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### Benefits of Music Education

Throughout middle school and high school, I took many music classes: choir for seven years, band for two, drumline for one, guitar for one, symphony for one and even musical theatre for four. Through all of these classes and programs I learned how important an education in music really is. It is more than just learning how to play a new instrument or song. It is about the mental, physical, social and educational benefits. To understand these benefits, we need to dive into why we study music. Music education in K-12 provides many benefits from social, emotional and even physical skill improvement.

The brain, when playing music, gets a complete workout because “[m]usic education touches on all domains of learning, including the psychomotor domain, the cognitive domain, and, in particular and significant ways, the affective domain, including music appreciation and sensitivity” (Shute et al. 16). The psychomotor domain is the brain function of controlling motor skills. The cognitive domain controls brain activity, including learning skills. Finally the affective domain is the part of the brain that is directly related to values and attitude (VickyRN). This definition is a foundational starting point to dissect music in an educational setting. It includes studying and learning how to read music, the technical aspect of playing music, and even music sensitivity as to why we play music. Music sensitivity is becoming in tune with music in all aspects from intonation, dynamics, rhythms and even meaning behind a piece. All of these aspects, and many more, are taught in schools across the world from preschool age until

the moment a student decides to part ways with music education. This being said, the peak years of students learning music in an education setting are between 4th grade and 12th grade (Montgomery). For that reason, this essay will be in regards to this age range.

Music education programs and classes take many different forms. Instrument lessons, ensemble classes, theory classes, musical theatre, music history, music production, and composition are some types of classes or programs that schools may offer for music education. In instrument lessons students learn how to play an instrument. Reading music, technique and performance of a specific instrument are just some of the skills that come along with this class. Ensemble classes such as choir, orchestra, or band allow students to play their chosen instrument with a group of students. More often than not these classes are led by a conductor who helps direct the ensemble together when playing. Theory classes are lecture-style classes where students learn how to deeply dissect the patterns in music. Musical theatre takes the form of an afterschool program at most schools. Here students learn about play production including, but not limited to, dancing, acting and singing. In music history students learn about music from the past and how it has evolved over time into the music we have today in the modern age. Music production can take the form of a class or program where editing, recording, mixing, and digital music are just some of the skills students can learn. In a class such as songwriting, students learn the basic formula to songs and how to create lyrics or melody that follows this form.

Music creates a unique connection in the brain unlike any other school subject. The act of playing an instrument itself actually changes the brain. This is due to the constant activity in the brain when playing music. Music stimulates both the right and left side of the brain, using visual processing, sound, movement and memory regions of the brain. Just how we keep our bodies physically healthy when we exercise and eat well, playing an instrument is a full body workout

for the brain. And just like a healthy lifestyle can lead to a positive physical feeling, this too causes long lasting positive outcomes in the brain. More specifically the corpus callosum, the bundle of nerve fibers that connects your right and left brain, is larger and stronger in musicians (Collins).

The high level of memorization in music has been shown to lead to higher levels of memory processing in students who play music versus students who don't. Each aspect of music memory, from recalling lyrics, reading music, playing the proper notes, or simply just remembering a song, all helps the speed and quality of memory (Silverstone). Music itself can be easy to memorize, and it may even be helpful for students in non-music settings. Sometimes creating a song of facts that a student must know for an upcoming test helps the student learn and remember the material for the test.

Another aspect that changes in the brain is mental processing speed. This is the speed at which the brain retains and learns information, which is a critical skill for students. Research shows that students who studied music for one year demonstrated better mental processing speed than students who studied science for one year (Brown). The speed at which student musicians learn has improved due to the fact that when students are in music class they are responsible for doing many tasks at one time. They must read the sheet music, understand the music, and physically play the music all while watching a conductor or instructor for tempo and/or creative directions they may take. Each of these things are done at the same time with no room for error in a performance setting as well. With this being a constant practice in student musicians day after day, their brain processing power improves greatly which can produce better results in other classes as well.

The next skill that can grow with music study is the skill of foreign language. When a student first starts out learning music, taking a peek at a more advanced piece of sheet music can be intimidating because of seeing all the symbols and foreign words and not knowing what they mean. Oftentimes this is how many people feel when starting a new language. In foreign language class there is reading, writing, speaking, vocabulary, and culture. Similarly in music you have rhythm, pitch, dynamics, culture, and the physical act of playing an instrument. Learning how to read music is a skill that takes a lot of time, practice, and studying; and the study skill we use can help in learning a new language as well. Even more so a lot of the language used in music is not English. This alone required students to learn words in new languages. With a vocalist, there are often times when the lyrics to a song won't be in English. A requirement to perform a vocal piece well includes knowing what the singer is singing about and, in the case of a different language, how to say and pronounce the words. Due to this the brain becomes well equipped with learning new languages. The memory the brain has about studying and retaining the new language will help in not only foreign languages classes but many others (Benz et al.).

The act of studying has been shown to be more effective in students who play music. Learning an instrument takes a lot of time and practice, so because of this many students walk out of music class with study skills. These benefits are identifiable in test results, and one study showed “that students in elementary schools with superior music education programs scored around 22 percent higher in English and 20 percent higher in math scores on standardized tests, compared to schools with low-quality music programs, regardless of socioeconomic disparities among the schools or school districts” (Brown). Music students understand that if they would

like to perfect something or a skill it will take time and practice. They understand that this is also true when it comes to school.

Inside the head is not the only part of a body that gets a work out because of music. The physical body also gets a workout. Posture is an aspect in playing music. Good posture when playing most instruments is both feet flat on the floor, sitting upright in the chair with a straight back and with the instrument in the proper position. When standing, students should have both feet shoulder width apart and flat on the floor, back straight, body weight evenly centered and instrument in proper position. When it comes to moving or walking while playing the posture is similar to standing except you must be sure that the performer should have a slight natural bent in their knees ready for movement and chest lifted if the instrument allows (Goodwin). Having these strict guidelines when playing music often translates to life.

Marching band is arguably the most physical music ensemble in schools. Students in this program are required to play their instrument while marching in a choreographed formation. Many times we think of marching bands as an ensemble that plays during sporting events and even during halftime. Marching bands also play in competitions similar to many other ensembles. During these performances there is a lot of physical demand. Students must be able to hold and play their instrument in proper position the entire performance. Adding to this is the choreography, which often includes glide step, high step, and backwards march. Many of these skills are learned during a time of practice during the summer months called band camp. Many times band camp is very intense practice that often lasts the entire day. During these practices the students learn music, instrumentation, and choreography. Like many sports, preparing for a big game with conditioning is a requirement, this is also the case for the marching band. Along the

lines of sports, marching band conditioning consists of running, stretching, back exercises (to help with posture), and pushups.

Breathing for performing music can also be very different from how we normally breathe. Musicians need to have a strong sense of control when it comes to breathing. Wind instrument players need to be able to breathe in enough air to produce a quality sound and a sound that will match the duration that is written on the sheet music. By creating this strong sense of self-recognition, students learn how to not only properly breathe while playing or singing music but also in daily life. For instance, other situations in school settings where students can benefit from good breath support include “reciting lines for a play, reading aloud in class, talking louder in a noisy cafeteria, and running in physical education class” (Daymut). These skills are not only used in school; many jobs require public speaking and having a good control of breathing will help make the experience less intimidating and result in a better and more professional delivery. Not only this, but health-wise, the ability to breathe properly and recognize one’s breathing pattern will help make a person not pass out while in rehearsal or a performance.

Many argue that a benefit in sports is the use of motor skills. Musicians also use both their large and fine motor skills. For example, in musical theatre students use their entire body to sing, dance and act. In marching band students combine large motor skills while marching around the field with fine motor skills to play their instruments. Much like marching bands, percussion and drumline use their large motor skills to play many of the instruments that are needed for these ensembles. These skills are crucial to children especially at the younger ages. Hand-eye coordination is extremely important to help students with physical skills later in life that playing an instrument develops since, “a musician must be able to create the correct notes

through the proper hand motions, whether it be hitting keys, closing valves or using another apparatus to produce sound” (Silverstone).

One of the final benefits is the social aspect music education brings into children's life. Students are naturally social and enjoy being social with fellow students who have similar passions to them. Music classes help bring these students who are passionate about music together to “share exciting moments together through music, help develop one another’s abilities, and become a support system for each other. This special bond also increases student engagement in school” (“The Importance of Music Education in Schools”). By creating these bonds, students create a better sound. They are more inclined to listen to each other while playing, which is critical when playing in an ensemble (Jorgensen). This helps with intonation and bending issues. Through this students are more likely to create lifelong friendships with fellow classmates, which during this era is very important.

Giving students a solid place to repeatedly return to and be welcomed into this community is huge for healthy development. Having a safe place for students to be introduced to new ideas in a comfortable setting surrounded by like-minded people helps students be more open to the idea of learning and growing without being judged. This is especially true for high-school-age students. During this phase of development students can often be turned away from trying new things or accepting new ideas in fear of being judged by their peers. Music classes are often safe spaces for students to go and be surrounded by like minded people. Not only this but students will also feel connected with other musicians even if they are not in the same music class or ensemble. Being a musician is about being a part of the music community regardless of what instrument you play and with this follows fans. Many times the biggest fans of musicians are fellow musicians.



Teamwork is essential for kids to learn before they leave school to enter the workforce. Teamwork is used in everyday life. In music education classes students learn this vital skill. When playing in ensembles, teamwork is crucial. The entire class joins together as a team to create beautiful music for others to enjoy. They learn to listen to each other, help when another student is struggling, and even learn how to respect each other. An aspect that is often used in ensemble classes that helps reinforce these ideas for the students is during time called sectionals. During this time students break off into small groups with their selections; for example, trumpets go with trumpets, flutes go with flutes, etc. While in these small groups, each section works on practicing and learning their specific part, so when they play together they have a better idea of how their part is meant to sound. Oftentimes there is one student who is the section leader. They lead the section through the practice and help students who seem to be having a harder time learning the material. This is a great teamwork experience for the students.

The love for music gives students a creative outlet. Allowing students to be creative in a professional learning environment will help release stress that other classes may add and allow students to have a break while also stimulating their brain (Silverstone). It allows students to take risks in a safe and controlled environment to grow their creative skill which would otherwise be neglected in many other standard classes. 72% of employers say the number one skill they look for when hiring is creativity (VanWeelden and Whipple). With this in mind, it is important that students are given the opportunity to learn this skill before entering the workforce in order to make them a competitive candidate.

Stage fright is a big fear for many. Whether through performing or through public speaking, it is something we all have to do. Music is a great way to conquer this fear, especially in this day in age where the number of kids being diagnosed with social anxiety is only growing.

According to the CDC, 7.1% of children aged 3-17 years have diagnosed anxiety. 3.2% of children aged 3-17 years have diagnosed depression (“Anxiety and Depression in Children”).

Stage fright is a fear that becomes less and less scary the more you do it. The Anxiety and Depression Association of America suggests that avoidance may give you immediate relief, but it reinforces your fear in the long run (“Conquering Stage Fright”). With this being a skill we all must do at some point in our life, putting a child in music and teaching them that stage fright is normal and needs to be tackled head on will give them the confidence they need to continue to either perform or publicly speak in the future.

Neurotypical students are not the only ones that can benefit from music education. Students who range on the Autism scale also have benefited greatly from these programs. One study examined the impact of music education on a class of 11-15 students with different ADCs (acute cognitive delays) including Down syndrome, Autism, and various learning disabilities. This examination was conducted to successfully prepare students to interact with children with special needs in music. What they found was that many times lesson plans needed to be adapted to fit the needs of the students. They needed to be adapted in a way that would help these students who may have short attention spans or difficulty understand more complex topics (Wolff). The great thing about music is its ability to be adaptable. If a specific instrument or song is not working it is very easy to try something different or even return to the basics. This being just having fun with the instruments.

Music programs are also great as after school activities. They are much more educational and have better long-term effects, such as giving children structure outside of a formal school setting, than having students return home from school to an empty house or staying at an after school program (Slaton). Here students can enjoy time with friends and learn the new skills that

have been previously mentioned. Students have a sense of physical belonging here and know that they are where they are meant to be and are always welcomed so long as they have an interest in music.

As we draw everything that has been discussed to a close, it is important to restate the key important factors of music in an educational setting. Giving students the tools they need to explore a creative subject is crucial to their development and has lasting effects. From the educational benefits of improved test scores, better memory and language skills to the social benefits of finding like-minded friends and learning teamwork skills, the emotional benefits of having a creative outlet and overcoming fears are apparent. Musical education also can provide the physical benefits of higher stamina, hand eye coordination and better breath support, and finally, music education can support kids with special needs. By giving them this time in school to play music it helps create a solid foundation for other skills to be strengthened and built upon. Music education in K-12 provides many benefits from social, emotional and even physical skill improvement.

## Works Cited

- “Anxiety and Depression in Children: Get the Facts.” *Centers for Disease Control and Prevention*, 22 Mar. 2021,  
<https://www.cdc.gov/childrensmentalhealth/features/anxiety-depression-children.html>.
- Benz, S., Sellaro, R., Hommel, B., & Colzato, L. S. *Music makes the World Go Round: The impact of musical training on non-musical cognitive functions-a review*. *Frontiers*. Retrieved November 4, 2021, from  
<https://www.frontiersin.org/articles/10.3389/fpsyg.2015.02023/full>.
- Brown, Laura Lewis. “The Benefits of Music Education.” *PBS*, Public Broadcasting Service,  
<https://www.pbs.org/parents/thrive/the-benefits-of-music-education>.
- Collins, Anita. “How Playing an Instrument Benefits Your Brain.” *YouTube*, 22 July 2014,  
<https://youtu.be/R0JKCYZ8hng>.
- “Conquering Stage Fright.” *Anxiety and Depression Association of America, ADAA*,  
[adaa.org/understanding-anxiety/social-anxiety-disorder/treatment/conquering-stage-fright](http://adaa.org/understanding-anxiety/social-anxiety-disorder/treatment/conquering-stage-fright)
- Daymut, Julia A. “Breath Support and Control.” *Handy Handout #260: Breath Support and Control*,  
[https://www.handyhandouts.com/viewHandout.aspx?hh\\_number=260&nfp\\_title=Breath%2BSupport%2Band%2BControl](https://www.handyhandouts.com/viewHandout.aspx?hh_number=260&nfp_title=Breath%2BSupport%2Band%2BControl).
- “Definitions for Music Education.” *What Does Music Education Mean?*,  
[www.definitions.net/definition/Music+education](http://www.definitions.net/definition/Music+education).

Goodwin, Casey. "Get in Shape for Marching Band!?" *University of New Hampshire Bands*,  
<https://unhbands.org/index.php/athletic-bands/wildcat-marching-band/193-get-in-shape-for-marching-band>.

"How to Secure Funding for Music Education for Public Schools - TC." *Music and Music Education Master of Arts Hybrid Summer*. 23 Sept. 2020.

"The Importance of Music Education in Schools." *Graduate Programs for Educators*, 21 Aug. 2020,  
[www.graduateprogram.org/2020/08/the-importance-of-music-education-in-schools/](http://www.graduateprogram.org/2020/08/the-importance-of-music-education-in-schools/).

Jorgensen, Estelle R. "Music Education as Community." *Journal of Aesthetic Education*, vol. 29, no. 3, 1995, pp. 71–84. JSTOR, [www.jstor.org/stable/3333542](http://www.jstor.org/stable/3333542). Accessed 22 Feb. 2021.

Koopman, Constantijn. "Music Education: Aesthetic or 'Praxial'?" *Journal of Aesthetic Education*, vol. 32, no. 3, 1998, pp. 1–17. JSTOR, [www.jstor.org/stable/3333302](http://www.jstor.org/stable/3333302).

Montgomery, Erika. "The Best Instruments to Learn Based on Age." *Peterson Family Foundation*, 27 Sept. 2016,  
<https://petersonfamilyfoundation.org/music-therapy/best-instruments-learn-based-age/#:~:text=Starting%20around%204-5%20th%20grade%2C%20children%20should%20have,size%2C%20special%20health%20issues%20and%20their%20musical%20aptitude>.

Pregola, Joseph. "Music Education in Crisis." *Rent or Shop Branded Musical Instruments*,  
[https://www.nemc.com/resources/articles/music-education-in-crisis\\_90](https://www.nemc.com/resources/articles/music-education-in-crisis_90).

Shute, Florence L., et al. "Aims and Objectives of Music Education." *Music Supervisors' Journal*, vol. 20, no. 2, 1933, pp. 16–24. JSTOR, [www.jstor.org/stable/3384500](http://www.jstor.org/stable/3384500).

Silverstone, Jenny. "Tuning In: Six Benefits of Music Education for Kids." *New England Board of Higher Education*,

[nebhe.org/journal/tuning-in-six-benefits-of-music-education-for-kids/](http://nebhe.org/journal/tuning-in-six-benefits-of-music-education-for-kids/).

Slaton, Emily Dawn. "Music Education Budget Crisis." *Music Educators Journal*, vol. 99, no. 1, 2012, pp. 33–35. JSTOR, [www.jstor.org/stable/41692693](http://www.jstor.org/stable/41692693).

VanWeelden, Kimberly, and Jennifer Whipple. "The Effects of Field Experience on Music Education Majors' Perceptions of Music Instruction for Secondary Students with Special Needs." *Journal of Music Teacher Education*, vol. 14, no. 2, Jan. 2005, pp. 62–70, doi:10.1177/10570837050140020109.

VickyRN. "Teaching and Learning in the Affective Domain." *Allnurses*, VickyRN, 29 May 2009, <https://allnurses.com/teaching-learning-affective-domain-t280258>.

Wolff, Karen I. "The Nonmusical Outcomes of Music Education: A Review of Literature." *Bulletin of the Council for Research in Music Education*, no. 55, 1978, pp. 1–27. JSTOR, [www.jstor.org/stable/40311603](http://www.jstor.org/stable/40311603).