

Incorporating Music Education in Educational Curricula

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Abstract

Music education is a field of practice in which students understand and communicate the language of music. Music education also identifies compositional elements and musical qualities. In this paper, I argue that music education should be made compulsory in educational institutions. I support my position on music education being made compulsory in schools with the three following arguments. First, I argue that music stimulates brain development in children, especially if its educational aspects are efficiently embedded in elementary stages. Second, I argue that music helps in relieving stress. Finally, I argue that studying music nurtures creativity, which is important for overall development. I also consider alternative arguments such as those that argue that music education requires natural talent, that it may cause disparity in students because of varying student skill levels, and that it may act as a distraction from other academic subjects. School curriculums are formed with the aim of enriching students with the maximum skills for their higher education endeavors, and it is important to recognize any improvements that can be made.

Keywords: music education, brain development, school subjects, stress management, educational budgeting

Music Education Should Be Made Compulsory in Educational Institutions

Education is perceived to be an essential commodity and it is crucial to reflect upon the effectiveness of our global education programs. With growing concerns over our education system's effects on mental health, it seems reasonable to try and make positive

changes to the contents of the program to make the whole learning experience more efficient and enjoyable. According to Damkohler (2015), the value of incorporating music into a child's education cannot be understated. An immense volume of incontestable research reveals that children learn better when music is part of their school curriculum. For example, in New York City, numerous educators believe that efficient music education is a direct contributor to academic success. Furthermore, several of the city's highest performing students spend their school years intensively studying music (Mathewson, 2017). As a result, ministries of education have focused for a long time on ensuring that technical subjects are taught using the most advanced technologies and updated syllabuses, but may have overlooked another important aspect of the schooling system: the arts, and more specifically, music.

In this paper, I argue that music education should be made compulsory in educational institutions. I support my position on music education being made compulsory in schools using the three following arguments. First, I argue that music stimulates brain development in children, especially if its educational aspects are efficiently embedded in elementary stages. Studies have suggested that certain aspects of music education help in forming the bases for higher technical subjects (Sanders, 2018). Second, I argue that music helps in relieving stress. This is important to note as more school students are finding it difficult to manage their academic stress in schools (Campa et al., 2019). Finally, I argue that studying music nurtures creativity, which is important for overall development. Hogenes (2014) posits that employers from almost all job fields identify creativity as one of the most important skills for gaining success in the workforce. Additional benefits to creativity include efficient stress management and improved focus.

While supporting my position, I also consider alternative positions that may present themselves towards the introduction of music education. First, music education may have its benefits, but natural talent is needed to excel at music performance (Barnes, 2018). Second, music may act as a distraction from other academic subjects (Amsen, 2018). Finally, discouraging competition between students may arise because of skill disparity (O'Leary, 2019). While these positions have merits, I provide refutations based on information from studies that contest these statements. For instance, a study conducted by McGill University demonstrates that students who studied a musical instrument during their school days are more likely to excel in their studies at college, work better in teams, and have enhanced critical thinking skills (Forgeard et al., 2008).

This paper is important because there exist several misconceptions about global music education. Some of these misconceptions, such as those related to natural talent, are discussed in this paper (e.g., Gorman, 2017). It is important to dispel these misconceptions on music education because educational curricula are developing at a fast rate and are getting more challenging and demanding (Mkandawire & Luo, 2018). To cope with such advancements in technical knowledge, it is vital to implement measures that can improve learning capabilities and help in minimizing the additional stress developed. Playing a musical instrument is an excellent way of managing anxiety related issues, and by implementing compulsory music education, more students can be given an opportunity to make their academic journeys more enjoyable and manageable (Lehrer & Woolfolk, 2020).

The Effects of Music Education on Students

An outstanding amount of research has been conducted on the positive outcomes observed in young people who practice music. Indeed, music education in schools has been found to have profound effects on student performance and the development of well-rounded

citizens. These effects include brain stimulation and academic performance, creativity, and stress management, all of which are integral to an ideal academic experience in schools.

Brain Development and Music Education

Music education has been shown to have a positive and significant impact on brain development. Tierney (2014) acknowledges that although brain development is a lifelong process, the major and basic structure of the brain is laid down primarily during early childhood. Tierney also stresses that a large proportion of the early brain development process depends on environmental factors such as preschool and extracurricular exposure. Studies show that when jazz pianists play, their brains display an extremely efficient connection between the different parts of the frontal lobe compared to non-musicians (Nelsen, 2013). The frontal lobe in the brain is largely responsible for problem solving skills, language efficiency, decision-making skills and social behavior development. Because of this high-speed connection, it can be inferred that students of music can breeze through slower, methodical thinking and tap into quicker and more spontaneous creativity.

In addition to better problem-solving skills, music training leads to enhanced gains in auditory and motor function, especially if it started at a young age (Tierney et al., 2015). The scientists in Tierney et al.'s study concluded that the performers' brains showed stronger awareness of their finger dexterity and auditory sensors (2015). Therefore, musical training enhances vital functions such as better auditory and motor functions for better academic performance. As an example, the following case was observed during a study on musicians' brain functioning while performing: When a jazz pianist's brain was scanned during a performance, scientists observed that different neurological processes occurred. That is, when the pianist started to play a harmonic chord progression, their brains started to replan the upcoming actions faster than regular nonmusical performers.

Although motor and auditory functions are important, the aspect of brain dominance that determines right or left handedness is important for musicians. Normally, left or right side brain dominance is innate for children, and children tend to develop their motor skills in the dominant side of their body. Musicians however, use both of their hands to play tunes and rhythms, which forces them to develop both sides of their brain (Tierney et al., 2015). The dual development of the brain is further described in the research conducted by neurologists at the *European Journal of Social & Behavioral Sciences* (Hogenes et al., 2014). The position of the brain's central sulcus demonstrates which of the person's hands is the more dominant one. When scientists scanned the brains of pianists, they found that pianists possessed a more symmetrical central sulcus than others. That is, the pianists' brains had hardly registered their dominant hand; instead, pianists were able to strengthen their weaker hand's dexterity to more closely match their dominant hand (2014). Other musical instruments develop motor function along with the brain functioning differently. This concept of motor skill development is mainly linked to the usage of both hands at the same time for any instrument.

Creativity and Music Education

Carson (n.d.) states that "A society that has lost touch with its creative side is an imprisoned society" (para. 1). Creativity is an invaluable skill that allows us to view and solve problems in the most innovative ways by broadening perspectives and can help in overcoming prejudices. Although it is well known that creativity is a skill that cannot necessarily be taught, recent studies claim that arts education is essential to stimulating creativity and innovation, enabling young students to compete in the global economy (Duncan, 2021). Lower grade scoring students who play instruments in musical groups are

more than twice as likely to excel at the highest level in math as peers who do not play music. Additionally, many high achievers have claimed that their music education opened pathways to creative thinking, which allowed them to view their calculus and abstract math courses in different ways (Barnes, 2018).

To enable students to view math courses in abstract ways, exceptional skills in the creative field need to be developed. Studies in various fields have revealed that creative thinking is a skill that progresses mainly through stage preparation, illumination, and verification. Artists who have been interviewed about their creations in the field of music have also accepted the fact that they get most of their ideas for new music while practicing classical music pieces. In addition, these artists add that they try to record their practice sessions to be able to retrieve any form of ideas that may present themselves (Webster, 1987). Caroline Phillips from the “Children’s Music Workshop” states that songs help young minds imprint language information in the brain. This act of storing information in a song also results in students who study music getting higher SAT scores overall as compared to students who do not have training in music (Nelsen, 2013). As such, it can be seen that music education is a powerful tool that can be used to effectively foster creativity in students after the basics of tune and rhythm compositions have been efficiently covered in their pre school and middle school academic curricula.

Stress Management and Music Education

Music is used as a therapeutic tool to not only reduce stress, but also to promote healing and improve overall emotional wellbeing. Research has demonstrated that music provides additional restorative benefits for people suffering from depression and anxiety (Aalbers et al., 2017). Solid evidence demonstrates that music stimulates the production of dopamine, which can be seen using magnetic resonance imaging. Dopamine is a chemical that makes us ‘feel good’ (Dagher, 2011). These findings may suggest why music has played such an integral role in shaping cultures and has been a source of pleasure for generations of humans. These benefits stem merely from listening to music. When an individual learns to play a music instrument, the benefits gained from music therapy are amplified greatly (Reina, 2018).

To learn about the extent of music therapy for stress management, Lai and Li (2011) conducted a study to examine the effects of music on stress indices. A group of nurses were randomly assigned to evaluate a stress coping technique. The techniques were either silently resting on a chair or listening to their preferred music while resting on the chair. The nurses’ vitals, such as heart rate and cortisol levels, and other readings, were taken every fifteen minutes throughout the procedure. The findings concluded that compared to the silent rest treatment, those who rested listening to music had significantly lower levels of all forms of distress. Evidence was found that nurses who used soothing music as intervention for stress reduction had succeeded more effectively at handling patients and this activity was made a standard procedure in their lounges from then on.

Misconceptions About Music Education

Although much research suggests that music education has unmatched benefits in school settings, some skepticism or even unwillingness still exists either because of misconceptions about music and its educational value or lack of awareness of the benefits of this artistic field. Some of the common misconceptions that I aim to address include the need for natural talent to excel in music, the economics of implementing music education, and effectiveness of music education compared with technical subjects.

The Question of Natural Talent

Opponents of music education may argue that only “gifted” and “talented” students are able to excel at music education and other artistic endeavors. This claim is further supported by mentioning that music exams demotivate students who are not able to perform well in music, even though they may be high achievers in other core subjects. For instance, Persson (2011) claims that most children show a fascination for sounds as babies, but only the musically gifted children tend to truly relish a few sounds more than others, and those children must be the ones pursuing music education as it may help to foster their natural “gift.” Persson adds that traditional music examinations assess a certain set of skills in a child, such as pitch recognition and music sequence memory. Atterbury (1997) agrees with Persson and argues that lack of giftedness causes disparity in children performing music as a group, which is automatically present in school bands and orchestras. Atterbury also claims that children who practice music without being born with a natural talent cannot compete effectively with gifted children. Overall, Persson and Atterbury imply that music education results are insignificant since students are always subjected to differences in talent and picking up pace in learning music concepts.

Opposing the arguments of Persson (2011) and Atterbury (1997), Gladwell (2008) concludes that almost no study reveals that being gifted at something naturally provides the resources for the gifted individual to meet success in the real world. Instead, a large majority of successful icons in all artistic fields had one feature in common, devotion and practice towards the mastery of their respective fields. “Time triumphs talent” is the motto of the book written by Gladwell, in which he further supports his ideas by clarifying that talent can indeed offer a good head start and grant success to a musician for a short while. Eventually, an individual has put in the time and effort. A talented individual is successful because of their perseverance. Gladwell ends his argument by stating that varying levels of talent in group settings encourage the lower skilled students to work harder and achieve their goals, which further fosters a healthier “practice makes perfect” aspect into the students’ lives, as explained further in the next point.

Varying Skill Level and Unhealthy Competition

Competition is known to have a negative effect on education; however, music education is known to promote healthy competition in academic settings, which also fosters productive learning. The results of a survey conducted by Watson (2017) demonstrate that healthy competition between students in school music ensembles and orchestras fosters productive learning. Students are driven towards proving themselves and, as a result, are always punctual to practice sessions and sometimes research deep into the topics being taught in music theory classes to enhance their understanding and help their peers too. Watson formed this conclusion after analyzing teacher reviews and music subject grades in schools that promoted one on one music tutoring for differently leveled students versus those that taught all students in large batches. No significant difference between the number of students performing poorly in the subject of music were found from both the groups of schools. Teacher and parent reviews suggested that students who were exposed to competition between their peers in the artistic subject were more inclined towards further pursuing music education for their senior years in school. Such findings contrast with Atterbury, claiming that competition in music education resulted in unsuccessful implementation of music programs in schools. Furthermore, Atterbury’s claim is based on outdated evidence (1997),

which may suggest that the structure of music education in schools has greatly developed and the more recent studies, such as Watson's (2017), can be relied on more strongly.

Music As A Distraction From “Core” Academics

In most conventional schooling, subjects that are given most importance are mathematics and science. There exists a notion that technical subjects are a better indicator of intellectual and academic performance than the arts. This notion is also displayed in standardized tests such as the SAT and international university entrance examinations, where no artistic skills are measured for admission into top tier institutions. As a result, the quality of education provided in the arts is not given proper attention and often overlooked. Learning music requires practice and time, and parents and teachers often consider time spent learning any form of art as time “wasted.”

Watson (2017) argues that music programs in schools can detract from academics and hinder students' learning in more key areas. Watson also claims that students spend too much time on practicing, music education trips, and performances, which affects their ability to do their homework and study. Despite these claims, researchers have found that music actually helps students academically by improving math and reading skills (Mathewson, 2017). Others argue that students can get the minor benefit of music outside of school. While in school, they argue, students ought to be in a classroom spending time analyzing technical concepts and theories.

While both positions have merit, the advantages of music education are not limited to factors such as academic achievement and portfolio improvement. Benefits such as brain development and stress management are incomparable to other scholastic achievements as the advantages and benefits that are reaped from these methods are incomparable to academic profile achievements. Music education proves to be beneficial for a person's personal wellbeing, as contested by several psychologists and neurologists in several health journals (Lehrer & Woolfolk, 2020). Top tier colleges around the world are also beginning to pay attention and claim to give more importance to music-based achievements along with academic profiles for university admission. Sometimes, artistic achievement can prove to be a more reliable sign for high potential than academic grades. Therefore, music education should be given more importance in schools to broaden and strengthen student profiles for higher education prospects. Music also helps in relieving stress and is a great creativity booster.

Conclusion

Music education has been in existence for centuries, but the quality of education provided in the field of music remains to be below par. Educational institutions have overlooked the importance of music education in curriculums. However, researchers have argued that music knowledge is a vital and beneficial element for students in schools. Essentially, music education is criticized for its requirement of natural talent, and for the notion that music may cause disparity among students because of varying skill levels.

In support of my claim that music education should be made compulsory in schools, or at least an intrinsic part of the education, I explored the following aspects of music education: The impacts of music education on students' brain development, academic performance, and stress management abilities. Research indicates that musicians' brains develop in a more advanced way from early stages. In terms of academic performance, several studies suggest that music education may result in productive scholastic outcomes because it fosters a disciplined dedication towards practicing and investing time in learning.

The points therefore conclude that music education positively affects students' socialization and academic performances and should be made compulsory in educational institutions.

Opponents argue that not every student is capable of opting for music education classes. As mentioned earlier, the most prominent objection is linked to natural talent. Furthermore, unhealthy competition because of varying skill levels may arise in class settings, which could be discouraging for some students. However, findings show that music education does not actually influence students' lives negatively. First, research suggests that, while natural talent might help at the beginning, music examinations require only practice and standard preparation. Second, schools that have successfully implemented music subjects in their curricula find that music as a subject positively affects student performance in other subjects. Finally, music as a subject in schools and other educational institutions can be as important as scientific subjects for higher education prospects.

It is thus important to realize that music education is highly beneficial for school students for their overall development, and that the advantages of introducing music in schools outweigh any possible disadvantages. Therefore, governments and education activists must work towards mandating that schools introduce music education in their curriculums.

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