Improving School Improvement*-http://smhp.psych.ucla.edu/improving_school_improvement.html.)

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