

Liberty University

School of Music

An Exploration Into The Social and Emotional Effects of K-12 Music Education

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The Faculty of the School of Music
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by

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Abstract

A student must learn to read music notation, develop eye-hand-mind coordination, develop keen listening skills, develop team skills for playing in an ensemble, and develop the discipline to practice in music education. This research aims to connect the current research on music education with the lack of exploration and knowledge to create a theme to demonstrate the correlation between music and students' academic success. The methodology used for this study is a quantitative historical study format directed to discover research-backed evidence based on this idea. Through this methodology, student's success and motivation trend through matriculation from their first year to high school and college has been noted. The study examined the association between music involvement and academic achievement in childhood and adulthood using the measure of music participation. Education officials have implied that arts subjects are an extracurricular activity, shifting its importance. The general purpose is to explore the relationship between music education and students' intellectual and emotional development to begin the argument to prove the importance of music education. The study's findings support the effectiveness of music education in improving the students' mental, social, and academic development through the analysis of retrospective data and the use of quantitative methods of the research. The inference from the findings is that music education results in emotional stability and improve thinking skills, leading to improved performance.

Keywords: Extracurricular, Music Education, Advancement of the Arts

Dedication/Acknowledgments

This dissertation is dedicated to my father, Edward Thomas Perry, who gave me the belief that anything is possible and that my potential is boundless, and to my wife, whose constant encouragement has enabled me to succeed and get past the most challenging obstacles. Her trust in my abilities gave me the strength and self-assurance I needed to keep pursuing my goals. I would lastly like to dedicate this work to Kendyl, my beautiful daughter. Your happiness and purity inspires me to work harder every day to become a better father to you.

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Abbreviations

SES – Socio Economic Status

SEL – Social Emotional Learning

IQ – Intelligence Quotient

PRU – Public Referral Units

MMP – Miami Music Project

SCO – Social Cognitive Outcomes

EO – Emotional Outcomes

MP – Music Participation

EI – Emotional Intelligence

Chapter One: Introduction

Background of Study

Music is considered a universal practice found in each culture. It has evolved into an essential phenomenon that influences social lives. Its significance in cultural practices has made it an integral societal entity and has gained researchers' attention in understanding the impact of music on social livelihood, especially children.¹ Several parties, for instance, teachers, scholars, parents, and students, have developed an interest in learning more about music, specifically its impact on children's cognitive development. Such interests involved formal music training, which is continuously being integrated into the learning curriculum as it positively influences these children's cognitive development based on perception, memory, and language.

One of the most utilized conceptual frameworks is the Mozart Effect, which operates based on the hypothesis that listening to Mozart's music enhances one's cognitive ability. A series of debates have been held to understand the validity of such an effect, with some supporting and others opposing the hypothesis. Despite the position of those supporting or opposing Mozart, research confirmed that while such a hypothesis is inconclusive, it did not mean that music did not have any impact on children's cognitive development.² For example, in a study to evaluate the role of music education in early childhood education and care aligned with daily childhood activities, those who engaged in music exhibited positive emotions,

¹ Deborah Arasomwan., and Nontokozo J. Mashiy. "Early Childhood Care and Education Educators' Understanding of the Use of Music-Based Pedagogies to Teach Communication Skills." *South African Journal of Childhood Education* 11, no. 1 (July 9, 2021). <https://doi.org/10.4102/sajce.v11i1.896>

² Ibid.

increased social activities and engagement, and enhanced social adaptation with other members of the community, more specifically, parents and teachers.³

Past studies affirmed that early childhood music skills are critical in shaping the future livelihood of children. Additionally, evidence-based studies in neuro-scientific and psychological studies affirm that music is crucial for positive cognitive development among children.⁴ In other terms, developing musical abilities is directly associated with cognitive skills and academic achievements. While past studies affirm the significance of music in childhood cognitive development, limited studies have been conducted to understand its impact on late academic achievements. Few studies on music have evaluated the role of learning music, which is often associated with the development of dynamic cognitive and music abilities in academic success. Also, over the years, music has not been approached as an independent variable key in developing children's mental development. Still, it has been utilized as a practice of learning how to play the instrument as an essential entity of skill development thus making it dynamic since it involves the development of several musical and non-musical qualities.

Music learning involves inputting effort and attention, which are associated with persistence and focus. Additionally, it entails active listening to capture, understand, and decode complex musical compositions or notes alongside the musical symbols. The process involves understanding the musical structure, illustrated as chords, scales, and intervals. To improve their understanding of music, students often engage in continuous practice that involves ideal observation to understand motor coordination and music genres and styles. Such experiences

³ Graham F Welch. "The Challenge of Ensuring Effective Early Years Music Education by Non-Specialists." *Early Child Development and Care*, July 16, 2020, 1–13. <https://doi.org/10.1080/03004430.2020.1792895>.

⁴ Ibid

often expose the students to express themselves emotionally through the content, which is associated with developing cognitive skills such as working memory, inhibitory control, mental efficiency, and flexibility.⁵ Nonetheless, continuous practice or music lessons instill in students' attributes such as persistence, self-regulated learning, and determination. These attributes are critical in developing a positive mentality and are crucial to academic excellence.

Music's implementation process, while music attracts teachers' attention, remains a barrier since most education stakeholders do not comprehend its importance, especially its significance in enhancing childhood cognitive development. Therefore, the interest in this topic is to understand how music positively influences children's cognitive development, such as enabling the growth of healthy memory, language, perception, listening, observation, and imitation skills, as well as spoken and reading proficiency. The study also aimed to address gaps associated with educating and informing parents on how music can enrich cognitive development. Furthermore, the study looks to establish a resource for parents to assist them in understanding K-12 music education and the students' intellectual, emotional, and academic development.

Background Overview

School officials are now seeing fine arts as an extracurricular activity instead of being academically important. For years, it has been said that learning music makes individuals smarter. The study examined the association between music involvement and academic achievement in childhood and adolescence using three measures of music participation: in and outside of school and parental involvement in concert attendance. As one author said, "musical

⁵ Márta Janurik, and Krisztián Józsa. "Long-Term Impacts of Early Musical Abilities on Academic Achievement: A Longitudinal Study." *Journal of Intelligence* 10, no. 3 (June 29, 2022): 36. <https://doi.org/10.3390/jintelligence10030036>.

competence may confer cognitive advantages that extend beyond the processing of familiar musical sounds. Behavioral evidence indicates a general enhancement of working memory and attention in musicians. It is possible that musicians, due to their training, can better focus on task-relevant stimuli, a skill crucial to working memory.”⁶ University of Vermont College of Medicine Child psychiatry teams have found that musical training might also help kids focus their attention, control their emotions, and diminish their anxiety.⁷

Purpose of the Study

This study aimed to investigate the impact of music learning on students’ academic achievements that are aligned with cognitive and intellectual development. This idea focuses on the notion that even though music education posits musical and non-musical gains that assist students in performing better in their class settings, between students who are actively engaged in music classes and those who are not, thus creating the need to understand the variations in their cognitive, intellectual, and academic growth and development. This study uses students’ success and motivational trends through matriculation from their first high school and college years. The primary purpose is to establish a correlation between music education, general academic success, cognitive development, and intellectual proficiency. It also provides essential information for schools, parents, and other practitioners interested in integrating music into their daily activities since its implementation extends to outdoor activities.

⁶ Martin Guhn, Scott D. Emerson, Peter Gouzouasis. A population-level analysis of associations between school music participation and academic achievement.. *Journal of Educational Psychology*, 2019; DOI: 10.1037/edu0000376

⁷ Almlund M. Duckworth, A. L. Heckman, J. J. Kautz, 2011. Personality psychology and economics. In: Hanushek, E. A., Machin, S., Woessmann, L. (Eds.), *Handbook of the Economics of Education*. Vol. 4. Elsevier Amsterdam, pp. 1–181. Andersen, P. L., Hansen, M. N

Core Concepts

Researchers, educators, parents, and instructors advocate nationwide, and an increasing number of people agree that mastering and working towards social and emotional competencies in tandem with lecturers is crucial to K-12 pupil success.⁸ Social and emotional competencies include apprehending and modifying one's emotions, exercising compassion, and increasing wholesome trusting relationships. According to the report titled "How Learning Happens: Supporting Students' Social, Emotional, and Academic Development," "Students are most successful when they're allowed to learn in environments that recognize that these skills are mutually reinforcing and are central to learning."⁹ There is a growing consensus that those abilities imparted through stand-alone activities and integrated into academic lessons through collaborations and project-based learning are fundamental to positive school climates.

The commission concluded that social and emotional development is intertwined "in the brain and behavior" with cognitive, linguistic, and academic growth and is equally central to learning and success. Stand-alone activities that teach students to develop such skills are a good start and have been linked to improved behavior and academic performance.¹⁰ School Systems should consider every pupil's culture, history, and studies and offer resources to students who

⁸ Almlund M. Duckworth, A. L. Heckman, J. J. Kautz, 2011. Personality psychology and economics. In: Hanushek, E. A., Machin, S., Woessmann, L. (Eds.), Handbook of the Economics of Education. Vol. 4.

⁹ Schlaug Gaab. Musicians differ from nonmusicians in brain activation despite performance matching. Ann N Y Acad Sci.2013

¹⁰ Martin Guhn, Scott D. Emerson, Peter Gouzouasis. A population-level analysis of associations between school music participation and academic achievement. Journal of Educational Psychology, 2019; DOI: 10.1037/edu0000376

have experienced trauma.¹¹ Not surprisingly, the commission also points out that teachers and administrators must work on their social and emotional skills to impart them.

One cannot anticipate that, simply because they are an adult, they have the competencies and the mindsets they want to version wholesome behaviors and apprehend the center expertise of social-emotional mastering. “It’s hard for someone to give what they don’t have. You can’t assume that, just because they’re adults, they have the skills and the mindsets they need to model healthy behaviors and understand the core knowledge of social-emotional learning.”¹² It is a brilliant component while adults and kids can develop together. Social and emotional development should also be woven into teacher training programs and professional development.¹³

Statement of Primary Research Questions

A student of music has to learn to read music notation, develop eye-hand-mind coordination, develop keen listening skills, develop team skills for playing in an ensemble, and develop the discipline to practice. “We have documented longitudinal changes in the brains of the children receiving music instruction that are distinct from the typical brain changes those children that age would develop. Our findings suggest that musical training is a powerful intervention that could help children mature emotionally and intellectually.”¹⁴

¹¹ Martin Guhn, Scott D. Emerson, Peter Gouzouasis. A population-level analysis of associations between school music participation and academic achievement.

¹² James Hudziak, M.D. et al. Cortical Thickness Maturation and Duration of Music Training: Health-Promoting Activities Shape Brain Development. *Journal of American Academy of Child and Adolescent Psychiatry*, December 2014 DOI: 10.1016/j.jaac.2014.06.015 show

¹³ Ibid.

¹⁴ Martin Guhn, Scott D. Emerson, Peter Gouzouasis. A population-level analysis of associations between school music participation and academic achievement.. *Journal of Educational Psychology*, 2019; DOI: 10.1037/edu0000376

Such statistics, when taken in the context of our present neuroimaging results, underscore the vital importance of finding new and innovative ways to make music training more widely available to youth, beginning in childhood.¹⁵ It is important to note, however, that although musical training was shown to produce benefits for the phonological awareness language tasks, for the other two tests of phonological memory and rapid naming, no difference was found between the two groups of adolescents. “Finally, although the effects of music training initiated in older adulthood have not yet been documented, we know that short-term computer-based training can improve subcortical neural timing and speech-in-noise performance in older adults.”¹⁶ This suggests that although musical training can enhance some forms of language skills, there are areas that it does not improve.

Music participation, both inside and outside of school, is associated with measures of academic achievement among children and adolescents. Future work should further delineate the relevant processes of music involvement, as well as how background inequalities and music involvement affect educational performance.¹⁷ There were no firm indications in any results that music-specific processes played a role in the superior performance of musicians, hence supporting previous evidence that cognitive control may be generally enhanced in musicians.¹⁸ As an exploration of these ideas, this study will seek to answer the following questions:

¹⁵ James Hudziak, M.D. et al. Cortical Thickness Maturation and Duration of Music Training: Health-Promoting Activities Shape Brain Development. *Journal of American Academy of Child and Adolescent Psychiatry*, December 2014 DOI: 10.1016/j.jaac.2014.06.015 show

¹⁶ Almlund M. Duckworth, A. L. Heckman, J. J. Kautz, 2011. Personality psychology and economics. In: Hanushek, E. A., Machin, S., Woessmann, L. (Eds.), *Handbook of the Economics of Education*. Vol. 4.

¹⁷ James Hudziak, M.D. et al. Cortical Thickness Maturation and Duration of Music Training: Health-Promoting Activities Shape Brain Development. *Journal of American Academy of Child and Adolescent Psychiatry*, December 2014 DOI: 10.1016/j.jaac.2014.06.015 show

¹⁸ Martin Guhn, Scott D. Emerson, Peter Gouzouasis. A population-level analysis of associations between school music participation and academic achievement.. *Journal of Educational Psychology*, 2019; DOI: 10.1037/edu0000376

Research Question One: What are the impacts of K-12 music education on student intellectual development?

Research Question Two: What are the impacts of K-12 music education on student emotional development?

Research Question Three: What are the impacts of K-12 music education on their academic matriculation?

Definition of Terms

Music Education – The activities of educating or instructing in the field of music; activities that impart musical knowledge or skill.¹⁹

Education Stakeholders – A person with an interest or concern in something, especially in the education field.²⁰

Social Development – The process by which people learn to interact with others and develop the skills to relate to them; it can also refer to the process of improving the well-being of individuals in society so they can reach their full potential.²¹

Emotional Development – A complex process that begins in infancy and continues throughout life, involving the ability to experience, understand, express, and manage emotions and also includes the ability to develop meaningful relationships with others.²²

¹⁹ “Music Education.” LiveAbout. Accessed July 30, 2024. <https://www.liveabout.com/music-education-4688135>.

²⁰ Sabbott. (2014, September 25). Education Stakeholder definition. The Glossary of Education Reform. <https://www.edglossary.org/educationstakeholder/>

²¹ “Apa Dictionary of Psychology.” American Psychological Association. Accessed July 30, 2024. <https://dictionary.apa.org/social-development>.

²² “Apa Dictionary of Psychology.” American Psychological Association. Accessed July 30, 2024. <https://dictionary.apa.org/emotional-development>.

K-12 – A term relating to the education system’s matriculation from the adolescents of kindergarten to twelfth grade; includes all grades in between in either public or private schooling.²³

Mozart Effect – The theory that listening to Mozart's music can induce a short-term improvement on the performance of certain kinds of cognitive tasks and processes.²⁴

Academic Development – The process helping students develop to their fullest potential by using their skills and knowledge to perform in school now so that they may also perform professionally in the workplace later in life.²⁵

School Administrator – Education leaders that manage the running and functioning of schools and school districts; they may hire and supervise teachers and fellow administrators, create and manage budgets, direct educational programming, design curriculum, and oversee recordkeeping.²⁶

Proficiency – A high degree of competence or skill.²⁷

Summary

This research utilizes historical evidence from backed research on educators, students, administrators, parents, and school districts. The study will establish a critical decision on how

²³ Walch, Kathleen. “AI for Education Brings Benefits to Burdened School Staff: TechTarget.” Enterprise AI, August 30, 2018. <https://www.techtarget.com/searchenterpriseai/feature/AI-for-education-brings-benefits-to-burdened-school-staff>.

²⁴ “Apa Dictionary of Psychology.” American Psychological Association. Accessed July 30, 2024. <https://dictionary.apa.org/mozart-effect>.

²⁵ Sabbott. (2014, September 25). Academic Development definition. The Glossary of Education Reform. <https://www.edglossary.org/academicdevelopment/>

²⁶ “School Administration.” The Free Dictionary. Accessed July 30, 2024. <https://encyclopedia2.thefreedictionary.com/School+Administration>.

²⁷ Proficiency | definition in the Cambridge english dictionary. Accessed July 31, 2024. <https://dictionary.cambridge.org/us/dictionary/english/proficiency>.

music can be integrated into the school curriculum with the approval of all learning stakeholders.

In other terms, the study aims to add to the literature where there is a need for balance in the academic sector.

Chapter Two: Literature Review

Introduction

Music education in K-12 schools has emotional and social benefits that extend beyond the school environment and contribute to students' overall development. Scholars are searching for effective ways to transfer values and facilitate the educational development of physical, social, emotional, and artistic skills.¹ The education sector is paying more attention to social-emotional learning (SEL) at the K-12 level. Music education in this setting has become a trend as parents and teachers understand its significance in developing students' interpersonal skills and academic achievement.² This literature review aims to evaluate how music education influences K-12 students socially and emotionally. Examining theoretical frameworks and historical perspectives provides a comprehensive understanding of the topic and provides a guideline for policy implementation.

Music education has been a significant component of the K-12 curriculum for centuries. It includes learning music theory, singing, and playing musical instruments. Blasco-Magraner et al. explain how various challenges, including the need to adapt to new situations, constantly justify the incorporation of emotional competence in modern educational systems.³ These

¹ Laura Hamilton, and Betheny Gross. "How Has the Pandemic Affected Students' Social-Emotional Well-Being? A Review of the Evidence to Date." Center on Reinventing Public Education (2021). <https://crpe.org/how-has-the-pandemic-affected-students-social-emotional-well-being-a-review-of-the-evidence-to-date/>.

² Camille A Farrington., Joseph Maurer, R. R. Aska McBride, Jenny Nagaoka, J. S. Puller, Steve Shewfelt, Elizabeth M. Weiss, and Lindsay Wright. "Arts education and social-emotional learning outcomes among K-12 students." Chicago Consortium on School Research. Accessed February 1, no. 2023 (2019): 2019-05. <https://lmeamusic.org/wp-content/uploads/2020/12/Arts-Education-and-Social-Emotional-Learning-Outcomes-Report.pdf>

³ José Salvador Blasco-Magraner, Gloria Bernabe-Valero, Pablo Marín-Liébanana, and Carmen Moret-Tatay. "Effects of the educational use of music on 3-to 12-year-old children's emotional development: A systematic review." *International journal of environmental research and public health* 18, no. 7 (2021): 3668. <https://doi.org/10.3390/ijerph18073668>

scholars also state that the increased study of the emotional nature of the classroom has led to a holistic and humanistic approach to different educational activities. For instance, Wang et al. justify that learning music has a direct relationship with emotional intelligence.⁴ Another study argues that music education enables K-12 students to monitor their feelings and use this knowledge to guide their actions.⁵

Music educators commit themselves to creating an environment where their students thrive and achieve creative freedom and a positive sense of self-confidence and self-belief. According to Costa-Giomi, different school systems implement different ways of teaching music, which include general music classrooms, bands, or choirs.⁶ Hendricks et al. mention that these methods provide outlets that allow students to process their feelings and express them healthily by listening and putting their skills into practice.⁷ Hille et al. also mentions that people learn to manage emotions over time and that students in middle school benefit significantly from music and any other experience that enlightens their emotional responses.⁸ Additionally, Powell and his co-authors argue that music educators in these schools often assume the role of a

⁴ Feng Wang, and Sadaf Zeb. "Impact of music education on mental health of higher education students: moderating role of emotional intelligence." *Frontiers in psychology* 13 (2022): 938090. <https://doi.org/10.3389/fpsyg.2022.938090>

⁵ Ana-María Botella-Nicolás, and Inmaculada Retamero-García. "Music education's contribution to the development of EI in adolescents and its effect on the gender variable." *Revista Española de Pedagogía* 82, no. 287 (2024): 14. <https://www.revistadepedagogia.org/cgi/viewcontent.cgi?article=3945&context=rep>

⁶ Eugenia Costa-Giomi. "The long-term effects of childhood music instruction on intelligence and general cognitive abilities." *Update: Applications of Research in Music Education* 33, no. 2 (2015): 20-26. <https://doi.org/10.1177/8755123314540661>

⁷ Karin S. Hendricks, Tawnya D. Smith, and Jennifer Stanuch. "Creating safe spaces for music learning." *Music Educators Journal* 101, no. 1 (2014): 35-40. <https://www.jstor.org/stable/43289089>

⁸ Adrian Hille, and Jürgen Schupp. "How learning a musical instrument affects the development of skills." *Economics of Education Review* 44 (2015): 56-82. <https://doi.org/10.1016/j.econedurev.2014.10.007>

counselor as they help teenagers navigate their personal lives and form their identities.⁹ Music programs make this process easier by helping young students recognize their thoughts and become more self-aware.

Social and emotional competence contributes significantly to children's positive development and functioning in the classroom and in life. Boal-Palheiros and her co-authors discovered that children who participate more in collective music and arts education interact with others easily, are more likely to succeed academically and exhibit excellent performance among their peers.¹⁰ Váradi also argues that SEL enables children and youth to manage their emotions, empathize with others, set positive goals, and establish functional relationships.

Throughout research there have been multiple researchers that have sought to provide insight on this idea. A study that Diz-Otero et al. conducted to evaluate music's contribution to skill development in educational contexts confirmed that it facilitates the development of skills, including leadership, coordination, and teamwork.¹¹ Children at low education levels struggle to recognize and express their emotions. Emami et al. suggest that failure to communicate and solve a problem triggers anger and frustration, which may cause teenagers to feel stressed.¹² To avoid negative expressions, educators teach songs that include simple words and phrases that learners

⁹ Bryan Powell, Donna Hewitt, Gareth Dylan Smith, Beatrice Olesko, and Virginia Davis. "Curricular change in collegiate programs: Toward a more inclusive music education." *Visions of Research in Music Education* 35, no. 1 (2020): 16.

¹⁰ Graça Boal-Palheiros, and Beatriz Ilari. "Music, drama, and social development in Portuguese children." *Frontiers in Psychology* 14 (2023): 1093832. <https://doi.org/10.3389/fpsyg.2023.1093832>

¹¹ Mario Diz-Otero, Margarita Pino-Juste, Jose María Esteve-Faubel, and Sara Domínguez-Lloria. "The Development of Soft Skills through Music in Educational Contexts: A Systematic Review." *Education Sciences* 13, no. 12 (2023): 1194. <https://doi.org/10.3390/educsci13121194>

¹² Azita Emami, Töres Theorell, Hyejin Kim, Lars Berglund, Helena Hallinder, and Gabriella Engström. "Assessing stress using repeated saliva concentration of steroid hormones in dementia care dyads: results from a controlled pilot care music intervention." *Upsala Journal of Medical Sciences* 128 (2023). doi: 10.48101/ujms.v128.9340

can use to express themselves. Supartini et al. write that teachers also use music to teach letters, numbers, and facts.¹³ Moreover, using these programs to teach K-12 students social and emotional skills improves communication and enables them to understand others' feelings engagingly.

How teachers use and integrate music in the classroom influences its impact on K-12 youth. Music's transformative potential explains why K-12 educators use it to support the youth and build a positive environment in the classroom, however, Marsh et al. argue that to acquire these benefits, educators should identify ways to integrate music into the curriculum effectively.¹⁴ Moreover, Gonzalez et al. explains that factors like the type of music used and the context matter. For example, music improves performance during simple tasks but has the opposite effect when the listener performs complex tasks. Furthermore, K-12 youth will likely benefit more from soothing than aggressive music.

A customized approach to this training enables educators to expose children and youth to music experiences that resonate well with their developmental stage. Mulle believes that at the foundational stage, teachers should consider teaching basic rhythm exercises that elementary school students can easily understand.¹⁵ Simple items like recorders can come in handy. For the students in higher grades, learning coaches can discuss the history of music, introduce music

¹³ Tri Supartini, Ivan Th J. Weismann, and Wijaya Hengki. "Development of Learning Methods through Songs and Movements to Improve Children's Cognitive and Psychomotor Aspects." *European Journal of Educational Research* 9, no. 4 (2020): 1615-1633. <https://doi.org/10.12973/eu-jer.9.4.1615>

¹⁴ Kathryn Marsh, Catherine Ingram, and Samantha Dieckmann. "Bridging musical worlds: Musical collaboration between student musician-educators and south Sudanese Australian youth." *Visions for intercultural music teacher education* (2020): 115-134. <https://doi.org/10.1007/978-3-030-21029-8>

¹⁵ Phil Mulle. *Music with Children and Young People who have Social, Emotional and Mental Health Difficulties*. Midlands Arts Centre. Kaufman, Brian, and Lawrence Scripp. *Music Learning as Youth Development*. 1st ed. New York, NY: Routledge, 2019. <https://doi-org.ezproxy.liberty.edu/10.4324/9780429436956>. Ilari, Beatriz, and Eun Cho. "Musical participation and positive youth development in middle school." *Frontiers in Psychology* 13 (2023): 1056542. <https://doi.org/10.3389/fpsyg.2022.1056542>

theory, and delve deeper into composition. They should encourage them to create unique melodies and train with complex musical instruments.¹⁶ At this level, educators should also support live performances and organize lessons on digital music creation.¹⁷ Effective implementation of music programs in K-12 institutions involves using instructional strategies that consider the student's needs and abilities and the building of schools.

Music is a fundamental communication medium, with every society and group having a preferred music group and style. Blaise et al. conducted a study focusing on the impact of music on youth development in France; they discovered that some cultures use music to influence, manage, or ban the government.¹⁸ These researchers also argue that music defines how teenagers communicate with others, defines their original cliques, and chooses their friends.¹⁹ Many adolescents claim their favorite tracks are about love, life's struggles, fun, and friendships.²⁰ Some groups, however, tend to feel a different impact and blame the music or parents for it. Kaufman, Brian, and Lawrence Scripp state that teens often interpret the songs they listen to in a way that relates to the issues they experience in their upbringing.²¹ They also describe music as an expression of time and a representation of the listener's spirit.

¹⁶ Adrian Hille, and Jürgen Schupp. "How learning a musical instrument affects the development of skills." *Economics of Education Review* 44 (2015): 56-82. <https://doi.org/10.1016/j.econedurev.2014.10.007>

¹⁷ Ibid.

¹⁸ Agossou Arthur Blaise, and Raphael Diekstra. "Influence Of Music And Musical Education On Youth Development In France." *African Journal of Emerging Issues* 3, no. 9 (2021): 9-18. <https://www.ajoeijournals.org/sys/index.php/ajoei/article/view/230>

¹⁹ Ibid.

²⁰ Ibid.

²¹ Brian Kaufman, and Lawrence Scripp. *Music Learning as Youth Development*. 1st ed. New York, NY: Routledge, 2019. <https://doi-org.ezproxy.liberty.edu/10.4324/9780429436956>.

Ilari, Beatriz, and Eun Cho. "Musical participation and positive youth development in middle school." *Frontiers in Psychology* 13 (2023): 1056542. <https://doi.org/10.3389/fpsyg.2022.1056542>

Preliminary Literature Review

Music is considered to bring optimism, creativity, and consolation. Cultural studies identify music as an entity that assists individuals in coping during times of difficulty and emotional situations. In other terms, from the cultural use of music, psychological studies proposed that music played a critical role in therapeutic processes and procedures. For instance, it was for this reason that music was identified to establish mixed feelings: it can enable an individual to be in a state of sad or happy mood.²² Other studies proposed that music played an essential role in the norms of self-development, enhancing well-being, and support regarding illness.²³

Empirical literature proposed that music positively influenced stress reduction. While music plays a critical role in daily social activities, different variables can be used to understand how music critically influences different age groups. For example, music plays a crucial role in early childhood education. For instance, learning music is essential in children's development.²⁴ Music can positively impact the learning environment, where students are prepared socially, academically, and emotionally.

Empirical literature outlined that the significance of music in a contemporary environment such as K-12 learning institutions is not fully understood. Some of the factors that

²² Márta Janurik, and Krisztián Józsa. "Long-Term Impacts of Early Musical Abilities on Academic Achievement: A Longitudinal Study." *Journal of Intelligence* 10, no. 3 (June 29, 2022): 36. <https://doi.org/10.3390/jintelligence10030036>.

²³ Márta Janurik, and Krisztián Józsa. "Long-Term Impacts of Early Musical Abilities on Academic Achievement: A Longitudinal Study." *Journal of Intelligence* 10, no. 3 (June 29, 2022): 36. <https://doi.org/10.3390/jintelligence10030036>.

²⁴ Márta Janurik, and Krisztián Józsa. "Long-Term Impacts of Early Musical Abilities on Academic Achievement: A Longitudinal Study." *Journal of Intelligence* 10, no. 3 (June 29, 2022): 36. <https://doi.org/10.3390/jintelligence10030036>.

have been approved are that music plays an influential role in strengthening sensibility, enhancing concentration, promoting healthy memory, writing and reading capabilities, and nurturing physical development. In other words, music is considered an essential learning tool for both physical and cognitive development in childhood. Music can be implemented in early childhood learning, which will assist the students in gaining interest in developing essential skills such as critical thinking, imagination, creativity, and language. It reflects that the art of learning music enables children to establish creative social development skills essential in guiding their characters as they grow.²⁵

Schools often consider tapping into a child's talent at an early age in the present learning environments, and these schools utilize music as a primary resource. Such a process assists in defining the child's creativeness, future, skill, and social potential, which is critical in developing positive personal character.²⁶ Besides, teachers have considered creating holistic learning structures using songs to assist the children in memorizing, comprehending, or decoding the primary messages of the music.

Psychological studies promote that utilizing music lessons in K-12 learning platforms often reduces tension within the space, making it a perfect tool for addressing depression or anxiety.²⁷ Listening to music compositions assists in relieving stress, moodiness, or emotional distress. Additionally, music stimulates deep emotional connection of past and present events

²⁵ Navarro Ramón, Laura, and Helena Chacón-López. "The Impact of Musical Improvisation on Children's Creative Thinking." *Thinking Skills and Creativity* 40 (June 2021): 100839. <https://doi.org/10.1016/j.tsc.2021.100839>.

²⁶ Ginette Pestana. "Preparing Preservice Early Childhood Educators to Use Music in Australian Settings: An Audit of Programmes." *Australasian Journal of Early Childhood* 47, no. 1 (December 7, 2021): 1836939121105666. <https://doi.org/10.1177/18369391211056669>.

²⁷ Maria Manuel Vidal, Marisa Lousada, and Marina Vigário. "Music Effects on Phonological Awareness Development in 3-Year-Old Children." *Applied Psycholinguistics* 41, no. 2 (March 2020): 299–318. <https://doi.org/10.1017/s0142716419000535>.

with its context or tone. While music genres continue to change, so do the generations involved in composing this music.²⁸

It additionally proves that music enhances creativity since children are bound to create new music each time they listen. Therefore, music creativity aligns with the children's intellectual, emotional, and cognitive development, positively impacting the students' physical well-being. While music lessons often create opportunities for creativity, literature proposes that through them, students can engage in the higher order of thinking, which entails engaging in critical analysis, research, and practicality.²⁹ Music promotes a sense of continuous learning where students rely not only on what is taught in class but also on their research and observation in and outside the classroom.

It is impossible to overstate the importance of music's ability to influence mood and emotion and the role those individual melodic tendencies play in communicating individual and collective melodic personalities. Scholars argue that one explanation for the profound power of music is its unique capacity to connect all aspects of human social capability that are essential for human endurance, comprehension, and communication in distinct and significant ways. Music experiences should be charming and satisfying, assuming music is to have any more substantial effect, particularly in supporting the headway of certainty and trademark motivation. Generally, music is viewed as a pleasing, intriguing, and memorable subject. It drives identified perspectives, giving people ways to deal with their issues. Through music, one can relax without tension and stress. Music has significant capacities since singing and playing instruments together anticipate that they should collaborate.

²⁸ Ginette Pestana. "Preparing Preservice Early Childhood Educators to Use Music in Australian Settings: An Audit of Programmes."

²⁹ Ibid.

Empirical literature outlines that the discernment capability is associated with the resulting outcome of music, especially the verbal composition, social relevance, comprehension, and other musical elements such as tone and pitch. When composed, music often entails many elements that positively influence the student, such as tone and the pitch. These features are essential since they stimulate the critical auditory process, necessitating memory and recognition to promote auditory functioning.³⁰ Scientific studies outline that while hearing is associated with processing and identifying hearable musical elements, listening involves processing and filtering the music to create a pattern associated with sound.³¹ It is compelling that exposing students to music enables them to master how to engage auditory stimuli and process the hear-able, which is later translated into visuals that can be quickly processed and explained.³² In this manner, tuning in and hearing are integrated and essential for advancing good hear-able capability through affiliation, mental, physical, and social processing. Critical to the development of auditory function is the ability to rapidly distinguish similarities and differences in signal-based cues, such as tone frequency, harmony, pitch, and volume over time and in the environment, through the identification of repeating or sequential patterns that require attention and involve both working and semantic memory.

³⁰ Ginette Pestana. "Preparing Preservice Early Childhood Educators to Use Music in Australian Settings: An Audit of Programmes."

³¹ Ibid.

³² Judit Váradi. "A Review of the Literature on the Relationship of Music Education to the Development of Socio-Emotional Learning." *SAGE Open* 12, no. 1 (January 2022): 215824402110685. <https://doi.org/10.1177/21582440211068501>.

Overview of Music Education in K-12 Curriculum

Music education in the K-12 curriculum aims to educate young students about music, inspire them to love and appreciate this art, and foster skill development. In his study on music's social-economic and intercultural significance, Villodre indicates that music education can achieve its goal only if the curriculum is inclusive and offers the learners an experience that reflects different cultures.³³ The lessons provided should also seek to meet the student's needs based on Maslow's hierarchy of needs.³⁴ Gawel's article also argues that adolescents can grow emotionally, socially, and intellectually if the schools provide a safe and healthy learning environment.³⁵ Ilari et al. states that the K-12 curriculum advocates for the development of teenagers in all aspects, including improving their academic performance and enhancing them socially and emotionally.³⁶ Its specifics and efficiency, however, depend on multiple factors, such as the music education policies in place, teachers' expertise, and availability of resources.

Evolution of Music Education in K-12 Curriculum

The evolution of music learning in K-12 curricula over the years reflects technological, societal, and educational changes. Initially, music education primarily involved singing patriotic

³³ María del Mar Bernabé Villodre. "Music education as a tool to improve socio-emotional and intercultural health within adverse contexts in El Salvador." *Procedia-Social and Behavioral Sciences* 237 (2017): 499-504. <https://www.sciencedirect.com/science/article/pii/S1877042817300988/pdf?md5=260299c788a1103bb94bca42ef164d71&pid=1-s2.0-S1877042817300988-main.pdf>

³⁴ Joseph E Gawel. "Herzberg's theory of motivation and Maslow's hierarchy of needs." *Practical Assessment, Research, and Evaluation* 5, no. 1 (2019): 11. <https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1066&context=pars>

³⁵ Ibid.

³⁶ Beatriz Ilari, and Eun Cho. "Musical participation and positive youth development in middle school." *Frontiers in Psychology* 13 (2023): 1056542. <https://doi.org/10.3389/fpsyg.2022.1056542>

and hymn songs and instilling a sense of community and national identity.³⁷ Many schools combined it with religious education. Powell et al. writes that in the late 19th century, teacher training programs introduced music as a lesson, causing learning institutions to recognize music education formally.³⁸ This extensive research on the history of music education in the US also explains that the increased attention on well-rounded education facilitated the introduction of instrumental training, school bands, and choirs and the development of national standards to regulate music education in many countries.³⁹ Technological advancement led to the introduction of more music genres like jazz music and motivated advocacy groups to emphasize the significance of music education in developing learners' academic excellence and social skills.⁴⁰

Digital technology has provided a solid foundation for transforming music education in the K-12 curriculum. Additionally, they can use different software and applications to create, listen to, and share music through online platforms. A recent study that Powell et al. conducted explained that recent improvements in music education have increased the demand for a more inclusive and diverse curriculum to allow all students, regardless of their social, cultural, or economic background, to benefit from music programs.⁴¹ Kallio et al. narrates that today, K-12

³⁷ Mary Katherine Strachan. "Social and Emotional Learning in the Elementary Music Classroom: A Teacher's Perspective." (2021).
https://repository.belmont.edu/cgi/viewcontent.cgi?article=1004&context=music_theses

³⁸ Bryan Powell, Donna Hewitt, Gareth Dylan Smith, Beatrice Olesko, and Virginia Davis. "Curricular change in collegiate programs: Toward a more inclusive music education." *Visions of Research in Music Education* 35, no. 1 (2020): 16. <https://digitalcommons.lib.uconn.edu/cgi/viewcontent.cgi?article=1235&context=vrme>

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ Bryan Powell, Andrew Krikun, and Joseph Michael Pignato. "'Something's happening here!': Popular music education in the United States." *IASPM Journal* 5, no. 1 (2015): 4-22. DOI 10.5429/2079-3871(2015)v5i1.2en

youth learn songs from different cultures and countries.⁴² Multiple factors like pedagogical research and technological advancement drive more changes in music education in the K-12 curriculum. Parents, educators, and school leaders should collaborate to ensure that every student enrolls in a music program to equip them with fundamental skills and prepare them for their future artistic careers.

Theoretical Frameworks

Social Cognitive Theory

Albert Bandura's theory focuses on interactive processes and provides insights into how people develop new social and cognitive skills. In 1977, this psychologist proposed that task mastery, verbal encouragement, and learning from others can help one improve one's self-efficacy.⁴³ According to Bandura, one can learn and master an activity by watching others accomplish it in a similar situation.⁴⁴ Additionally, people can imitate what they observe, become independent, and build self-efficacy. Wang and his co-authors support this idea by stating that intellectual activities enable individuals to learn new things about themselves and their environment.⁴⁵ When the individuals, in this case, receive praise from their authority, they become more confident and interactive.

⁴² Alexis Anja Kallio, Kathryn Marsh, Heidi Westerlund, Sidsel Karlsen, and Eva Sæther. "Introduction: The politics of diversity in music education." In *The politics of diversity in music education*, pp. 1-11. Cham: Springer International Publishing, 2021. https://doi.org/10.1007%2F978-3-030-65617-1_1

⁴³ Lyndsey Middleton, Hazel Hall, and Robert Raeside. "Applications and applicability of Social Cognitive Theory in information science research." *Journal of Librarianship and Information Science* 51, no. 4 (2019): 927-937.

⁴⁴ Jian Sun. "Exploring the impact of music education on the psychological and academic outcomes of students: mediating role of self-efficacy and self-esteem." *Frontiers in Psychology* 13 (2022): 841204. <https://doi.org/10.3389/fpsyg.2022.841204>

⁴⁵ Feng Wang, and Sadaf Zeb. "Impact of music education on mental health of higher education students: moderating role of emotional intelligence." *Frontiers in psychology* 13 (2022): 938090. <https://doi.org/10.3389/fpsyg.2022.938090>

In music education and its impact on K-12 youth, the social cognitive theory implies that young students can become more social, confident, and emotionally intelligent by interacting with music and peers. According to Middleton's research, learning music involves cognitive processes whereby young students watch what their teachers do, combine the new knowledge with their ideas, and use this information to regulate their functions.⁴⁶ In their journal article, Kaufman, Brian, and Lawrence equate self-efficacy with believing these children can exhibit a particular behavior to achieve specific performance.⁴⁷

Social Theory of Learning

The social theory of learning can help to explain how arts relate to social-emotional learning among K-12 youth. Etienne Wenger's focus when developing this theory was to examine learning as a social participation activity. Moreover, Juan's study explains that as social beings, humans know things only when they actively participate in them and learn through experience. In his work, Wenger describes the benefit of engaging in communities. He argues that when people with similar concerns or passion for the same things come together, they will likely experience personally transformative learning. In the context of music education among K-12 students, composing songs or performing in choirs and bands enables these teenagers to develop their skills.⁴⁸

⁴⁶ Lyndsey Middleton, Hazel Hall, and Robert Raeside. "Applications and applicability of Social Cognitive Theory in information science research." *Journal of Librarianship and Information Science* 51, no. 4 (2019): 927-937. https://napier-repository.worktribe.com/preview/1076071/Jenkins_JoLIS_i3_manuscript_revised.pdf

⁴⁷ Brian Kaufman, and Lawrence Scripp. *Music Learning as Youth Development*. 1st ed. New York, NY: Routledge, 2019. <https://doi-org.ezproxy.liberty.edu/10.4324/9780429436956>.

⁴⁸ Beatriz Ilari, and Eun Cho. "Musical participation and positive youth development in middle school." *Frontiers in Psychology* 13 (2023): 1056542. <https://doi.org/10.3389/fpsyg.2022.1056542>

Constructivist Learning Theory

The constructivist learning theory aims to explain how people acquire knowledge from their active participation in activities and experiences. It goes against the traditional learning models, which support the idea that learning involves passively receiving information from educators or other external sources. Suhendi conducted a study regarding the contribution of foreign languages to music learning and discovered that this educational psychology model perceives students as active participants in education and knowledge acquisition.⁴⁹ This theory proposes that when learning, students combine the new information they acquire during this process with their previous experiences and intellectual capabilities. In his work, Bada argues that other factors, like students' beliefs and attitudes, significantly influence the quality of learning.⁵⁰

The constructivism theory of learning principles include constructing meaning, active learning, problem-based learning, social interaction, proximal development, construct learning, and reflection. First, active learning means students actively participate in learning to acquire new knowledge.⁵¹ Second, this model proposes that students construct meaning based on how they interact with the world and interpret their experiences, as explained in Suhendi's study.⁵² It

⁴⁹ Andang Suhendi. "Constructivist learning theory: The contribution to foreign language learning and teaching." *KnE Social Sciences* (2018): 87-95. <https://doi.org/10.1007/978-3-030-21029-8>

⁵⁰ Steve Olusegun Bada, and Steve Olusegun. "Constructivism learning theory: A paradigm for teaching and learning." *Journal of Research & Method in Education* 5, no. 6 (2015): 66-70. <https://doi.org/10.9790/7388-05616670>

⁵¹ Daniel Hellman. "Social Emotional Learning (SEL) in Schools and Music Education: Implications for Music Education." In *ISME Commission on Policy: Culture, Media and Education Virtual Conference*, p. 89. 2020. https://artsedsel.org/wp-content/uploads/Social-Emotional-Learning-in-Schools-and-Music-Education_-_Implications-for-Music-Education.pdf#page=96

⁵² Andang Suhendi. "Constructivist learning theory: The contribution to foreign language learning and teaching." *KnE Social Sciences* (2018): 87-95. <https://doi.org/10.1007/978-3-030-21029-8>

also suggests that social interactions and group discussions assist learners in challenging and building their understanding, however, this approach does not overrule the principle that each learner is unique. According to Bada's analysis, the teaching strategies implemented should offer flexibility to accommodate learners from different backgrounds and with different capabilities.⁵³ Fourth, the theory supports problem-based learning whereby educators engage their students in real-life scenarios that require them to apply knowledge, thereby deepening their understanding of new and existing situations.

Constructivist learning also facilitates reflection whereby students reflect on their experiences to internalize their learning. It also enables them to connect new information with their prior knowledge. According to Hellman, social interaction and active and problem-based learning facilitate cognitive development when students have adequate support during the learning process.⁵⁴ Suhendi writes that the guidance could come from teachers or more knowledgeable peers.⁵⁵ The principle of proximal development highlights the significance of having music lessons in a classroom setting and holding discussions or composing music in teams. A recent study by Bolden proves that combining different teaching methods encourages students to challenge their beliefs and understanding of the world.⁵⁶ The constructivist learning

⁵³ Steve Olusegun Bada, and Steve Olusegun. "Constructivism learning theory: A paradigm for teaching and learning."

⁵⁴ Daniel Hellman. "Social Emotional Learning (SEL) in Schools and Music Education: Implications for Music Education."

⁵⁵ Andang Suhendi. "Constructivist learning theory: The contribution to foreign language learning and teaching." *KnE Social Sciences* (2018): 87-95. <https://doi.org/10.1007/978-3-030-21029-8>

⁵⁶ Benjamin Bolden, Sean Corcoran, and Alana Butler. "A scoping review of research that examines El Sistema and Sistema-inspired music education programmes." *Review of Education* 9, no. 3 (2021): e3267. DOI: 10.1002/rev3.3267

theory proposes integrating reflection in music programs so that students can internalize the acquired knowledge.

In the framework of music learning in K-12 school systems, the constructivist theory argues that quality learning can occur when the youth ask questions freely, relate to music on a personal level, connect it to previous knowledge, and discover a new understanding of this art form.⁵⁷ Efgivia narrates how examining the application of constructivism theory and its principles on educational practices enables educators and school leaders to design curricula, teaching, and evaluation methods that encourage curiosity and critical thinking.⁵⁸ This educational psychology model also emphasizes the significance of creating learning environments that motivate learners to participate in music programs actively and sharpen the social and emotional skills they acquire during learning.

Self-Esteem Theory

Scholars and psychologists describe self-esteem as a fundamental component of a person's self-concept. Sun mentions that the link between high self-esteem and the favorable outcomes it offers to individuals and society attracts attention to this topic.⁵⁹ In Mulle's opinion, self-esteem relates to multiple components, such as how someone feels about themselves, their social status, or their achievements.⁶⁰ Furthermore, Sun believe that self-esteem is contingent or

⁵⁷ Joseph Shively. "Constructivism in music education." *Arts Education Policy Review* 116, no. 3 (2015): 128-136. <https://doi.org/10.1080/10632913.2015.1011815>

⁵⁸ M. Givi Efgivia, RY Adora Rinanda, Aang Hidayat, Irfan Maulana, and Anthon Budiarto. "Analysis of constructivism learning theory." In *1st UMGESHIC International Seminar on Health, Social Science and Humanities (UMGESHIC-ISHSSH 2020)*, pp. 208-212. Atlantis Press, 2021. <https://www.atlantispress.com/article/125961875.pdf>

⁵⁹ Jian Sun. "Exploring the impact of music education on the psychological and academic outcomes of students: mediating role of self-efficacy and self-esteem." *Frontiers in Psychology* 13 (2022): 841204. <https://doi.org/10.3389/fpsyg.2022.841204>

⁶⁰ Phil Mulle. "Music with Children and Young People who have Social, Emotional and Mental Health Difficulties. Midlands Arts Centre." <https://network.youthmusic.org.uk/file/40581/download?token=Bfi0S4Pn>

non-contingent, genuine or fake, implicit or visible.⁶¹ Active participation in music programs boosts K-12 youth's self-esteem, which qualifies as contingent self-esteem since the educators require the student to meet specific achievements and aspirations.

Social Effects of Music Education

Promotes Self-awareness

Music learning allows young students to analyze their emotions and values and understand how they influence their behavior in different situations. Edgar and his co-authors indicate that self-awareness forms in different ways as a significant component of social-emotional learning, like integrating one's social and personal identities.⁶² According to Wang et al., students who develop this skill quickly adapt to different environments and collaborate with their peers.⁶³ They can also evaluate information about their personality, environment, and background.⁶⁴ Music lessons enable K-12 youth to identify their emotions and express them and

⁶¹ Jian Sun. "Exploring the impact of music education on the psychological and academic outcomes of students: mediating role of self-efficacy and self-esteem."

⁶² Scott N Edgar., and Bob Morrison. "A vision for social emotional learning and arts education policy." *Arts Education Policy Review* 122, no. 3 (2021): 145-150. <https://doi.org/10.1080/10632913.2020.1774830>

⁶³ Feng Wang, and Sadaf Zeb. "Impact of music education on mental health of higher education students: moderating role of emotional intelligence." *Frontiers in psychology* 13 (2022): 938090. <https://doi.org/10.3389/fpsyg.2022.938090>

⁶⁴ José Salvador Blasco-Magraner, Gloria Bernabe-Valero, Pablo Marín-Liébana, and Carmen Moret-Tatay. "Effects of the educational use of music on 3-to 12-year-old children's emotional development: A systematic review." *International journal of environmental research and public health* 18, no. 7 (2021): 3668. <https://doi.org/10.3390/ijerph18073668>

clearly.⁶⁵ For example, they find the right words or vocabulary to express their feelings about their experiences or situations, enabling their classmates and teachers to understand them.⁶⁶

Improves Communication and Self-Expression Skills

Active engagement in music programs in school contributes to developing language, perceptual, and literacy skills. Studies on the power of music in an educational context suggest that singing, writing music, or playing instruments enables the brain to encode linguistic sounds faster.⁶⁷ Moreover, musical training enables K-12 students to understand structural auditory patterns and read properly. Hellman discovered that when learning to play musical instruments, students in the K-12 curriculum understand how to differentiate tonal from rhythmic patterns and associate them with visual symbols.⁶⁸ This knowledge enables the students to communicate better and express themselves verbally and non-verbally. Rhythmical performances significantly benefit young students who struggle with reading comprehension.

The world recognizes music as a powerful medium for conveying different emotions. In his study, Chen explains that through composing and listening to music, adolescents examine themselves and manage positive and negative emotions without causing harm to those around

⁶⁵ Judit Váradi. "A review of the literature on the relationship of music education to the development of socio-emotional learning." *Sage Open* 12, no. 1 (2022): 21582440211068501. <https://doi.org/10.1177/21582440211068501>

⁶⁶ Scott N Edgar., and Bob Morrison. "A vision for social emotional learning and arts education policy." *Arts Education Policy Review* 122, no. 3 (2021): 145-150. <https://doi.org/10.1080/10632913.2020.1774830>

⁶⁷ Camille A Farrington., Joseph Maurer, R. R. Aska McBride, Jenny Nagaoka, J. S. Puller, Steve Shewfelt, Elizabeth M. Weiss, and Lindsay Wright. "Arts education and social-emotional learning outcomes among K-12 students." *Chicago Consortium on School Research*. Accessed February 1, no. 2023 (2019): 2019-05. <https://lmeamusic.org/wp-content/uploads/2020/12/Arts-Education-and-Social-Emotional-Learning-Outcomes-Report.pdf>

⁶⁸ Daniel Hellman. "Social Emotional Learning (SEL) in Schools and Music Education: Implications for Music Education." In *ISME Commission on Policy: Culture, Media and Education Virtual Conference*, p. 89. 2020. https://artsedsel.org/wp-content/uploads/Social-Emotional-Learning-in-Schools-and-Music-Education_-Implications-for-Music-Education.pdf#page=96

them.⁶⁹ For instance, they tend to listen to high-paced music due to excitement and slow-paced music whenever they feel sad, angry, or frustrated.⁷⁰ Empirical evidence from Emami et al. in their study on this topic also notes that music assists young students in managing stress and anxiety and becoming more confident by lowering stress hormones.⁷¹ For students to fully benefit from this art, they should fully commit to the learning process by playing instruments, joining choirs, or organizing performances.⁷² Music education at this level prepares the youth for careers in industries that require effective time management, collaboration, and creative thinking skills.

Music is an effective mode of self-expression as it simultaneously involves applying emotions, senses, and intelligence. According to Abou Dargham, learning this art form enables K-12 adolescents to understand their cultural background and respond thoughtfully to different aspects of their environment.⁷³ Students achieve this sensitivity by interacting with tempo, rhythm, and rhythm and their expressive qualities.⁷⁴ For example, when students compose or perform a song in the classroom, they understand musical concepts and synthesize their

⁶⁹ Li Chen. "Influence of music on the hearing and mental health of adolescents and countermeasures." *Frontiers in Neuroscience* 17 (2023): 1236638. <https://doi.org/10.3389/fnins.2023.1236638>

⁷⁰ Ibid.

⁷¹ Azita Emami, Töres Theorell, Hyejin Kim, Lars Berglund, Helena Hallinder, and Gabriella Engström. "Assessing stress using repeated saliva concentration of steroid hormones in dementia care dyads: results from a controlled pilot care music intervention." *Uppsala Journal of Medical Sciences* 128 (2023). doi: 10.48101/ujms.v128.9340

⁷² Ibid.

⁷³ Khaldoun Abou Dargham. "Teachers' Perceptions of the Factors that Challenge and Advance Music Education in K-12 Schools: A Qualitative Study in Lebanon." (2024). <https://fount.aucegypt.edu/cgi/viewcontent.cgi?article=3308&context=etds>

⁷⁴ Tri Supartini, Ivan Th J. Weismann, and Wijaya Hengki. "Development of Learning Methods through Songs and Movements to Improve Children's Cognitive and Psychomotor Aspects." *European Journal of Educational Research* 9, no. 4 (2020): 1615-1633. <https://doi.org/10.12973/eu-jer.9.4.1615>

emotions. In his article, Edgar found that the expression that music education triggers is unique, personal, and meaningful to the students.⁷⁵ Creation, analysis, and performance of music require students to exercise their critical reflection and problem-solving skills and engage fully in the experience to achieve the desired outcome.

Fostering Cultural Awareness, Diversity, and Understanding

Diversity is when educators create an environment where young students celebrate and respect music from different cultures. Kallio et al. write that this practice encourages the learners to know different music genres and instruments and confidently enjoy and embrace the music they find meaningful.⁷⁶ Based on previous studies, music teachers should be aware of the cultural diversity of the children they teach when they join a new school.⁷⁷ This awareness will enable them to define the occasions to use diversity to enrich the K-12 school curriculum.⁷⁸ Sometimes, music instructors lack the confidence to teach music genres that belong to another area of specialization rather than their own. According to Powel et al., learners can improve this situation by sharing knowledge about their culture in the classroom.⁷⁹ In addition to having a comprehensive understanding of new music genres, teachers and students should assess the

⁷⁵ Scott N Edgar, and Bob Morrison. "A vision for social emotional learning and arts education policy." *Arts Education Policy Review* 122, no. 3 (2021): 145-150. <https://doi.org/10.1080/10632913.2020.1774830>

⁷⁶ Alexis Anja Kallio, Kathryn Marsh, Heidi Westerlund, Sidsel Karlsen, and Eva Sæther. "Introduction: The politics of diversity in music education." In *The politics of diversity in music education*, pp. 1-11. Cham: Springer International Publishing, 2021. https://doi.org/10.1007%2F978-3-030-65617-1_1

⁷⁷ Kelly A Parkes., Joshua A. Russell, William I. Bauer, and Peter Miksza. "The well-being and instructional experiences of K-12 music educators: Starting a new school year during a pandemic." *Frontiers in psychology* 12 (2021): 701189. <https://doi.org/10.3389/fpsyg.2021.701189>

⁷⁸ Alexis Anja Kallio, Kathryn Marsh, Heidi Westerlund, Sidsel Karlsen, and Eva Sæther. "Introduction: The politics of diversity in music education." In *The politics of diversity in music education*, pp. 1-11. Cham: Springer International Publishing, 2021. https://doi.org/10.1007%2F978-3-030-65617-1_1

⁷⁹ Bryan Powell, Donna Hewitt, Gareth Dylan Smith, Beatrice Olesko, and Virginia Davis. "Curricular change in collegiate programs: Toward a more inclusive music education." *Visions of Research in Music Education* 35, no. 1 (2020): 16. <https://digitalcommons.lib.uconn.edu/cgi/viewcontent.cgi?article=1235&context=vrm>

historical background, content, and purpose of the songs selected. This knowledge will help educators teach the music sensitively and accurately, referring to the songs' origin and context.

Music education allows educators to design instructional programs using materials and techniques and consider the cultural factors that guide their use in different contexts. Polk's study, which examined the issue of diversity in music education, indicated that in today's globalized world, where communication, technological advancement, and mobility have become global issues, music learning can significantly influence how individuals from different cultural backgrounds relate.⁸⁰ The increased adoption of fundamentalist and protectionist tendencies increases the need for music education to focus on diversity, primarily on how educational institutions handle the production of knowledge on this global issue. Kallio writes that many schools create policies outlining this agenda but fail to pay attention to ignore the complexity of implementing them.⁸¹ Villodre's study proposes that the solution to this knowledge gap addresses how school leaders and music teachers promote, challenge, and navigate student differences.⁸² For instance, they should consider the power relations that differentiation provides rather than the categorization of students and their music choices.

Music education fosters diversity among K-12 youth by providing students from various cultures with a way to interact. It lets them learn about the cultures' musical performance styles,

⁸⁰ Matthew Polk. "Building a Foundation for Social Innovation: A Descriptive Case Study Examining How Entrepreneurial Educators Creatively Navigate Innovative Music Education Programs for K-12 US Students." PhD diss., Northeastern University, 2019. <https://repository.library.northeastern.edu/files/neu:m044pp41d/fulltext.pdf>

⁸¹ Alexis Anja Kallio, Kathryn Marsh, Heidi Westerlund, Sidsel Karlsen, and Eva Sæther. "Introduction: The politics of diversity in music education."

⁸² María del Mar Bernabé Villodre. "Music education as a tool to improve socio-emotional and intercultural health within adverse contexts in El Salvador." *Procedia-Social and Behavioral Sciences* 237 (2017): 499-504.

genres, and traditions.⁸³ Other strategies, like organizing regular competitions and allowing the participants to experience diversity in music, are effective strategies to promote multiculturalism.⁸⁴ Villodre advises educators to establish interrelationships between music education and other fundamental elements like ecology and geography.⁸⁵ This approach will help to broaden the music students' idea of diversity and the coverage of different music genres. Studies on the contribution of music to the development of K-12 students explain that music education can address the issue of diversity by acknowledging the inclusion of different cultures in the K-12 curriculum.⁸⁶

Transcending language to express or interpret emotion through music is an effective strategy to bridge cultural divides. Aalbers et al. argue that this art's ability to inspire and drive change among its listeners is more than its use for leisure, entertainment, or diversion.⁸⁷ Additionally, the power of music education to preserve cultural heritage helps unite students from different communities, cultivating cultural awareness and diversity. Through music education, teachers introduce their students to different regions' musical traditions and instruments to help them define their identity.⁸⁸ In his study on the significance of music in

⁸³ Alexis Anja Kallio, Kathryn Marsh, Heidi Westerlund, Sidsel Karlsen, and Eva Sæther. "Introduction: The politics of diversity in music education."

⁸⁴ Adam J Lonsdale. "Emotional intelligence, alexithymia, stress, and people's reasons for listening to music." *Psychology of Music* 47, no. 5 (2019): 680-693. <https://doi.org/10.1177/0305735618778126>

⁸⁵ María del Mar Bernabé Villodre. "Music education as a tool to improve socio-emotional and intercultural health within adverse contexts in El Salvador." *Procedia-Social and Behavioral Sciences* 237 (2017): 499-504.

⁸⁶ Adam J Lonsdale. "Emotional intelligence, alexithymia, stress, and people's reasons for listening to music." *Psychology of Music* 47, no. 5 (2019): 680-693. <https://doi.org/10.1177/0305735618778126>

⁸⁷ Sonja Aalbers, Laura Fusar-Poli, Ruth E. Freeman, Marinus Spreen, Johannes CF Ket, Annemiek C. Vink, Anna Maratos, Mike Crawford, Xi-Jing Chen, and Christian Gold. "Music therapy for depression." *Cochrane database of systematic reviews* 11 (2017). <https://doi.org/10.1002/2F14651858.CD004517.pub3>

⁸⁸ Adrian Hille, and Jürgen Schupp. "How learning a musical instrument affects the development of skills." *Economics of Education Review* 44 (2015): 56-82. <https://doi.org/10.1016/j.econedurev.2014.10.007>

socio-emotional health, Villodre expresses that in the modern digital world, individuals understanding their roots is fundamental in shaping their perception of themselves.⁸⁹ Activities like learning to play traditional musical instruments and actively participating in music lessons can help K-12 youth know stories of their communities' music and cultural roots.⁹⁰ Music education is an effective medium for preserving and transmitting these cultural relics from one generation to the next.

Another effective way to promote diversity in music education is introducing K-12 students to music composers and singers from different social, ethnic, and economic backgrounds. According to Villodre, these experts should translate the meaning of lyrics to the learners if the music is in a different language.⁹¹ Schools can also hire performers with different gender identities to challenge societal stereotypes that only a category of people can have successful music careers.⁹² Bolden suggests that inviting blind or disabled musicians to music programs can also help give the learners role models and motivate them to believe that they can

⁸⁹ María del Mar Bernabé Villodre. "Music education as a tool to improve socio-emotional and intercultural health within adverse contexts in El Salvador." *Procedia-Social and Behavioral Sciences* 237 (2017): 499-504.

⁹⁰ Daniel Hellman. "Social Emotional Learning (SEL) in Schools and Music Education: Implications for Music Education." In *ISME Commission on Policy: Culture, Media and Education Virtual Conference*, p. 89. 2020. https://artsedsel.org/wp-content/uploads/Social-Emotional-Learning-in-Schools-and-Music-Education_-Implications-for-Music-Education.pdf#page=96

⁹¹ Mary Katherine Strachan. "Social and Emotional Learning in the Elementary Music Classroom: A Teacher's Perspective." (2021).

⁹² María del Mar Bernabé Villodre. "Music education as a tool to improve socio-emotional and intercultural health within adverse contexts in El Salvador." *Procedia-Social and Behavioral Sciences* 237 (2017): 499-504.

succeed.⁹³ Diversity in music education fosters inclusion by enabling learning institutions to create a curriculum that accommodates students of all backgrounds and with different abilities.

Influences Peer Relationships and Social Integration

Active engagement in music activities like dancing and playing instruments facilitates transformative learning. According to Hellman, this process equips teenagers with social-emotional skills to build healthy relationships with their peers.⁹⁴ Lewis also argues that when these students sing along different songs, compose a song, or attend a performance.⁹⁵ They learn to listen, be patient, and coordinate with their friends. Songs, especially those that use the repeat-after-me format, require the learners to pay more attention, practice stillness, and take turns. Parkes et al. support allowing youth to practice music within groups to learn the concept of cooperation and teamwork.⁹⁶ According to Strachan and Mary, social-emotional skills built through music education facilitate social integration and teach K-12 students how to cooperate and connect with their peers.⁹⁷ Interacting with teachers and fellow learners and observing the

⁹³ Judit Váradi. "A review of the literature on the relationship of music education to the development of socio-emotional learning." *Sage Open* 12, no. 1 (2022): 21582440211068501. <https://doi.org/10.1177/21582440211068501>

⁹⁴ Benjamin Bolden, Sean Corcoran, and Alana Butler. "A scoping review of research that examines El Sistema and Sistema-inspired music education programmes." *Review of Education* 9, no. 3 (2021): e3267. DOI: 10.1002/rev3.3267

⁹⁵ Daniel Hellman. "Social Emotional Learning (SEL) in Schools and Music Education: Implications for Music Education." In *ISME Commission on Policy: Culture, Media and Education Virtual Conference*, p. 89. 2020. https://artsedsel.org/wp-content/uploads/Social-Emotional-Learning-in-Schools-and-Music-Education_Implications-for-Music-Education.pdf#page=96

⁹⁶ Judy Lewis. "How children listen: multimodality and its implications for K-12 music education and music teacher education." *Music Education Research* 22, no. 4 (2020): 373-387. <https://doi.org/10.1080/14613808.2020.1781804>

⁹⁷ Kelly A Parkes., Joshua A. Russell, William I. Bauer, and Peter Miksza. "The well-being and instructional experiences of K-12 music educators: Starting a new school year during a pandemic." *Frontiers in psychology* 12 (2021): 701189. <https://doi.org/10.3389/fpsyg.2021.701189>

environment allows these teenagers to understand themselves better, those around them, and the world in general.

Promotes Social Interaction and Teamwork

Social awareness, developed through group music activities, is critical to smooth social interaction and healthy social relationships. Mulle explains that this skill enables young students to empathize with people from different cultures, social classes, or races and understand them from their perspectives.⁹⁸ When students can show compassion to their peers, it becomes easy for them to build and sustain strong relationships.⁹⁹ With empathy, collaborative problem-solving becomes easy since the people involved are patient with each other and compromise when necessary. Additionally, showing concern for others' feelings enables them to feel emotions that relate to others.¹⁰⁰ Self-awareness builds the social skills of K-12 youth, enabling them to work in teams and navigate multiple settings with people from different backgrounds.

Music education offers developmental opportunities for K-12 students. These youth gain exposure to the world when they practice songs and performances in choirs. They also acquire different social-emotional competencies that contribute to their general development when interacting with their peers and teachers. Moreover, they develop habitual feelings and behavior in response to how they assess and perceive different circumstances. It becomes easier for these students to create social relationships and communicate in social situations without fear.

⁹⁸ Mary Katherine Strachan. "Social and Emotional Learning in the Elementary Music Classroom: A Teacher's Perspective." (2021). https://repository.belmont.edu/cgi/viewcontent.cgi?article=1004&context=music_theses

⁹⁹ Phil Mulle. Music with Children and Young People who have Social, Emotional and Mental Health Difficulties. Midlands Arts Centre. <https://network.youthmusic.org.uk/file/40581/download?token=Bfi0S4Pn>

¹⁰⁰ Agossou Arthur Blaise, and Raphael Diekstra. "Influence Of Music And Musical Education On Youth Development In France." African Journal of Emerging Issues 3, no. 9 (2021): 9-18. <https://www.ajoeijournals.org/sys/index.php/ajoei/article/view/230>

Fosters Development of Self-Discipline

Active involvement in music education fosters the development of self-discipline and diligence. Students need these skills to understand a song's acoustic properties, the emotions the music genre communicates, and its connection to the owner's culture.¹⁰¹ When the music program involves group work, the participants should attend the rehearsals regularly, concentrate during the sessions, and observe punctuality, practices that lead to self-discipline. Furthermore, Foster et al. explain that the students who compose or perform music more often receive new responsibilities that require them to work independently or as a team.¹⁰² The transition from a team player to a leader who decides on the music's rhythm, tempo, and volume and evaluates it requires self-discipline.¹⁰³ It also demands that the participants cooperate to make the social process successful. The involvement fosters confidence and independence, motivating learners to join other projects to boost their music learning and academic performance.

Emotional Effects of Music Education

Incorporating music education in the K-12 curriculum enables students to develop emotional intelligence. This approach teaches them how to explore their emotions and learn how to regulate them.¹⁰⁴ According to the findings of a research survey that Lewis conducted, kids

¹⁰¹ Beatriz Ilari, and Eun Cho. "Musical participation and positive youth development in middle school." *Frontiers in Psychology* 13 (2023): 1056542. <https://doi.org/10.3389/fpsyg.2022.1056542>

¹⁰² Khaldoun Abou Dargham. "Teachers' Perceptions of the Factors that Challenge and Advance Music Education in K-12 Schools: A Qualitative Study in Lebanon." (2024). <https://fount.aucegypt.edu/cgi/viewcontent.cgi?article=3308&context=etds>

¹⁰³ Michael E. Foster, and Jade V. Marcus Jenkins. "Does participation in music and performing arts influence child development?." *American Educational Research Journal* 54, no. 3 (2017): 399-443. <https://doi.org/10.3102/0002831217701830>

¹⁰⁴ Martin Guhn, Scott D. Emerson, and Peter Gouzouasis. "A population-level analysis of associations between school music participation and academic achievement." *Journal of Educational Psychology* 112, no. 2 (2020): 308. <https://doi.org/10.1037/edu0000376>

who enjoy listening to music or dancing and making movements adjust their emotions better.¹⁰⁵ Aalbers et al. explain that when K-12 youth create or listen to a song's lyrics and melody, they get to evaluate how the art makes them feel.¹⁰⁶ Additionally, this opportunity helps them connect with their emotions, whether sadness or joy. This concept explains why soft and peaceful music soothes young teenagers whenever they feel overwhelmed. According to Middleton et al., educators take advantage of the power of music and encourage learners to dance or play a musical instrument to eliminate negative feelings.¹⁰⁷ Therefore, experiences with music lessons enable K-12 students to recognize, communicate, and healthily regulate their emotions.

Impact on Self-Esteem and Confidence

Young students actively participating in concerts and other music program events are confident. Here, they get to perform and showcase their skills to the world. A recent study by Chen supports the idea that performing helps teenagers transform nervousness into creativity, hence overcoming stage fright.¹⁰⁸ They also receive a boost in confidence when they compose a song and create something they are proud of and can show to the world. Hendricks et al. supports the idea that playing musical instruments and attending concerts in class is another effective way

¹⁰⁵ Ana-María Botella-Nicolás, and Inmaculada Retamero-García. "Music education's contribution to the development of EI in adolescents and its effect on the gender variable." *Revista Española de Pedagogía* 82, no. 287 (2024): 14.

¹⁰⁶ Judy Lewis. "How children listen: multimodality and its implications for K-12 music education and music teacher education." *Music Education Research* 22, no. 4 (2020): 373-387. <https://doi.org/10.1080/14613808.2020.1781804>

¹⁰⁷ Sonja Aalbers, Laura Fusar-Poli, Ruth E. Freeman, Marinus Spreen, Johannes CF Ket, Annemiek C. Vink, Anna Maratos, Mike Crawford, Xi-Jing Chen, and Christian Gold. "Music therapy for depression." *Cochrane database of systematic reviews* 11 (2017). <https://doi.org/10.1002/2F14651858.CD004517.pub3>

¹⁰⁸ Lyndsey Middleton, Hazel Hall, and Robert Raeside. "Applications and applicability of Social Cognitive Theory in information science research." *Journal of Librarianship and Information Science* 51, no. 4 (2019): 927-937.

to build confidence and overcome performance anxiety.¹⁰⁹ High self-esteem and confidence are skills that can help mold K-12 youth who plan to venture into artistic careers. According to a study that Powell and his co-authors conducted on the strategies for inclusive music education, youth who start cultivating their music appreciation early enough are likely to pursue a music-related career.¹¹⁰ The K-12 curriculum equips these students with essential skills like confidence, discipline, and emotional intelligence that help them become successful musicians later in life.

Music Education and Mental Health

Music education helps children and youth in the K-12 system to develop positive qualities that improve their mental health. Sun conducted a study on the impact of music on academic performance and discovered that the challenges youth face in their academic life can cause stress and anxiety.¹¹¹ If not managed properly, these mental health issues these mental health issues can affect the learners' academic performance and future. A recent study by Ilari and her corresponding authors demonstrates how the COVID-19 pandemic affected students' mental health and emotional experiences.¹¹² The unprecedented crisis prevented K-12 youth from engaging in social activities and interacting with their teachers and peers. Hamilton et al. explain how this pandemic caused uneven access to virtual learning materials, especially for

¹⁰⁹ Li Chen. "Influence of music on the hearing and mental health of adolescents and countermeasures." *Frontiers in Neuroscience* 17 (2023): 1236638. <https://doi.org/10.3389/fnins.2023.1236638>

¹¹⁰ Karin S. Hendricks, Tawnya D. Smith, and Jennifer Stanuch. "Creating safe spaces for music learning." *Music Educators Journal* 101, no. 1 (2014): 35-40. <https://www.jstor.org/stable/43289089>

¹¹¹ Bryan Powell, Donna Hewitt, Gareth Dylan Smith, Beatrice Olesko, and Virginia Davis. "Curricular change in collegiate programs: Toward a more inclusive music education." *Visions of Research in Music Education* 35, no. 1 (2020): 16. <https://digitalcommons.lib.uconn.edu/cgi/viewcontent.cgi?article=1235&context=vrme>

¹¹² Jian Sun. "Exploring the impact of music education on the psychological and academic outcomes of students: mediating role of self-efficacy and self-esteem." *Frontiers in Psychology* 13 (2022): 841204. <https://doi.org/10.3389/fpsyg.2022.841204>

underprivileged and marginalized students.¹¹³ Besides experiencing distractions in the educational structure, students also experienced the fear of an unknown future and losing their loved ones.¹¹⁴ The challenges faced at home and in school exposed these teenagers to a high risk of mental health issues.

Recent research provides insights into how music education can undo the damage that the pandemic caused to K-12 students. For example, it can help children and adolescents work on their emotions and connect to different groups and the community around them.¹¹⁵ According to Sun, studies examining the importance of teaching music in school support the idea that singing or performing songs and other art forms enable young students to understand and regulate their emotions.¹¹⁶ Additionally, it enables them to communicate their feelings healthily, making these students more confident around their peers. Mulle writes that music programs also allow students in the K-12 curriculum to handle negative emotions like anger, grief, and disappointment.¹¹⁷ An effective way of achieving this is by expressing the joy of creating music and listening to lyrics and sweet melodies. Learning music assists in important social-emotional learning areas like discipline, critical thinking, and perseverance.

¹¹³ Beatriz Ilari, and Eun Cho. "Musical participation and positive youth development in middle school." *Frontiers in Psychology* 13 (2023): 1056542. <https://doi.org/10.3389/fpsyg.2022.1056542>

¹¹⁴ Laura Hamilton, and Betheny Gross. "How Has the Pandemic Affected Students' Social-Emotional Well-Being? A Review of the Evidence to Date." Center on Reinventing Public Education (2021). <https://crpe.org/how-has-the-pandemic-affected-students-social-emotional-well-being-a-review-of-the-evidence-to-date/>

¹¹⁵ Ibid.

¹¹⁶ Karin S Hendricks, Tawnya D. Smith, and Jennifer Stanuch. "Creating safe spaces for music learning." *Music Educators Journal* 101, no. 1 (2014): 35-40. <https://www.jstor.org/stable/43289089>

¹¹⁷ Jian Sun. "Exploring the impact of music education on the psychological and academic outcomes of students: mediating role of self-efficacy and self-esteem."

Chen's systematic review evaluates the relationship between music education and K-12 adolescents' mental health.¹¹⁸ He states that music fosters social connection, improves the students' emotional expression, and enables them to develop a sense of belonging.¹¹⁹ Shively also clarifies that music promotes creative thinking, emotional intelligence, and intellectual growth.¹²⁰ Young students who enroll in music programs have a platform to articulate their emotions and define their identity as they develop their social networks and build their cognitive skills.¹²¹ All these adjustments improve their mental health. A study conducted to assess the use of music therapy for depression deeply argued that students' emotional and psychological stability determines how they perceive and interact with music learning.¹²² For example, adolescents going through phases of sadness, grief, or frustration tend to gravitate towards slow music for comfort.

The evident impact of music on the mental health of K-12 students provides a strong foundation for using music to promote mindful awareness. In the article "Social and Emotional Learning in the Elementary Music Classroom: A Teacher's Perspective," Strachan and his co-authors advise educators to help their students understand how music can relax their bodies.¹²³ A

¹¹⁸ Phil Mulle. Music with Children and Young People who have Social, Emotional and Mental Health Difficulties. Midlands Arts Centre. <https://network.youthmusic.org.uk/file/40581/download?token=Bfi0S4Pn>

¹¹⁹ Li Chen. "Influence of music on the hearing and mental health of adolescents and countermeasures." *Frontiers in Neuroscience* 17 (2023): 1236638. <https://doi.org/10.3389%2Ffnins.2023.1236638>

¹²⁰ Ibid.

¹²¹ Joseph Shively. "Constructivism in music education." *Arts Education Policy Review* 116, no. 3 (2015): 128-136. <https://doi.org/10.1080/10632913.2015.1011815>

¹²² Li Chen. "Influence of music on the hearing and mental health of adolescents and countermeasures."

¹²³ Sonja Aalbers, Laura Fusar-Poli, Ruth E. Freeman, Marinus Spreen, Johannes CF Ket, Annemiek C. Vink, Anna Maratos, Mike Crawford, Xi-Jing Chen, and Christian Gold. "Music therapy for depression." *Cochrane database of systematic reviews* 11 (2017).

study that Blaise et al. conducted to research how music influences youth development in France indicates that music helps young people unwind and lower their stress levels.¹²⁴ Instructors should encourage teenagers to lie in the field or sit comfortably when listening to music. Other practices, like breathing deeply at the beginning of a song, can calm their bodies and enable them to connect with their surroundings.

Students with high self-efficacy and psychological stability believe that they can do anything. This attitude enables them to perceive challenges and obstacles as learning new opportunities, motivating them to solve problems instead of avoiding them. Additionally, K-12 youth who study music create appropriately challenging objectives and commit to solving them with persistence.¹²⁵ Their extreme engagement in music education and life makes them love their lives, building them with confidence and self-assurance. These social and emotional skills prepare young students to associate well with others and succeed in life outside the classroom.

Fosters Emotional Intelligence

An emotional intelligence quotient indicates an individual's psychological well-being and social ability. Peer-reviewed literature on the significance of music education illustrates that active engagement in music activities can improve K-12 youth' IQ scores since it activates the brain regions that process emotions and improve mood. According to a study that Lonsdale conducted, people with different psychiatric disorders have a dysfunctional cortical and

¹²⁴ Mary Katherine Strachan. "Social and Emotional Learning in the Elementary Music Classroom: A Teacher's Perspective." (2021).
https://repository.belmont.edu/cgi/viewcontent.cgi?article=1004&context=music_theses

¹²⁵ Agossou Arthur Blaise, and Raphael Diekstra. "Influence Of Music And Musical Education On Youth Development In France." *African Journal of Emerging Issues* 3, no. 9 (2021): 9-18.
<https://www.ajoeijournals.org/sys/index.php/ajoei/article/view/230>

subcortical network.¹²⁶ Creating or listening to music reactivates these brain sections and enables individuals to control their emotions. A study by Wang et al. discovered that learning music can manipulate cognitive arousal and improve the learner's emotional intelligence.¹²⁷ Liang supports this finding and explains that high IQ assists K-12 students with socialization and the development of self-identity and self-awareness, which are essential elements during adolescence.¹²⁸ According to Botella-Nicolás, approximately 90% of EI (Emotional Intelligence) programs implemented in learning institutions in 2020 impacted students positively.¹²⁹

Modern education systems focus on the development of emotional intelligence among students because of the advantages it offers. Liang writes that the capacity to recognize and control emotions enables teenagers to maintain composure, react appropriately in different contexts, and remain resilient in difficult situations.¹³⁰ This information means that emotionally intelligent teenagers are socially competent, have high self-esteem, and remain calm in intimidating situations. Lonsdale mentions that high EI improves students' academic and professional achievements and effectively enables them to handle negative emotions associated

¹²⁶ Mary Katherine Strachan. "Social and Emotional Learning in the Elementary Music Classroom: A Teacher's Perspective." (2021). https://repository.belmont.edu/cgi/viewcontent.cgi?article=1004&context=music_theses

¹²⁷ Adam J Lonsdale. "Emotional intelligence, alexithymia, stress, and people's reasons for listening to music." *Psychology of Music* 47, no. 5 (2019): 680-693. <https://doi.org/10.1177/0305735618778126>

¹²⁸ Feng Wang, and Sadaf Zeb. "Impact of music education on mental health of higher education students: moderating role of emotional intelligence." *Frontiers in psychology* 13 (2022): 938090. <https://doi.org/10.3389/fpsyg.2022.938090>

¹²⁹ Jitao Liang. "Developing emotional intelligence in a static and interactive music learning environment." *Frontiers in Psychology* 15 (2024): 1279530. <https://doi.org/10.3389/fpsyg.2024.1279530>

¹³⁰ Ana-María Botella-Nicolás, and Inmaculada Retamero-García. "Music education's contribution to the development of EI in adolescents and its effect on the gender variable." *Revista Española de Pedagogía* 82, no. 287 (2024): 14. <https://www.revistadepedagogia.org/cgi/viewcontent.cgi?article=3945&context=rep>

with risk-taking and failure.¹³¹ In a research study investigating how EI correlates with academic performance, McGinnis interviewed ten students who enrolled in a course on the basics of music teaching.¹³² The training results in this study demonstrated that students with high emotional intelligence achieved better academic outcomes, however, McGinnis also notes that scholars must conduct further research to determine the effectiveness of tools used to assess EI and pedagogical interventions to increase EI scores.¹³³

Facilitates Cognitive Development

Learning to play a musical instrument stimulates K-12 students' intellectual development. A study that Wang, Feng, and Sadaf conducted to examine the impact of music lessons in the K-12 music education setting revealed that students who actively participate in music lessons have a higher IQ.¹³⁴ Listening to songs or playing musical instruments sends auditory input to the hippocampus and frontal lobe of the brain. These regions send the input to the auditory cortex and amygdala, which enable the students to hear the sound and provide an emotional response. Ilari et al. believe that formal music training in a K-12 setting enables these students to retain new information by linking it to familiar tunes, improving their memory.¹³⁵

¹³¹ Jitao Liang. "Developing emotional intelligence in a static and interactive music learning environment." *Frontiers in Psychology* 15 (2024): 1279530. <https://doi.org/10.3389/fpsyg.2024.1279530>

¹³² Adam J Lonsdale. "Emotional intelligence, alexithymia, stress, and people's reasons for listening to music." *Psychology of Music* 47, no. 5 (2019): 680-693. <https://doi.org/10.1177/0305735618778126>

¹³³ Emily J McGinnis. "Developing the emotional intelligence of undergraduate music education majors: An exploratory study using Bradberry and Greaves' (2009) Emotional Intelligence 2.0." *Journal of Music Teacher Education* 27, no. 2 (2018): 11-22. doi: 10.1177/1057083717723919

¹³⁴ Emily J McGinnis. "Developing the emotional intelligence of undergraduate music education majors: An exploratory study using Bradberry and Greaves' (2009) Emotional Intelligence 2.0."

¹³⁵ Feng Wang, and Sadaf Zeb. "Impact of music education on mental health of higher education students: moderating role of emotional intelligence." *Frontiers in psychology* 13 (2022): 938090. <https://doi.org/10.3389/fpsyg.2022.938090>

Kids can use the memory recall skills they learn through music education to contextualize unfamiliar issues and find practical solutions.

Active engagement in music consistently correlates with more creativity and higher general attainment. The impact is more noticeable when the musical activity is creative because it enables the participants to express their emotions and inner thoughts.¹³⁶ These findings explain why music lessons at the K-12 level should involve composing, exploring, and improvising songs and performances.¹³⁷ Lonsdale's study supports this finding and explains that the human brain, especially that of young adults, can change over time when familiarized with new experiences or stimuli.¹³⁸ This plasticity allows music education in K-12 to build crucial intellectual skills and positively modify how these learners think.

Improves Academic Performance

A study that Blaise, Agossou, and Raphael conducted supports the idea that studying music improves adolescents' academic achievement.¹³⁹ Music education motivates kids and young students to learn more, even in other subjects. The music instruction has the creative thinking skills kids earn from music education to help steer their academic success. Chen

¹³⁶ Beatriz Ilari, and Eun Cho. "Musical participation and positive youth development in middle school." *Frontiers in Psychology* 13 (2023): 1056542. <https://doi.org/10.3389/fpsyg.2022.1056542>

¹³⁷ Eugenia Costa-Giomi. "The long-term effects of childhood music instruction on intelligence and general cognitive abilities." *Update: Applications of Research in Music Education* 33, no. 2 (2015): 20-26. <https://doi.org/10.1177/8755123314540661>

¹³⁸ Feng Wang, and Sadaf Zeb. "Impact of music education on mental health of higher education students: moderating role of emotional intelligence." *Frontiers in psychology* 13 (2022): 938090. <https://doi.org/10.3389/fpsyg.2022.938090>

¹³⁹ Adam J Lonsdale. "Emotional intelligence, alexithymia, stress, and people's reasons for listening to music." *Psychology of Music* 47, no. 5 (2019): 680-693. <https://doi.org/10.1177/0305735618778126>

mentions that scientists consider music education an instrument for intellectual development.¹⁴⁰ In their research, Guhn, Martin, Scott D. Emerson, and Peter Gouzouasis discovered that music training increases learners' logical, mathematical, and spatial intelligence, an improvement that contributes to academic excellence.¹⁴¹ Although researchers continue to study the specific impact of music learning on intellectual development, the empirical evidence from previous studies proves that K-12 youth who actively engage themselves in music programs perform better academically than those who do not.¹⁴²

Develops Problem-Solving and Critical Thinking Skills

Music education teaches K-12 youth the techniques they need to solve problems in mathematics, language, and life. Polk Mathew describes music as one of the most powerful means of knowing how to use one's mind to create innovative solutions to existing issues.¹⁴³ During music programs, students decode musical symbols to interpret music language and use this literacy to engage in different musical performances.¹⁴⁴ During the interpretation process, the learners recreate the composers' expressions and personalize them. They also synthesize information, evaluate their literacy of musical language, and synthesize the knowledge to provide a superior final product. McGinnis mentions that when these learners decode language, play

¹⁴⁰ Agossou Arthur Blaise, and Raphael Diekstra. "Influence Of Music And Musical Education On Youth Development In France." *African Journal of Emerging Issues* 3, no. 9 (2021): 9-18. <https://www.ajoeijournals.org/sys/index.php/ajoei/article/view/230>

¹⁴¹ Feng Wang, and Sadaf Zeb. "Impact of music education on mental health of higher education students: moderating role of emotional intelligence."

¹⁴² Ibid.

¹⁴³ Beatriz Ilari, and Eun Cho. "Musical participation and positive youth development in middle school." *Frontiers in Psychology* 13 (2023): 1056542. <https://doi.org/10.3389/fpsyg.2022.1056542>

¹⁴⁴ Daniel Hellman. "Social Emotional Learning (SEL) in Schools and Music Education: Implications for Music Education." In *ISME Commission on Policy: Culture, Media and Education Virtual Conference*, p. 89. 2020. https://artsedssel.org/wp-content/uploads/Social-Emotional-Learning-in-Schools-and-Music-Education_-Implications-for-Music-Education.pdf#page=96

musical instruments, or compose songs, they engage their thoughts and emotions, which sharpens their problem-solving capabilities.¹⁴⁵ Studying more musical concepts and engaging in activities that require research and reflection to find solutions improves the learners' creativity. The problem-solving skills that K-12 students acquire through music education motivate them to take risks in school and their lives without the fear of making mistakes.

Inclusion and Accessibility in Music Education

Inaccessibility, discrimination, and prejudice are fundamental issues affecting the effectiveness of music education among K-12 students. The research that Powell and his co-authors conducted on a more inclusive curriculum explained that music education plays a fundamental role in building the social, emotional, and intellectual skills of K-12 students.¹⁴⁶ Multiple factors, however, have made it difficult or almost impossible for some students to access these benefits. Ilari and his co-authors argue that many states in America have reduced class time dedicated to art education post-COVID.¹⁴⁷ Changes in curriculum standards, law, and budget crises necessitate this adjustment. A 2019 study that Ward conducted to examine music education's impact on elementary school students' academic achievement discovered that music education in the US began to decline when Congress enacted the "No Child Left Behind Act (NCLB).¹⁴⁸ This legislation aimed to ensure equality among public school students. According to

¹⁴⁵ Daniel Hellman. "Social Emotional Learning (SEL) in Schools and Music Education: Implications for Music Education."

¹⁴⁶ Agossou Arthur Blaise, and Raphael Diekstra. "Influence Of Music And Musical Education On Youth Development In France." *African Journal of Emerging Issues* 3, no. 9 (2021): 9-18. <https://www.ajoeijournals.org/sys/index.php/ajoei/article/view/230>

¹⁴⁷ Benjamin Bolden, Sean Corcoran, and Alana Butler. "A scoping review of research that examines El Sistema and Sistema-inspired music education programmes." *Review of Education* 9, no. 3 (2021): e3267. DOI: 10.1002/rev3.3267

¹⁴⁸ Ibid.

this research, many schools have eliminated the lessons because many low-income students cannot afford them. These findings demonstrate how income and poor governance cause increases in the achievement gap in music training.

Mental health, emotional, and learning difficulties also prevent inclusion in music learning among K-12 youth. Mulle explains how young people in this age group often experience emotional and social challenges, which may manifest in ways such as displaying disruptive behavior and becoming isolated.¹⁴⁹ According to Powell et al., these challenges may trigger other issues like anxiety and depression.¹⁵⁰ Some youth may also have developmental disorders like Dyslexia, Autism, and Down Syndrome. An important issue that researchers focus on is these individuals' inability to conform to the "norm" or adjust to their environment and feel valued.¹⁵¹ Mulle writes that the music teachers who deal with such youth with complex lives may face challenges, particularly if they lack empathy and patience.¹⁵² Some learning institutions also lack the tools and resources to cater to these special students' needs in practical subjects like music.

Discrimination and prejudice against underprivileged and mentally or physically challenged youth cause low academic achievement and increase the chances of failing in life. Mulle mentions that exclusion prevents young people from accessing employment and training

¹⁴⁹ Eugenia Costa-Giomi. "The long-term effects of childhood music instruction on intelligence and general cognitive abilities." *Update: Applications of Research in Music Education* 33, no. 2 (2015): 20-26. <https://doi.org/10.1177/8755123314540661>

¹⁵⁰ Jitao Liang. "Developing emotional intelligence in a static and interactive music learning environment." *Frontiers in Psychology* 15 (2024): 1279530. <https://doi.org/10.3389/fpsyg.2024.1279530>

¹⁵¹ Agossou Arthur Blaise, and Raphael Diekstra. "Influence Of Music And Musical Education On Youth Development In France." *African Journal of Emerging Issues* 3, no. 9 (2021): 9-18. <https://www.ajoeijournals.org/sys/index.php/ajoei/article/view/230>

¹⁵² Andang Suhendi. "Constructivist learning theory: The contribution to foreign language learning and teaching." *KnE Social Sciences* (2018): 87-95. <https://doi.org/10.1007/978-3-030-21029-8>

opportunities.¹⁵³ It also increases the risk of teens becoming perpetrators of crime. When K-12 youth lack the social, communication, and emotional intelligence that participating in a music class offers, they reduce their chances of excelling in school.¹⁵⁴ Outside the school, these youth may engage in drug abuse or criminal behavior as a coping mechanism. Interviews done with young offenders suggested that a significant percentage of them were underachievers, born into disordered family environments, and failed to participate in mainstream education.¹⁵⁵

Promoting Inclusivity And Diversity In Music Programs

Educators in the K-12 curriculum can design approaches that promote inclusion to allow all students to enjoy the benefits of music education regardless of their background. For instance, they should consider teaching songs from different cultures: according to Kallio et al., this technique will allow the learners to celebrate their cultural heritage, learn music from other cultures, and appreciate their differences.¹⁵⁶ The youth can share the music their families enjoy at home and listen to it together during the music lesson. Another effective way to ensure inclusivity in music education is by designing music programs specially designed for learners

¹⁵³ Daniel Hellman. "Social Emotional Learning (SEL) in Schools and Music Education: Implications for Music Education." In ISME Commission on Policy: Culture, Media and Education Virtual Conference, p. 89. 2020. https://artsedsel.org/wp-content/uploads/Social-Emotional-Learning-in-Schools-and-Music-Education_-Implications-for-Music-Education.pdf#page=96

¹⁵⁴ Eugenia Costa-Giomi. "The long-term effects of childhood music instruction on intelligence and general cognitive abilities." *Update: Applications of Research in Music Education* 33, no. 2 (2015): 20-26. <https://doi.org/10.1177/8755123314540661>

¹⁵⁵ Beatriz Ilari, and Eun Cho. "Musical participation and positive youth development in middle school." *Frontiers in Psychology* 13 (2023): 1056542. <https://doi.org/10.3389/fpsyg.2022.1056542>

¹⁵⁶ Daniel Hellman. "Social Emotional Learning (SEL) in Schools and Music Education: Implications for Music Education." In ISME Commission on Policy: Culture, Media and Education Virtual Conference, p. 89. 2020. https://artsedsel.org/wp-content/uploads/Social-Emotional-Learning-in-Schools-and-Music-Education_-Implications-for-Music-Education.pdf#page=96

with disabilities.¹⁵⁷ Implementing updated programs will support these kids and improve their coordination, cooperation, and teamwork. Music learning programs should focus on ensuring that every youth in the K-12 curriculum enjoys the benefits of learning and making music.

Chen advocates for the implementation of positive teaching methods as a means to ensure equality and inclusivity in music education.¹⁵⁸ He mentions that the teaching methods implemented in school influence students' attitudes toward music learning and motivate or demotivate their active class participation. K-12 schools should design a syllabus with different music facets, such as music theory and vocal training.¹⁵⁹ Other approaches like instrumental performance and music creation inspire exploration and creativity in music learning in K-12 school systems. Different innovative teaching techniques, like cooperative and problem-based learning, focus on enhancing adolescents' learning efficacy and recognizing their uniqueness.¹⁶⁰ To support the effectiveness of the discussed teaching methods, schools should ensure that all students can access music education resources like music books, festivals, and websites.

Creating public referral units (PRUs) effectively addresses barriers to music inaccessibility among underprivileged or physically challenged students. These short-stay centers admit youth who qualify as "vulnerable" due to their behavioral, emotional, health, or social challenges. These students can participate in music programs that foster their social and

¹⁵⁷ Agossou Arthur Blaise, and Raphael Diekstra. "Influence Of Music And Musical Education On Youth Development In France." *African Journal of Emerging Issues* 3, no. 9 (2021): 9-18. <https://www.ajoeijournals.org/sys/index.php/ajoei/article/view/230>

¹⁵⁸ Andang Suhendi. "Constructivist learning theory: The contribution to foreign language learning and teaching." *KnE Social Sciences* (2018): 87-95. <https://doi.org/10.1007/978-3-030-21029-8>

¹⁵⁹ Brian Kaufman, and Lawrence Scripp. *Music Learning as Youth Development*. 1st ed. New York, NY: Routledge, 2019. <https://doi-org.ezproxy.liberty.edu/10.4324/9780429436956>.

¹⁶⁰ Beatriz Ilari, and Eun Cho. "Musical participation and positive youth development in middle school." *Frontiers in Psychology* 13 (2023): 1056542. <https://doi.org/10.3389/fpsyg.2022.1056542>

emotional development. Mulle argues that working in PRUs can be challenging because these units often value compliance with social norms as a fundamental aspect of these youth development.¹⁶¹ These driving forces might collide with the music teachers' values and personalities, however, the best music program leaders invent ways to work effectively in this environment and remain committed to the social and personal development of the excluded students' musicals.¹⁶² Encouraging the students to work in group settings will encourage them to interact with their peers and understand the value of teamwork.

The Miami Music Project (MMP) is an excellent example of a music program addressing barriers to access to music education for underprivileged students. It empowers youth from under-resourced communities to acquire value through music learning. In their article, Morris and his co-authors indicate that this program is tuition-free and supports children from all racial, economic, and cultural backgrounds.¹⁶³ Based on the National State Standards for Music Education, the students receive about ten hours of weekly music lessons.¹⁶⁴ The educators combine different teaching strategies like choirs, rehearsals, and ensembles. This program's curriculum allows all students to conduct concerts within the institution to engage families and

¹⁶¹ Agossou Arthur Blaise, and Raphael Diekstra. "Influence Of Music And Musical Education On Youth Development In France." *African Journal of Emerging Issues* 3, no. 9 (2021): 9-18. <https://www.ajoeijournals.org/sys/index.php/ajoei/article/view/230>

¹⁶² Jitao Liang. "Developing emotional intelligence in a static and interactive music learning environment." *Frontiers in Psychology* 15 (2024): 1279530. <https://doi.org/10.3389/fpsyg.2024.1279530>

¹⁶³ Jian Sun. "Exploring the impact of music education on the psychological and academic outcomes of students: mediating role of self-efficacy and self-esteem." *Frontiers in Psychology* 13 (2022): 841204. <https://doi.org/10.3389/fpsyg.2022.841204>

¹⁶⁴ Eugenia Costa-Giomi. "The long-term effects of childhood music instruction on intelligence and general cognitive abilities." *Update: Applications of Research in Music Education* 33, no. 2 (2015): 20-26. <https://doi.org/10.1177/8755123314540661>

people living nearby. Moreover, these learners can organize team performances in famous performing art stadiums in Miami.

Creating Safe Spaces for Music Learning

K-12 students should learn music safely to build their emotional and social skills. Hendricks and his co-authors mention that music education environments characterized by high demands, prejudice, and negative teacher attitudes evoke fear and cause the students to withdraw from fully committing themselves to the learning experience.¹⁶⁵ It also causes fear-based performance or lost love for music, a shared experience among many young music students. Supartini et al. advised teachers, school leaders, and other stakeholders to focus on creating emotionally safe learning environments that equip K-12 youth with creative freedom and positive self-belief and to nurture them for long-term enjoyment or even music careers.¹⁶⁶ For these leaders to achieve this goal, Hendricks et al. argue that they should first understand how fear-based attempts and competitive structures affect music students.¹⁶⁷ They should also allow students to incorporate their ideas during learning and practice. These strategies will motivate young people to invest more effort in learning and take ownership of their musical development.

A crucial strategy for establishing a safe music learning environment for K-12 students is monitoring the genre and volume of music taught in class. Chen mentions that choosing

¹⁶⁵ Jitao Liang. "Developing emotional intelligence in a static and interactive music learning environment." *Frontiers in Psychology* 15 (2024): 1279530. <https://doi.org/10.3389/fpsyg.2024.1279530>

¹⁶⁶ Brian Kaufman, and Lawrence Scripp. *Music Learning as Youth Development*. 1st ed. New York, NY: Routledge, 2019. <https://doi-org.ezproxy.liberty.edu/10.4324/9780429436956>.

¹⁶⁷ Agossou Arthur Blaise, and Raphael Diekstra. "Influence Of Music And Musical Education On Youth Development In France." *African Journal of Emerging Issues* 3, no. 9 (2021): 9-18. <https://www.ajoeijournals.org/sys/index.php/ajoei/article/view/230>

appropriate music is vital for adolescents because it influences them mentally.¹⁶⁸ To ensure that K-12 students benefit from these programs, teachers should consider various factors, such as the learners' preferences, artistic value, psychological needs, and the educational value of music.¹⁶⁹ Chen evaluates Maslow's hierarchy of needs and explains that music can meet students' psychological needs by relaxing and relieving stress.¹⁷⁰ It can also fulfill their social needs by enabling them to build strong interpersonal relationships. Additionally, music fulfills these young students' safety needs by fostering self-awareness and a sense of security. According to Gawel's study, music can fulfill one's esteem needs by enabling them to express themselves confidently and self-actualization needs by achieving their potential in creating and performing music.¹⁷¹

The aesthetic value of a particular music genre refers to its capacity to provoke an emotional and spiritual response. Previous studies show that music learning contributes to children's holistic development by equipping them with social, emotional, and intellectual skills.¹⁷² Educators are responsible for teaching music whose content offers high educational value to the learners. Another significant technique for creating a safe learning music

¹⁶⁸ Agossou Arthur Blaise, and Raphael Diekstra. "Influence Of Music And Musical Education On Youth Development In France."

¹⁶⁹ Feng Wang, and Sadaf Zeb. "Impact of music education on mental health of higher education students: moderating role of emotional intelligence." *Frontiers in psychology* 13 (2022): 938090. <https://doi.org/10.3389/fpsyg.2022.938090>

¹⁷⁰ Ibid.

¹⁷¹ Azita Emami, Töres Theorell, Hyejin Kim, Lars Berglund, Helena Hallinder, and Gabriella Engström. "Assessing stress using repeated saliva concentration of steroid hormones in dementia care dyads: results from a controlled pilot care music intervention." *Upsala Journal of Medical Sciences* 128 (2023). doi: 10.48101/ujms.v128.9340

¹⁷² Jian Sun. "Exploring the impact of music education on the psychological and academic outcomes of students: mediating role of self-efficacy and self-esteem." *Frontiers in Psychology* 13 (2022): 841204. <https://doi.org/10.3389/fpsyg.2022.841204>

environment is monitoring the music volume and content. Scholars argue that teachers should avoid exposing K-12 youth to songs that express negative emotions and elements like discrimination, hatred, and violence. According to Guhn et al., ensuring teenagers access positive and educative music genres is a collaborative effort between teachers, parents, and society. Since the home is a child's first classroom, parents and guardians should educate K-12 youth about the significance of listening to proper music at the right volume.¹⁷³

The teacher-student relationship influences learners' attitudes towards the music program and how much they benefit from it. Educators relate well to their students by providing opportunities to learn, create, and share music. A 2017 study by Foster et al. illustrates that these adolescents connect better with their music teachers when participating in festivals, performances, and ensembles.¹⁷⁴ According to Edgar, the teacher-student relationship helps to create a healthy learning space by challenging, inspiring, and motivating students to dedicate themselves to the lessons even when they become problematic behaviorwise.¹⁷⁵ Facilitative teaching is a term that Edgar uses to describe educators who implement positive teaching strategies to assist their students grow emotionally, musically, academically, and socially.¹⁷⁶ Those who intentionally create genuine relationships with each child and use the connection to

¹⁷³ Brian Kaufman, and Lawrence Scripp. *Music Learning as Youth Development*. 1st ed. New York, NY: Routledge, 2019. <https://doi-org.ezproxy.liberty.edu/10.4324/9780429436956>.

¹⁷⁴ Feng Wang, and Sadaf Zeb. "Impact of music education on mental health of higher education students: moderating role of emotional intelligence." *Frontiers in psychology* 13 (2022): 938090. <https://doi.org/10.3389/fpsyg.2022.938090>

¹⁷⁵ Li Chen. "Influence of music on the hearing and mental health of adolescents and countermeasures." *Frontiers in Neuroscience* 17 (2023): 1236638. <https://doi.org/10.3389/fnins.2023.1236638>

¹⁷⁶ Li Chen. "Influence of music on the hearing and mental health of adolescents and countermeasures."

motivate these adolescents and meet their learning needs also play a significant role in creating a healthy space for music education.

The theory of constructivism suggests that in a less teacher-led classroom, students commit themselves fully to learning and knowledge acquisition. Efgivia et al. demonstrate that music teachers' interactions with their students significantly influence the classroom atmosphere.¹⁷⁷ Lewis' study examined the relationship between autonomy support and students' development and well-being, music students need to hear words like safety and support to exhibit excellent performance in class.¹⁷⁸ Lewis also found that the responses from this survey also demonstrate that educators should make every learner feel valued by acknowledging their unique perspectives and helping them handle challenges in the classroom. Similarly, Suhendi discovered that students appreciate educators offering constructive feedback.¹⁷⁹ Teachers can also create warm relationships with their students and encourage them to commit to music courses by displaying a passion for music.

Fostering engagement in different music activities is the second approach to creating an emotionally safe environment for young music students. When teachers treat all students fairly, they motivate students to participate actively in classroom activities. According to Hendricks et al., skilled educators understand that every student is unique and interacts differently with the

¹⁷⁷ Agossou Arthur Blaise, and Raphael Diekstra. "Influence Of Music And Musical Education On Youth Development In France." *African Journal of Emerging Issues* 3, no. 9 (2021): 9-18. <https://www.ajoeijournals.org/sys/index.php/ajoei/article/view/230>

¹⁷⁸ Benjamin Bolden, Sean Corcoran, and Alana Butler. "A scoping review of research that examines El Sistema and Sistema-inspired music education programmes." *Review of Education* 9, no. 3 (2021): e3267. DOI: 10.1002/rev3.3267

¹⁷⁹ Kathryn Marsh, Catherine Ingram, and Samantha Dieckmann. "Bridging musical worlds: Musical collaboration between student musician-educators and south Sudanese Australian youth." *Visions for intercultural music teacher education* (2020): 115-134. <https://doi.org/10.1007/978-3-030-21029-8>

music learning experience.¹⁸⁰ For instance, some teenagers learn better in group performances, while others excel in solo recitals. These youth will likely enjoy the music program more if they feel valued despite their differences. Suhendi encourages teachers to perceive musical ability as a skill that students can develop through hard work.¹⁸¹ With this knowledge, learners also understand that they can thrive in music through effort and determination. Hendricks et al. mention that teachers can improve students' willingness to sharpen their music skills by praising learners for their progress and achievements in the music class.¹⁸²

Barriers to Provision of Music Education In K-12 Students

Researchers paying attention to the social and emotional benefits of music education to K-12 youth have discovered some barriers to the effective provision of music programs in these institutions. Crooke and McFerran argue that music teachers may create a curriculum that does not match the performance expectations.¹⁸³ The second barrier is the natural and perceived value placed on music programs. McFerran et al. explain how some schools do not pay attention to music as a subject or see it as necessary for raising students' grades in school.¹⁸⁴ The issue of funding often arises when school leaders and stakeholders fail to understand the importance of

¹⁸⁰ Azita Emami, Töres Theorell, Hyejin Kim, Lars Berglund, Helena Hallinder, and Gabriella Engström. "Assessing stress using repeated saliva concentration of steroid hormones in dementia care dyads: results from a controlled pilot care music intervention." *Upsala Journal of Medical Sciences* 128 (2023). doi: 10.48101/ujms.v128.9340

¹⁸¹ Ibid.

¹⁸² Brian Kaufman, and Lawrence Scripp. *Music Learning as Youth Development*. 1st ed. New York, NY: Routledge, 2019. <https://doi-org.ezproxy.liberty.edu/10.4324/9780429436956>.

¹⁸³ Kathryn Marsh, Catherine Ingram, and Samantha Dieckmann. "Bridging musical worlds: Musical collaboration between student musician-educators and south Sudanese Australian youth." *Visions for intercultural music teacher education* (2020): 115-134. <https://doi.org/10.1007/978-3-030-21029-8>

¹⁸⁴ Azita Emami, Töres Theorell, Hyejin Kim, Lars Berglund, Helena Hallinder, and Gabriella Engström. "Assessing stress using repeated saliva concentration of steroid hormones in dementia care dyads: results from a controlled pilot care music intervention." *Upsala Journal of Medical Sciences* 128 (2023). doi: 10.48101/ujms.v128.9340

these lessons. The financial issues interfere with the effective implementation of music programs, denying K-12 youth the chance to benefit.

Lack of actual or perceived value in the evaluative strategies of music assessments also prevents the effective incorporation of music teaching in the K-12 curriculum. Crooke and McFerran discovered that many learning institution shareholders do not expect learners to demonstrate their competence in music as defined in national educational standards.¹⁸⁵ Some leaders also fail to place any tangible value on music mastery or achievements, unlike literacy and numeracy. They also believe that music falls under the optional or filler subjects.¹⁸⁶ Walker also mentions that such schools lack a practical music provision policy, meaning they do not assess music achievements.¹⁸⁷ Based on this finding, K-12 youth will not benefit fully from music lessons and school leaders should understand the significance of this learning and implement a policy that facilitates music provision in their institutions.

Effective Designing and Administration of Music Programs

K-12 schools should meet several requirements when designing the music program to realize the curriculum goals. In his research on integrating social-emotional learning into the school curriculum, Ward proposes providing an appropriate learning environment with diverse equipment.¹⁸⁸ For instance, the classroom should have an open space big enough to

¹⁸⁵ Li Chen. "Influence of music on the hearing and mental health of adolescents and countermeasures." *Frontiers in Neuroscience* 17 (2023): 1236638. <https://doi.org/10.3389/fnins.2023.1236638>

¹⁸⁶ Benjamin Bolden, Sean Corcoran, and Alana Butler. "A scoping review of research that examines El Sistema and Sistema-inspired music education programmes." *Review of Education* 9, no. 3 (2021): e3267. DOI: 10.1002/rev3.3267

¹⁸⁷ Jian Sun. "Exploring the impact of music education on the psychological and academic outcomes of students: mediating role of self-efficacy and self-esteem." *Frontiers in Psychology* 13 (2022): 841204. <https://doi.org/10.3389/fpsyg.2022.841204>

¹⁸⁸ Ibid.

accommodate instructional equipment, singers, and choirs. Ward also mentions that an inclusive music program considers learners with special needs and from different cultures. The school should place and store the musical equipment and furnishings safely to protect the K-12 youth from hazards like slips and sharp corners while moving around or engaging in other activities. Location is an essential factor in designing a music instruction space. The designers should build the room acoustically isolated to prevent extraneous sounds from entering.

The administration of music programs significantly influences its success. In collaboration with the teachers, the school administration should consult and agree on factors like funding, size of the instructional space, and allocation of teachers.¹⁸⁹ They should also consider the classes' scheduling since the program cannot achieve its intended outcome if the school management assigns inadequate instructional time. Spacing the music classes adequately and regularly helps ensure sequential learning and skill development. Marsh et al. believe that reasonable class size is a crucial component of the school curriculum, which allows educators to administer instructions effectively.¹⁹⁰ An institution should not accommodate larger groups if it lacks additional teachers. Allocation of adequate funds to purchase learning resources and classroom materials can contribute to successful music learning among K-12 youth.¹⁹¹ Finally, parents, teachers, and school administrators should attend performances and rehearsals to show their continued support to the students.

¹⁸⁹ Li Chen. "Influence of music on the hearing and mental health of adolescents and countermeasures." *Frontiers in Neuroscience* 17 (2023): 1236638. <https://doi.org/10.3389%2Ffnins.2023.1236638>

¹⁹⁰ Agossou Arthur Blaise, and Raphael Diekstra. "Influence Of Music And Musical Education On Youth Development In France." *African Journal of Emerging Issues* 3, no. 9 (2021): 9-18. <https://www.ajoeijournals.org/sys/index.php/ajoei/article/view/230>

¹⁹¹ Agossou Arthur Blaise, and Raphael Diekstra. "Influence Of Music And Musical Education On Youth Development In France."

Conclusion

Music education in the K-12 curriculum is pivotal in promoting the holistic development of K-12 youth and impacting their social-emotional competencies in young students' lives inside and outside the school compound. Over the years, technological advancements have driven the evolution of music education in K-12 schools. Today, many of these programs are well-rounded and include digital resources and electronic instruments. Students who participate actively in music programs in their schools develop quality social and emotional skills that boost their academic performance and steer them to succeed in their future careers. Music education fosters the development of positive skills like self-awareness, self-regulation, emotional intelligence, self-confidence, and self-expression. Empirical evidence collected from recent studies shows that K-12 youth who receive music education perform better academically, are emotionally intelligent, and demonstrate the capacity to build healthy relationships with their peers.¹⁹²

Music education and training enable these young students to develop social, emotional, and cognitive skills. These students become more creative, attentive, and cooperative by singing, listening to different music genres, composing songs, or learning to play an instrument. Engaging in music programs enables these youth to interact well with their peers, teachers, and other community members. Learning to compose songs, attending concerts, and engaging in other music-related activities improves the participants' emotional intelligence, enabling them to handle positive and negative emotions maturely.

Several theories can help to explain the significance of music learning among young students. The social cognitive theory proposes that different interactive activities foster the development of strong social and cognitive skills. Through music, young students interact with

¹⁹² Li Chen. "Influence of music on the hearing and mental health of adolescents and countermeasures." *Frontiers in Neuroscience* 17 (2023): 1236638. <https://doi.org/10.3389%2Ffnins.2023.1236638>

their peers, teachers, and experts in this field, boosting their skills. According to the social theory of learning, experience is the best way to learn and master something. Additionally, the constructivist learning theory explains that besides receiving information from educators, students should engage in music programs to enjoy the benefits of music education.¹⁹³

Addressing the factors preventing the successful implementation of music programs in schools is an effective way to advocate for the holistic integration of music to support the comprehensive development of K-12 youth. Factors like discrimination, inadequate funds, and current legislation limit the accessibility and affect the efficiency of music programs. Schools should allocate adequate resources to music programs, hire enough teachers, build safe classrooms, and purchase the necessary instruments. Moreover, teachers should treat all students equally, regardless of their social, cultural, or economic background. Studies also advise these experts to allow K-12 teenagers to learn songs from different cultures and learn from different musicians to appreciate diversity.¹⁹⁴

The design and implementation of different facets of a school's music program determine its success. Educators should focus on creating safe spaces for music learning by regulating the music type and content their students access at school. The genres' educational value is equally important. Additionally, schools should assign adequate resources, including finances, teachers, and instructional equipment, to support the successful implementation of the program. They should also balance the number of students in each class for efficient learning. Creating a healthy

¹⁹³ Jian Sun. "Exploring the impact of music education on the psychological and academic outcomes of students: mediating role of self-efficacy and self-esteem." *Frontiers in Psychology* 13 (2022): 841204. <https://doi.org/10.3389/fpsyg.2022.841204>

¹⁹⁴ Ibid.

teacher-learner relationship motivates students to commit to and benefit fully from the learning process.

Chapter Three: Methods

Introduction

Quantitative research is an approach for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures.¹ The quantitative historical analysis is crucial for analyzing the correlation between music participation and emotional and intellectual outcomes in young learners between the first year of high school and matriculation into university. This study utilized quantitative analysis to examine data from structured secondary data collection methods. Secondary data from diverse county schools provided a rich history of academic information from their first year through high school to college matriculation. Secondary studies were identified according to their robustness, relevance, and application of integrated data collection strategies comprising interviews and surveys, facilitating the collection of comprehensive data regarding students' intellectual and emotional trends for effective analysis. Statistical strategies, such as descriptive statistics, correlational analysis, and multiple regression analysis, enable the identification of significant trends across collected data to demonstrate correlation among variables.

Design

Quantitative research designs often employ longitudinal data collection over time to examine the development of ideas and trends. Designs have also included elaborate structural equation models that incorporate causal paths and the identification of the collective strength of multiple variables. The final written report has a set structure consisting of introduction,

¹ John W Creswell. *Research Design : Qualitative & Quantitative Approaches*. Thousand Oaks, Calif. :Sage Publications, 1994.

literature and theory, methods, results, and discussion.² This study utilized a cross-sectional design to simultaneously assess the relationship between music participation and emotional and intellectual outcomes. The design promotes identifying relationships among selected variables and the correlational prevalence. Since inadequate information exists on the relationship between musical participation and emotional and intellectual outcomes in young participants, the correlational design allows the critical analysis amongst specific sub-elements of the research variables to establish the degree of correlation significance among intellectual and emotional outcomes with music participation.

Independent Variables

An independent variable is the variable manipulated, controlled, or varied in an experimental study to explore its effects. The independent variable in the study is Music Participation. Music Participation (MP) is measured by the number of hours spent learning, practicing, and performing music per week. Participation may be in and outside school, with or without parental involvement, but within the formal music curriculum. With the independent variable being the music participation, there can be clear path to directly see if there is any correlation of students gaining any positive benefits pertaining to enhanced cognitive matriculation.

Dependent Variables

A dependent variable is what is measured in the experiment and what is affected during the experiment. The dependent variable responds to the independent variable. The dependent variables in this study include Social Cognitive Outcomes (SCO) and Emotional Outcomes (EO). The Social Cognitive Outcomes will detail what percentage of students show social advantages

² John W Creswell. *Research Design : Qualitative & Quantitative Approaches*. Thousand Oaks, Calif. :Sage Publications, 1994.

based on their participation in music. The Emotional Outcomes will also detail student percentages based on participation in music regarding anxiety, self assurance, and depression. Both the Social and Emotional Outcomes are measured from Emotional Quotient Inventory results along with collected data from relevant peer reviewed sources.

Study Processing of Research

This study is carried out within the context of learners matriculating into university. The study will incorporate diverse secondary studies to enhance its generalizability and potentially identify how control variables, such as socioeconomic conditions and parental educational attainment, impact the correlation significance level among variables. The diverse approach also facilitates a wealth of academic data for learners who have musical experience and those without to strengthen finding generalizability. It also promotes examining how urban and rural settings may impact academic success due to access to musical programs and quality instruction.

Identifying the length of musical experience among learners is crucial in identifying long-term trends and dynamics for learners with long musical experiences. Reviewing existing music programs will help identify trends to provide a quality and uniform sample.

Questions and Hypotheses

Research Question One: What are the impacts of K-12 music education on student intellectual development?

Research Question Two: What are the impacts of K-12 music education on student emotional development?

Research Question Three: What are the impacts of K-12 music education on their academic matriculation?

Adults who participate in K-12 music education will report a positive impact on their social cognitive and intellectual development (SCO) and emotional development (EO) compared to those who did not participate in K-12 music education.

Participants

Collegiate adults in China engaged in K-12 music lessons will be assessed through previous research to assess their historical experiences. The population will be divided into adults with K-12 music education (Group 1) and those without (Group 2). Group 1 will be individuals who actively engaged and participated in music education programs during their K-12 schooling, which entails that they had to have belonged to a music group or class. Age was not a considered factor, but other factors involved socioeconomic backgrounds and level of music engagement. Group 2 will be composed of individuals that did not have any formal music education program during the K-12.

Setting

The setting of quantitative research is a controlled environment that includes the physical, social, or experimental context in which the research is conducted. This setting can include factors such as the location, time period, population, and environmental factors.³ All data collected in this research is from peer-reviewed sources that are public records online. The data has been summarized into a database to build a collective correlation based on prior research and surveys. The data will be used only for research purposes to find the correlation in the proposed research target.

³ John W Creswell. *Research Design: Qualitative & Quantitative Approaches*. Thousand Oaks, Calif. :Sage Publications, 1994.

Instrumentation/Data Collection Method

Quantitative research methodologies rely on two data collection models: primary and secondary sources. For the primary sources, this study will delve into historical curriculum documents based on two essential factors: they have the information to reveal the skill and concept of music education used in cultivating the students. The second primary source is the teacher manual and pedagogical texts, which provide essential information that offers insights into music education's ideal concepts and philosophies. The third primary source entails music students' performance at school and home to provide a window into intellectual and emotional engagement norms nurtured through music education. Additional data will be gathered from secondary scholarly sources by exploring academic literature. This discipline has a data pool, but this study focuses on historical music education. Besides, data will be collected from historically composed scholarly articles on music education practices between the established duration. The data will be gathered from participants selected through an online recruitment survey from research from prior studies. To assess the distinctions and impacts that happen because of music instruction on students' psychological well-being, a factual analysis is performed on information of students with and without music education. The review is completed utilizing SQL Server.

Procedures

This research began with a comprehensive historical analysis. The purpose of this analysis is to look into how music education affects students' performance in relation to their emotional and cognitive growth. This analysis was expanded to include all music course not just instrumental programs. This comparative analysis shows how many educational institutions are moving toward providing all students with a thorough music education and is a useful benchmarking tool. This comparative analysis is an essential resource for politicians,

administrators, and educators. It not only facilitates a better understanding of the changing dynamics within the field of music education but also aids in assessing the efficacy of instructional tactics and the effects of curricular changes. Teachers and legislators can make well-informed decisions that prioritize the varied needs and interests of students by looking at the enrollment figures and availability of traditional and nontraditional music courses. This will help to ensure that music education stays a vibrant and relevant part of the educational experience.

Data Analysis

The gathered data will be evaluated using two essential techniques: thematic and discourse analysis. Thematic analysis will be critical to this research project since it will highlight and evaluate the correlation between music education and students' intellectual and emotional development throughout history. Thematic analysis will be conducted based on a standard steps: the initial step entails familiarization, which involves analysis of the data sources, for example, reading and re-reading the historical sources, curriculum guides, and music students' performance regarding intellectual and emotional engagement. This phase entails identifying potential themes, critical contributions of these themes, gaps not addressed in these themes, and exciting passages.

The second phase entails assigning codes to data segments aligned with capturing relevant concepts aligned with music education and its impact on intellectual and cognitive development. This phase entails creating descriptive and analytical codes, which will be further assessed in the third phase, which involves searching for themes.

The third phase entails critically reviewing the codes and establishing potential themes from the keywords. The fourth theme entails refining these themes by ensuring they accurately align with the three research questions. The process aims to tabulate the data to limit incidences

of redundancy and differentiate their contributions. The fifth phase involves defining and naming the themes, which will align with the research questions they are addressing.

A concise, descriptive label will also be used to define and outline the essence of the information. The sixth phase entails weaving the identified themes into the research narrative, critically evaluating the contexts to illustrate each theme's support, and establishing a correlation between music and student development. Additionally, the thematic analysis will be tailored to address the specific correlation, for example, channeling all the attention on themes that explicitly connect historical music education practices with intellectual and emotional development. Also, sub-themes will be considered; for example, under intellectual properties, factors associated with enhanced cognitive skills, memory, and focus will be captured as subthemes.

The following analytical process entails discourse analysis, which is very powerful since it assists in evaluating the role of music education and how it was integrated into the academic curriculum. Discourse analysis goes beyond the thematic outcome: it explores and critically evaluates the language utilized based on specific social and historical contexts to establish meaning, power dynamics, and assumptions. For instance, this study aims to use Foucauldian discourse analysis, emphasizing the knowledge associated with producing and disseminating context through the discourse. This analysis entails analyzing historical documents based on the construct related to music curriculum in developing students' intellectual capabilities. The process involves identifying the ideas and voices represented and prioritizing intellectual development.

The research will explore the correlation between music education and student development based on the following three fundamental movements:

- a. Movement 1: Historical Narrative – Music Education on Intellectual Development among K-12 Students
- b. Movement 2: The Emotional Symphony – Music Education's Impact on K-12 Students
- c. Movement 3: Resonation with the Current – Music Education on Academic Matriculation

Summary

The quantitative historical analysis method aims to contribute towards a richer comprehension of the music education transition from past to present and its impact on the education sector, explicitly stimulating students' intellectual capabilities. It offers a means of understanding how music shaped well-rounded parents with intellectual curiosity and emotional intelligence among K-12 students. Through quantitative historical analysis research design, this study will aim to investigate the impact of music learning on students' academic achievements that are aligned with cognitive and intellectual development. This study analyzes students' success and motivational trends through matriculation from their first high school and college years. The primary purpose is to establish a correlation between music education, general academic success, cognitive development, and intellectual proficiency that can be used to aid in the advancement of music education as a whole.

Chapter Four: Results

Introduction

Music is an essential tool for developing cognitive, social, and academic capabilities in children enrolled in K-12 education. Music requires keen listening and grasping its core elements, including rhythm, harmony, texture, melody, tempo, dynamics, sound, and structure or form. Identifying the listed musical components and many others contributes to cognitive development because it fosters understanding and memory expansion. At the same time, children develop interpretation capabilities that they extend to other aspects of their lives inside and outside school. Also, music contributes to children's social life development because of the inherent lessons and the need to be with peers while listening, singing, dancing, and acting to the musical tunes and lyrics. Music elevates individual moods, leading to favorable social interactions. Positive cognitive and social impacts of music contribute to better academic performance among the K-12 students.

This chapter of the thesis aims to present the research findings on music and its contribution to cognitive, social, and academic performance. The research shows that teachers and other education contributors do not value music as much as other components of education because they relegate it to part of the extracurricular activities, however, music is a vital tool that transforms learners into excellent performers cognitively, socially, and academically.¹ Thus, it requires keen attention and integration into the K-12 education system. Even though the education stakeholders, including teachers, identify music as part of the extra curriculum, which

¹ Graham F Welch. "The Challenge of Ensuring Effective Early Years Music Education by Non-Specialists." *Early Child Development and Care*, July 16, 2020, 1–13. <https://doi.org/10.1080/03004430.2020.1792895>.

lessens its educational importance, music remains one of the crucial tools to improve K-12 children's cognitive, social, and academic capabilities.

Music Importance in K-12 Education and Challenges

Music is one of the undervalued components of the K-12 education system, but it contributes to better emotional, social, cognitive, and academic performance. The Mozart Effect hypothesis stresses the importance of listening to Mozart's music because it leads to improved cognitive capabilities.² For instance, children can recognize and memorize musical lyrics and participate in singing and dancing. In other instances, children act based on the musical content. The mentioned activities related to listening and interpreting music contribute to improved emotional, social, and academic performance. Singing, dancing, and acting involve peers, contributing to social and emotional well-being. On the other hand, musical memorization and interpretation develop cognitive skills.³ Therefore, music is a vital element of the K-12 education system, however, teachers and other stakeholders have yet to give it the attention it requires since it is only associated with extracurricular activities rather than essential learning features. With this being said, the following table shows the percentage of students that have the opportunity to participate in music education in the United States.

Table 1. Percentage of students able to participate in music in the US

	Percentage
Number of schools in US with Music Ed.	92%

² Deborah A. Arasomwan, and Nontokoza J. Mashiy. "Early Childhood Care and Education Educators' Understanding of the Use of Music-Based Pedagogies to Teach Communication Skills." *South African Journal of Childhood Education* 11, no. 1 (July 9, 2021). <https://doi.org/10.4102/sajce.v11i1.896>

³ Graham F Welch. "The Challenge of Ensuring Effective Early Years Music Education by Non-Specialists." *Early Child Development and Care*, July 16, 2020, 1–13. <https://doi.org/10.1080/03004430.2020.1792895>.

Number of students able to participate	50%
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Source: Wang, Linglu 2023

Teachers and other K-12 contributors fail to prioritize music and its social, emotional, cognitive, and academic benefits because of several barriers. Other challenges that prevent educators from prioritizing music are a lack of governmental and school administrative support and teaching work overload. Moreover, many teachers lack enough music books and premises or spaces where students can learn music and apply the lessons.⁴ The lack of necessary support and resources is the primary cause of the limited efforts to integrate music into the education curriculum.⁵ As such, the K-12 education system forfeits the social, emotional, cognitive, and academic benefits associated with music, however, the education system can gain from music lessons through proper implementation plans.

Music in K-12 Education System and Evolution

Music is an integral component of the K-12 education system, even though more disregarded than other educational features. From the toddler stage, children encounter music to learn more about social and environmental components. The core goal of education policy-makers to include music in the curriculum is to inspire learners to appreciate it and learn related skills, even without the goal of making it a career.⁶ Furthermore, the education sector includes music to enable students to understand diverse societal factors and issues. Via music, learners

⁴ Martin Guhn, Scott D. Emerson, Peter Gouzouasis. A population-level analysis of associations between school music participation and academic achievement. *Journal of Educational Psychology*, 2019; DOI: 10.1037/edu0000376

⁵ Ibid.

⁶ Agossou Arthur Blaise, and Raphael Diekstra. "Influence Of Music And Musical Education On Youth Development In France." *African Journal of Emerging Issues* 3, no. 9 (2021): 9- 18. <https://www.ajoeijournals.org/sys/index.php/ajoei/article/view/230>

learn about the political and social features of their local, state, and federal territories. At the same time, music teaches students about cultural and economic aspects of their society and the importance of contributing to their development.⁷ Music is, therefore, a necessary learning tool despite the lack of effort to take it seriously in education.

In the initial phases of music introduction in the K-12 education system, the objective was to enable children to develop appropriate identities and patriotism. Students participated in singing hymns and songs that emphasized the local, state, and national identities.⁸ This contributed to children developing identities that reflect the national ideals, however, technological and digital changes have influenced the education sector to embrace music as a subject, even though with limited zeal. Students can learn music as a subject to develop their mental, social, and emotional capabilities. Schools have choirs, bands, and studios to help children learn about music and gain from its lessons. Also, different musical genres are part of the curriculum, including Jazz and pop. Students learn music through imitation, composition, improvisation, and exploration.⁹ Expanding music lessons in schools guarantees learners gain from the lessons and apply them to their personal and academic lives.

Research Findings

The research queries sought to identify the benefits of music for children in the K-12 education system, therefore, the questions focused on the emotional and social benefits of the

⁷ María del Mar Bernabé Villodre. "Music education as a tool to improve socio-emotional and intercultural health within adverse contexts in El Salvador." *Procedia-Social and Behavioral Sciences* 237 (2017): 499-504.

⁸ Bryan Powell, Donna Hewitt, Gareth Dylan Smith, Beatrice Olesko, and Virginia Davis. "Curricular change in collegiate programs: Toward a more inclusive music education." *Visions of Research in Music Education* 35, no. 1 (2020): 16. <https://digitalcommons.lib.uconn.edu/cgi/viewcontent.cgi?article=1235&context=vrme>

⁹ Mary Katherine Strachan. "Social and Emotional Learning in the Elementary Music Classroom: A Teacher's Perspective." (2021). https://repository.belmont.edu/cgi/viewcontent.cgi?article=1004&context=music_theses

music for the children. Another factor explored through the research questions was emotional gains from music lessons. Other benefits included in the research questions were cognitive and education. The findings indicate that music cannot be underrated for its numerous gains for the students. Music guarantees children develop cognitively through musical content memorization and interpretation.¹⁰ Also, through musical instrument learning, children develop necessary skills that can be extended to other spheres of their lives. Emotional, social, and academic development are integral aspects of the music lessons. The findings about the importance of music are detailed, and the core reason is to encourage educators in the K-12 system to prioritize it like other subjects. Prioritization of music will lead to implementation and student-relevant skill development.

Emotional Implications of Music Education

Music influences students' emotions based on lyrics, melodies, and other content. Children listening to music and participating in singing, dancing, acting, and writing feel better about themselves, which improves their emotional well-being. Such children know how to control themselves in diverse situations.¹¹ Besides, the children improve their relational skills because they know when and how to express their emotions. This means that music improves emotional intelligence outcomes in students in the K-12 education system. Learners with adequate emotions and intelligence can read and comprehend others' emotional aspects and act accordingly. The students are more empathetic and communicate and collaborate with their peers

¹⁰ Jian. Sun, "Exploring the impact of music education on the psychological and academic outcomes of students: mediating role of self-efficacy and self-esteem." *Frontiers in Psychology* 13 (2022): 841204. <https://doi.org/10.3389/fpsyg.2022.841204>

¹¹ Michael E. Foster, and Jade V. Marcus Jenkins. "Does participation in music and performing arts influence child development?." *American Educational Research Journal* 54, no. 3 (2017): 399-443. <https://doi.org/10.3102/0002831217701830>

with significant understanding.¹² Thus, music lessons are crucial for developing children's emotional components and facilitating their relational intentions.

Other emotional benefits of music are self-confidence and better mental health statuses. Children participating in writing, singing, performing, and dancing music become more confident in their artistic skills. Musical equipment learning and mastery also influence children to believe in their unique talents and skills.¹³ The increase in self-confidence causes the students to focus on bettering other aspects of their lives. Besides, participating in music contributes to favorable mental health. Music makes the learners feel good, relate with others effectively, and build their confidence. Such outcomes are fundamental for maintaining healthy mental statuses among K-12 children.¹⁴ Mental health issues such as anxiety, stress, and panic attacks are non-existence because the children believe in themselves and feel better. Therefore, mental health and confidence building are relevant justifications for further implementation of music in the K-12 education system.

Communities benefit when children learn to control their emotions through music lessons. For instance, self-confident children who feel better about themselves and are emotionally intelligent will likely join their families, friends, and community members to participate in positive causes.¹⁵ Positive communal causes include visiting the homeless, planting

¹² Ana-María Botella-Nicolás, and Inmaculada Retamero-García. "Music education's contribution to the development of EI in adolescents and its effect on the gender variable." *Revista Española de Pedagogía* 82, no. 287 (2024): 14.

¹³ Li Chen. "Influence of music on the hearing and mental health of adolescents and countermeasures." *Frontiers in Neuroscience* 17 (2023): 1236638. <https://doi.org/10.3389/fnins.2023.1236638>

¹⁴ Beatriz Ilari, and Eun Cho. "Musical participation and positive youth development in middle school." *Frontiers in Psychology* 13 (2023): 1056542. <https://doi.org/10.3389/fpsyg.2022.1056542>

¹⁵ Laura Hamilton, and Betheny Gross. "How Has the Pandemic Affected Students' Social-Emotional Well-Being? A Review of the Evidence to Date." Center on Reinventing Public Education (2021). <https://crpe.org/how-has-the-pandemic-affected-students-social-emotional-well-being-a-review-of-the-evidence-to-date/>

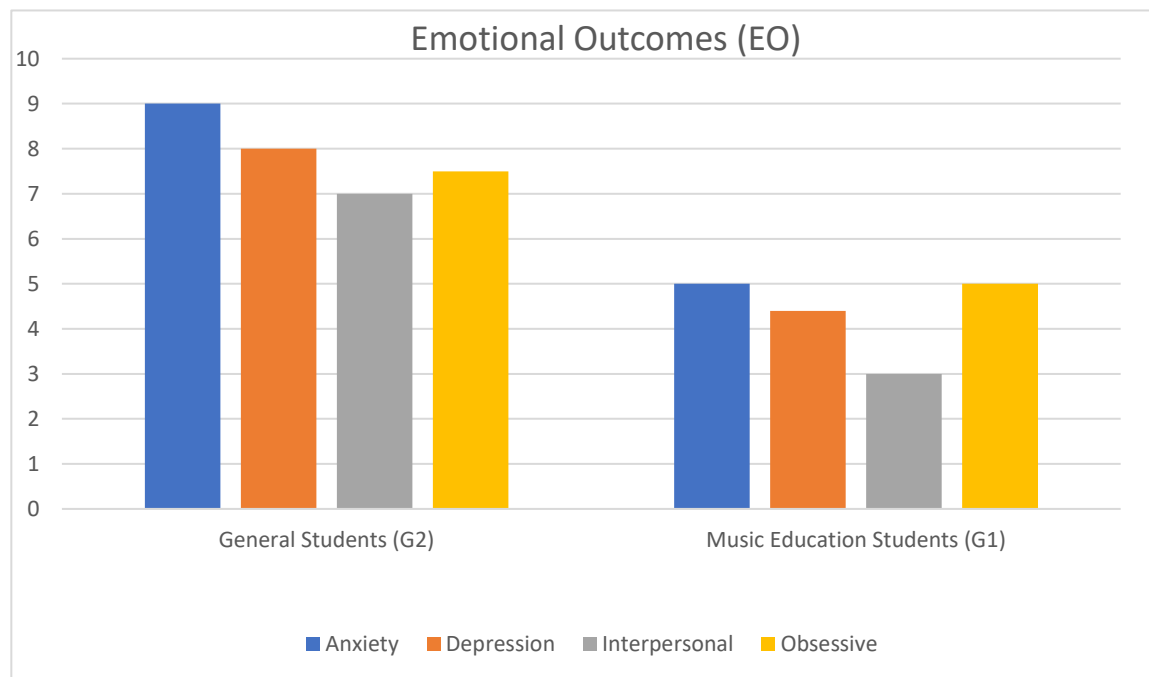
trees, marathons for healthcare benefits, and charity concerts. The kids are eager to be among those interested in noble causes because they can understand personal and others' emotions. The children are therefore confident in controlling their feelings and are empathetic when interacting and communicating with others. Moreover, it is easier for the students to deal with negative emotions, including disappointment, grief, and anger.¹⁶ The emotional stability from music lessons allows children to benefit their families and communities, meaning K-12 schools should implement music programs in their curriculum.

Xu Jun et al. made an interesting test which can be utilized for self-assessment in three perspectives: physical, mental, and social¹⁷. This study utilized two scales to survey 10,000 random college adults' emotional status and investigate their inward connections. Figure 1 below portrays a graphical portrayal of a correlation between students of music education background and general students utilizing four fundamental boundaries. These parameters are obsessive–compulsive, interpersonal, depression, and anxiety. As indicated by the emotional outcomes estimated by the figure, at statistically significant levels, general students are more likely to have psychological problems than music study students, and music major teaching has a more significant impact on student's mental health and overall psychological quality.¹⁸ This study was conducted by distributing questionnaires to 10,000 college students (5000 music learners and 5000 general students) in China. The results were synthesized using the SQL Server database and then analyzed.

¹⁶ Phil Mulle. Music with Children and Young People who have Social, Emotional and Mental Health Difficulties. Midlands Arts Centre. <https://network.youthmusic.org.uk/file/40581/download?token=Bfi0S4Pn>

¹⁷ Wang, Feng, and Sadaf Zeb. "Impact of music education on mental health of higher education students: moderating role of emotional intelligence." *Frontiers in psychology* 13 (2022): 938090. <https://doi.org/10.3389/fpsyg.2022.938090>

¹⁸ Linglu Wang. Exploring the influence of music education on the development of college mental health based on big data. *Soft Comput* 27, 17213–17229 (2023). <https://doi.org/10.1007/s00500-023-09209-2>

Figure 1. Emotional Outcomes

Emotional stability in children facilitates their future success because they do not fear to take and overcome challenges. The positive messages from music empower children to see life differently rather than as a collection of obstacles toward success. For instance, a song with a message about self-confidence and overcoming challenges influences learners to approach life positively.¹⁹ Therefore, educators and other interested stakeholders need to consider the lyrical

¹⁹ Amy Spray. The science of why music improves our memory and verbal intelligence. 2017.

content of the music they allow children to consume. It is the rational strategy to ensure music lessons empower students to gain confidence in facing life and overcoming life challenges. At the same time, children need to learn to compose positive music that can influence their peers positively.²⁰ Consequently, the K-12 learners improve their emotional stability and focus on building their personal, academic, and professional capabilities to contribute to local, state, and national development agendas, once they mature and graduate from school.

The emotional outcomes from music are the chief reasons educators prioritize the implementation of music in the K-12 education system.²¹ As indicated, music is part of the curriculum, but teachers and other contributing parties have not taken it as seriously as it should. The many challenges encountered when implementing music as part of the curriculum cause tutors and administrators to ignore or underrate it, however, the potential of music to improve children's confidence, emotional intelligence, and mental health status justifies its implementation.²² The school administrations can establish music as one of the core subjects in the curriculum through communication and collaboration with internal and external stakeholders. The local, state, and national governments are some of the relevant external contributors to music implementation.²³ The administrations provide legal guidelines and resources to accomplish the implementation goals.

²⁰ Mary Katherine Strachan. "Social and Emotional Learning in the Elementary Music Classroom: A Teacher's Perspective." (2021).

²¹ Ibid.

²² Galbraith GC, et al. Music Benefits Across Lifespan: Enhanced Processing of Speech in Noise Habibi et al. Childhood Music Training Induces Change in Micro and Macroscopic Brain Structure: Results from a Longitudinal Study, *Cerebral Cortex* (2017). DOI: 10.1093/cercor/bhx286

²³ James Hudziak, M.D. et al. Cortical Thickness Maturation and Duration of Music Training: Health-Promoting Activities Shape Brain Development. *Journal of American Academy of Child and Adolescent Psychiatry*, December 2014 DOI: 10.1016/j.jaac.2014.06.015 show

Social Implications of Music Education

Music teaches children to be self-aware to interact with others in different settings. As children listen to music, they learn their unique perceptions and tastes. Students also understand all that captivates them in their surroundings and reflect on them based on the musical content. The self-awareness influenced by music causes children to identify, accept, and regulate their emotions. Furthermore, self-awareness improves communication and collaboration skills. Since communication with others entails regulated emotions, anger, pride, hatred, and other negative emotions rarely interfere with socialization.²⁴ As such, students communicate and cooperate efficiently with others regardless of the situation.

Self-awareness from music leads to several other positive traits in children. For instance, the learners develop better leadership capabilities to guide others whenever necessary to accomplish specified objectives. The children are happier because they understand themselves and others and are reliable decision-makers.²⁵ All the cognitive, emotional, and physical self-awareness would be limited without the integration of music in K-12 education. Therefore, it is appropriate for teachers and administrators to prioritize implementing music education to help students develop self-awareness to accomplish personal, academic, and professional objectives.

Self-expression is another feature that develops whenever children receive music education. Self-expression is predicated on the following three essential components: literacy, perception, and language. Music entails reading and writing lyrics to compose an entire piece. As

²⁴ Márta Janurik, and Krisztián Józsa. "Long-Term Impacts of Early Musical Abilities on Academic Achievement: A Longitudinal Study." *Journal of Intelligence* 10, no. 3 (June 29, 2022): 36. <https://doi.org/10.3390/jintelligence10030036>.

²⁵ Martin Guhn, Scott D. Emerson, Peter Gouzouasis. A population-level analysis of associations between school music participation and academic achievement. *Journal of Educational Psychology*, 2019; DOI: 10.1037/edu0000376

a result, it contributes to the increase in literacy skills that can be extended to other spheres of life.²⁶ Likewise, music is about perception, meaning students perceive and listen to develop a specific understanding. This raises awareness about other people and their surroundings. Moreover, music includes specific language required by children to learn how to express themselves.

The music lessons improve self-expression because learners can learn from the composer how to regulate their emotions to improve communication with others. For instance, when children are excited, they listen to music with speed, rhythm, and tempo to express their happiness and joy. On the other hand, students listen to low-paced songs when they feel low, angry, or grieved.²⁷ The variation of music and emotional expression teaches learners how to manage their feelings. Consequently, the lesson application confirms the ability to weigh emotions to suit each situation and improve self-expression.

Cultural awareness is another lesson inherent in music education. Music reflects the prevailing culture and teaches listeners the core components. Therefore, when children listen to songs, they learn about their culture and help perpetrate it. For example, patriotic hymns and songs communicate to youngsters the importance of prioritizing their country and participating in its development.²⁸ Also, music teaches students to appreciate individual, group, and community ways of life without being judgmental. This contributes to peace and harmony inside and outside school because children know and understand the importance of diverse cultures in society.

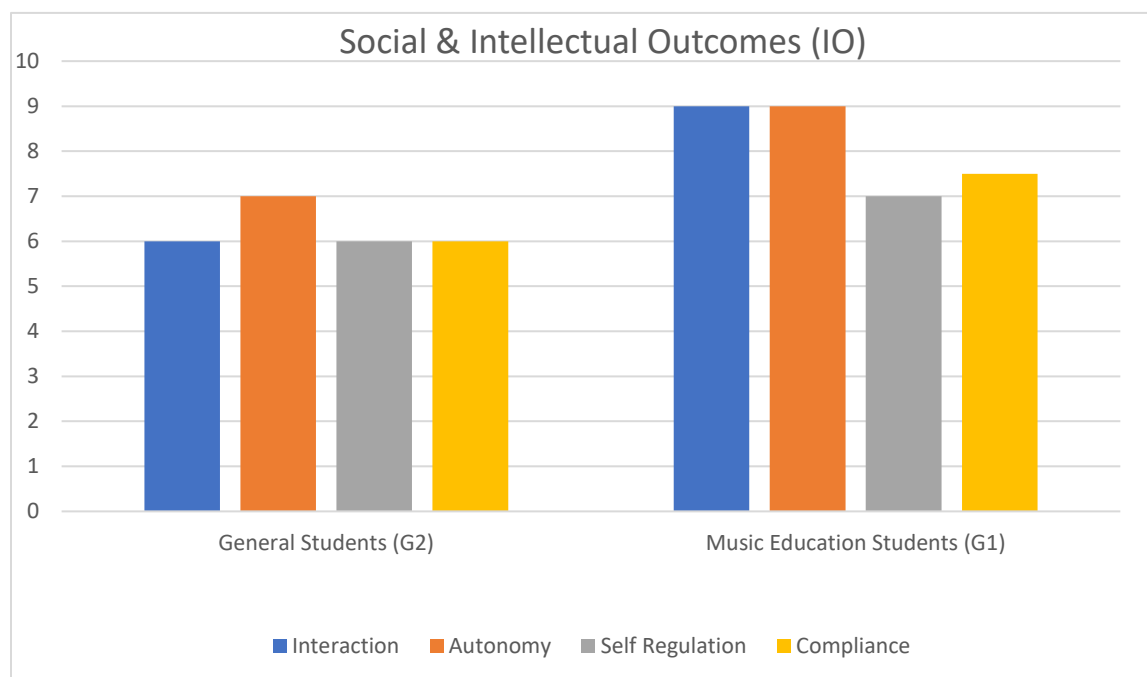
²⁶ Camille A. Farrington, Joseph Maurer, R. R. Aska McBride, Jenny Nagaoka, J. S. Puller, Steve Shewfelt,

²⁷ Michael E. Foster, and Jade V. Marcus Jenkins. "Does participation in music and performing arts influence child development?." *American Educational Research Journal* 54, no. 3 (2017): 399-443. <https://doi.org/10.3102/0002831217701830>

²⁸ Alexis Anja Kallio, Kathryn Marsh, Heidi Westerlund, Sidsel Karlsen, and Eva Sæther. "Introduction: The politics of diversity in music education." In *The politics of diversity in music education*, pp. 1-11. Cham: Springer International Publishing, 2021. https://doi.org/10.1007%2F978-3-030-65617-1_1

Based on the same assessment by Xu Jun et al., it was indicated by the social outcomes estimated by the figure, that students with musical background are more likely to have better social cognitive skills than student without it. See Figure 1 below.

Figure 1. Social and Intellectual Outcomes



Children appreciate diversity and avoid hurting each other based on ethnicity, race, and socioeconomic background when exposed to music that raises cultural awareness. For example, a song with racial and socioeconomic unity message influences children to appreciate one another and focus on integration rather than social segregation. When listening to such songs, students can hold hands and sing along if they know the lyrics.²⁹ Such a simple activity facilitated by

²⁹ Kelly A. Parkes, Joshua A. Russell, William I. Bauer, and Peter Miksza. "The well-being and instructional experiences of K-12 music educators: Starting a new school year during a pandemic." *Frontiers in psychology* 12 (2021): 701189. <https://doi.org/10.3389/fpsyg.2021.701189>

music improves children's cultural awareness and understanding of diverse populations sharing similar spaces and facilities.

Peer social integration happens better when K-12 system students receive music education. Children communicate and collaborate with their peers when listening to music. The activities to improve interactions include singing and dancing together. Also, the learners imitate the images they see in the music videos to improve social integration.³⁰ Other activities could be composing and memorizing the lyrics from the songs the children hear. In other cases, learners become best friends when they play musical instruments in the same band or choir. Music lessons are thus imperative for integrating children and fostering their relationships.

Teachers allow children to cooperate during the music lessons. The cooperation influences the learners to identify each other as friends and be willing to help whenever needed. The implication of such social settings is improved social relationships between children. The same attitude is taken to families and communities after school. Therefore, educators must identify and promote music education as one of the core factors of uniting children socially.³¹ This eliminates the inherent social injustices and prejudices afflicting most adult world because children teach the importance of unity and social relationships through music lessons.

Teamwork is another benefit of music lessons because children coordinate to accomplish the learning goals. The lessons may require children to role-play to match the musical lyrics. Hence, individuals learn and understand their specific roles without forgetting how their

³⁰ Daniel Hellman. "Social Emotional Learning (SEL) in Schools and Music Education: Implications for Music Education." In ISME Commission on Policy: Culture, Media and Education Virtual Conference, p. 89. 2020. https://artsedsel.org/wp-content/uploads/Social-Emotional-Learning-in-Schools-and-Music-Education_-Implications-for-Music-Education.pdf#page=96

³¹ María del Mar Bernabé Villodre. "Music education as a tool to improve socio-emotional and intercultural health within adverse contexts in El Salvador." *Procedia-Social and Behavioral Sciences* 237 (2017): 499-504.

characters affect those of others.³² Children understand from the settings that teamwork is the key to achieving and meeting the requirements of the lesson. The spirit of teamwork is then internalized, and children continue to have the same attitude, even with their families and community members outside the class. Another opportunity that teaches learners about teamwork in music lessons is choir or band.

In a choir or music band, children may assume the role of singers, choir masters, instrumentalists, and technicians. The diverse roles in the choir influence children to understand the importance of listening to each other and learning to collaborate to achieve the musical goal.³³ The learners are encouraged to be better team players with the success of their music band or choir. Thus, teachers should ensure the learners prepare adequately before cooperating to actualize a performance. The practice can take days or weeks, but the goal is to confirm to children that teamwork guarantees individual and group success. Moreover, each unique talent is essential to teamwork and overall objectives.

Music education has numerous benefits, including the cultivation of self-discipline. Activities involved in learning music entail listening, memorizing, composing, singing, dancing, and acting whenever necessary. Such activities guarantee that K-12 education students develop self-discipline and become faster and more efficient learners.³⁴ Likewise, learning musical

³² Agossou Arthur Blaise, and Raphael Diekstra. "Influence Of Music And Musical Education On Youth Development In France." *African Journal of Emerging Issues* 3, no. 9 (2021): 9- 18. <https://www.ajoeijournals.org/sys/index.php/ajoei/article/view/230>

³³ Martin Guhn, Scott D. Emerson, Peter Gouzouasis. A population-level analysis of associations between school music participation and academic achievement. *Journal of Educational Psychology*, 2019; DOI: 10.1037/edu0000376

³⁴ Agossou Arthur Blaise, and Raphael Diekstra. "Influence Of Music And Musical Education On Youth Development In France." *African Journal of Emerging Issues* 3, no. 9 (2021): 9- 18. <https://www.ajoeijournals.org/sys/index.php/ajoei/article/view/230>

instruments and coordinating with colleagues contribute to developing discipline that can help students while in school and after graduating. Students must be keen to perfect the required skills when learning musical instruments. All these activities instill self-discipline because students understand the importance of diligence during the lessons.

Since music lessons require students to present to the audience occasionally, they must observe all the details and guidelines necessitated for higher performance. For instance, learners are keen to understand musical instructions to avoid making unwarranted mistakes. Equally, students report to rehearsal or concert halls on time to mitigate inconveniences to their colleagues and teachers.³⁵ If the choir or the music band must wear uniform or matching costumes, all the members must adhere to the guidelines. Again, all the listed activities and requirements influence students to foster self-discipline, which informs the need to support the proper implementation of music lessons in the K-12 education system.

Music Education Effects on Cognitive Capabilities

Music education contributes to the development of cognitive capabilities in K-12 education students. The capacities consist of thinking, listening, learning, and understanding. Others are questioning justification and attentiveness. The music lessons add to all the mentioned cognitive capabilities. As an illustration, children listen to music and think about the meaning of the lyrics, leading to understanding.³⁶ In other instances, children compose music, facilitating the growth of their memories and their attentiveness to details. Therefore, music is an essential tool

³⁵ Khaldoun Abou Dargham. "Teachers' Perceptions of the Factors that Challenge and Advance Music Education in K-12 Schools: A Qualitative Study in Lebanon." (2024). <https://fount.aucegypt.edu/cgi/viewcontent.cgi?article=3308&context=etds>

³⁶ Deborah A. Arasonwan, and Nontokozi J. Mashiy. "Early Childhood Care and Education Educators' Understanding of the Use of Music-Based Pedagogies to Teach Communication Skills." *South African Journal of Childhood Education* 11, no. 1 (July 9, 2021). <https://doi.org/10.4102/sajce.v11i1.896>

teachers and other school stakeholders can apply to enable cognitive development and inherent benefits to children.

Creativity is another crucial aspect of the cognitive capabilities that music education helps develop. Children create their creative minds as they write music, explore the lyrics and melodies, and improvise musical content.³⁷ This is characterized by their higher level of innovation and generation of music-related ideas. The same innovative attitude is extended to other parts of students' lives, leading to excellence inside and outside the school. Therefore, educators ought to cite creativity, enabled by music lessons, as one of the core reasons music lessons need to be part of the curriculum in the K-12 education system.

Music Education Effects on Academic Performance

Music education helps students improve their academic performance. Learners develop logical thinking through listening to music and participating in inherent activities. For example, children learn to begin a composition with an introduction before developing the body and concluding.³⁸ Also, the students gain mathematical skills because music or songs can be used to count from one to ten or one or more. Spatial intelligence develops if learners appreciate music and focus on understanding all its core elements. The impacts of music training on the brain are fundamental to better academic performance.

Music affects the part of the brain that receives and stores verbal information. This section of the brain accesses verbal information and develops verbal memory to help individuals

³⁷ Almlund, M., Duckworth, A. L., Heckman, J. J., Kautz, T., 2011. Personality psychology and economics. In: Hanushek, E. A., Machin, S., Woessmann, L. (Eds.), *Handbook of the Economics of Education*. Vol. 4. Elsevier Amsterdam, pp. 1–181. Andersen, P. L., Hansen, M. N

³⁸ Alexis Anja Kallio, Kathryn Marsh, Heidi Westerlund, Sidsel Karlsen, and Eva Sæther. "Introduction: The politics of diversity in music education." In *The politics of diversity in music education*, pp. 1-11. Cham: Springer International Publishing, 2021. https://doi.org/10.1007%2F978-3-030-65617-1_1

recall and use words. As individuals consume music, the recall and storage parts of the brain develop to accommodate more information.³⁹ As a result, it is easier for learners to learn other subjects, including science, math, geography, and social studies, because they have enough recall memory. This fact about music education and brain development justifies the efforts of educators and other education contributors to provide adequate resources to improve music education and academic performance.

Music education expedites children to develop problem-solving skills. It requires the learners to pay attention to every musical detail and identify potential shortcomings. For instance, students can listen to each other sing point where mistakes appear and suggest the best way to eliminate the errors. Such opportunities allow children to develop problem-solving skills. As a result, the same capabilities are used to solve academic challenges.⁴⁰ The learners focus on math and other subjects to identify areas to improve. High academic performance is guaranteed the more the children practice locating and solving academic problems.

The other skill developed apart from problem-solving is critical thinking. In music education, learners analyze music objectively to make appropriate judgments about it. The evaluation may include genre, lyrics, melodies, beats, and rhythm. In the case of music videos, children observe characters and improvise or imitate them.⁴¹ The activities influence learners to develop critical thinking, one of the skills necessary for improving academic performance. Children think critically when learning another subject because music education sets a relevant

³⁹ Habibi et al. Childhood Music Training Induces Change in Micro and Macroscopic Brain Structure: Results from a Longitudinal Study, *Cerebral Cortex* (2017). DOI: 10.1093/cercor/bhx286

⁴⁰ Amy Spray. *The science of why music improves our memory and verbal intelligence*. 2017.

⁴¹ Michael E. Foster, and Jade V. Marcus Jenkins. "Does participation in music and performing arts influence child development?." *American Educational Research Journal* 54, no. 3 (2017): 399-443. <https://doi.org/10.3102/0002831217701830>

foundation. Thus, music education is necessary to guarantee better academic performance among K-12 education learners.

Potential Solutions

The research findings confirm that once implemented properly in the K-12 education system, music education leads to favorable emotional outcomes. Music education contributes to better cognitive, social, and academic performance. Therefore, it is rational to overcome the barriers associated with establishing music lessons in the K-12 education curriculum. The stakeholders must overcome challenges are limited resources, lack of teacher music specialization, non-inclusion of music as a curriculum subject, and lack of inclusion and diversity.⁴² Overcoming the challenges will enable the K -12 education stakeholders to establish music education to help learners improve their emotional stabilities, leading to better social, academic, and cognitive outcomes.

The implementation of music education begins with communication and coordination between internal and external school stakeholders. Teachers, education agencies, and the local, state, and federal governments coordinate to establish music education as part of assessable subjects and with the potential to open career opportunities for learners.⁴³ Besides, the cooperation enables the involved parties to determine the resources required to establish music as a curriculum subject. The resources must be adequate because music teaching requires

⁴² Daniel Hellman. "Social Emotional Learning (SEL) in Schools and Music Education: Implications for Music Education." In ISME Commission on Policy: Culture, Media and Education Virtual Conference, p. 89. 2020. https://artsedsel.org/wp-content/uploads/Social-Emotional-Learning-in-Schools-and-Music-Education_-Implications-for-Music-Education.pdf#page=96

⁴³ Navarro Ramón, Laura, and Helena Chacón-López. "The Impact of Musical Improvisation on Children's Creative Thinking." *Thinking Skills and Creativity* 40 (June 2021): 100839. <https://doi.org/10.1016/j.tsc.2021.100839>.

professional teachers, enough classroom space, equipment, and costumes for choirs and music bands. Availing the required resources will quicken the implementation to allow children to benefit from music education emotionally.

The implementation plan ought to comprise the efforts to assess each learner to guarantee learning opportunities for all. In other terms, teachers and other stakeholders need to adhere to laws such as the “No Child Left Behind Act” to eliminate prejudices and discrimination against children with disabilities and those from underprivileged backgrounds.⁴⁴ This can be accomplished through the public referral units (PRUs) or centers assigned to enroll special case students and allow them to learn music effectively. An example of the PRUs is the Miami Music Project, which gives children from limited socioeconomic backgrounds and those with disabilities an opportunity.⁴⁵ The music centers run concurrently with music education in schools to ensure each interested child gets the opportunity to learn music and improve their emotional, social, cognitive, and academic statuses.

Summary

Though music education can be underrated in the K-12 education system at times it can transform students emotionally, socially, cognitively, and academically. Music entails listening, composing, singing, dancing, acting, and playing musical instruments. All these activities contributed to learners’ emotional stability, leading to favorable social, cognitive, and academic implications. Thus, the education stakeholders need to cease underrating music education and

⁴⁴ Paula Tallal, The Salk Institute for Biological Studies, La Jolla, CA, and accepted by the Pestana, Ginette. “Preparing Preservice Early Childhood Educators to Use Music in Australian Settings: An Audit of Programmes.” *Australasian Journal of Early Childhood* 47, no. 1 (December 7, 2021): 1836939121105666. <https://doi.org/10.1177/18369391211056669>.

⁴⁵ Inkeri Ruokonen, Mari Tervaniemi, and Jyrki Reunamo. “The Significance of Music in Early Childhood Education and Care of Toddlers in Finland: An Extensive Observational Study.” *Music Education Research* 23, no. 5 (August 11, 2021): 1–13. <https://doi.org/10.1080/14613808.2021.1965564>.

recognize it as one of the relevant subjects for K-12 education students. This will influence communication and cooperation to raise resources necessary for implementing music education. At the same time, the music education implementation requires consideration of underprivileged students and those with disabilities. All learners, regardless of their race, ethnicity, and socioeconomic background, ought to benefit from music lessons to improve their emotions and other essential aspects of prospering in life.

Chapter Five: Conclusion/Discussion

Summary of Study

This research aimed to establish the effects of music on the schooling of learners in the K-12 program emotionally and intellectually. It offered a clear synthesis proving that music education improves students' development by integrating various theories and research data. Music education is classified under activities like listening, composing, singing, dancing, acting, and playing instruments, which help in students' emotional stability. This stability manifests itself in positive social, cognitive, and academic consequences, however, music learning is underestimated in schools K-12, and in this regard, the priorities need to be reconsidered by educational players. There is a call for equity in the dissemination of music, notably among minority students based on race, ethnic background, or even low-income families. This research adopts a cross-sectional research design and concludes data collection at one particular point to investigate the correlation between music engagement and students' achievement.

The primary purpose of the research is to find a link between music engagement and the affective and cognitive consequences of learners from the first year of secondary education to university enrollment. The study aims to discover other salient features and relations that will help justify why music should be taught; this is because social cognitive, constructivist learning, and self-esteem theories influence the prospect of change. These frameworks assist in explaining how aspects of students' development are affected by music education. The social cognitive theory further describes how observation of other students in musical activities can impact learners' behaviors and perceptions and assess their abilities in social learning. The constructivist learning theory framework helps affirm the notion that students engage themselves in music to enhance their understanding and, hence, definitely retain knowledge. Self-esteem theory

transmits that music education transforms students' self-esteem and confidence and thus affects their academic and social lives.

Summary of Findings and Prior Research

Among the issues that emerged as having a positive correlation implicating music education, one pertinent issue concerns students' social development. Thus, group performances, participation in ensembles, and music creation work together to promote unity and cooperation among learners. All these activities call for students to cooperate to achieve set goals, effectively improving their communication and collaboration. Playing musical instruments enables the learners to grow in self-actualization and emotional intelligence. By engaging in different types of music creation, like writing and performing, learners are privileged to express their feelings and channel them into understandable messages, which, in essence, enhances their communication skills. These courses ensure individual and interpersonal relationships but also academic and career achievement. Music education diversifies the student's contact with different types of music and traditions of various countries and helps develop cultural tolerance and respect for others. It allows students to minimize prejudice; those exposures widen students' vision of accepting a more accommodating school environment. One of the tendencies outlined in the literature was the positive effect of music education on multiculturalism and respect for differences. Involvement in musicals, choruses, bands, and orchestras improves friendships and, therefore, enhances the social interconnection among learners.

The advantages linked to the educational effect of music are numerous. Music can offer numerous chances for students to succeed and earn a reward for that success. Learning the problematic segment of a given score, giving a concert, or getting feedback from fellow students or teachers transposes a student into a confident performer. Higher self-esteem has been

associated with better grades, higher coping abilities, and more positive ways of facing life.

Music enhances students' emotional literacy as they learn to observe their emotional selves and those of others. Learning and performing music also educates people on the various critical aspects of life, such as patience, perseverance, and even resilience. Part of what one learns in school includes knowing how to handle disappointments and difficult moments, which is good for one's psychological well-being.

Music education significantly affects perceptual-cognitive abilities; in particular, various intellectual skills crucial for learning are improved. One positive effect of music education is that students are likely to improve their grades and tests and even increase their achievements in general. This is partly due to the fact that music education fosters specific skills of general applicability in other subject fields, as well as in reading, mathematics, or languages. Music can be enjoyed as a performance through playing an instrument, singing, dancing, and other activities; this entails using creativity, analysis, and critical thinking. Problems, decisions, essential processes of thinking, and skills attained aurally, orally, and in writing through composing, improvising, and performing music can be learned by students. It positively affects concentration since students must memorize specific melodies, juggle between many pieces simultaneously, and listen to instructions and other students' performances. They form important components of understanding that are used effectively in every discipline and help the development of intelligence.

Teaching music is associated, nonetheless, with specific difficulties regarding its integration into the curriculum and making it as accessible as possible for all learners. Unfortunately, due to the differences in socioeconomic status, schools with less privileged students are left with limited chances to learn music education. Children attending school in poor

neighborhoods: schools in poverty-stricken regions may not have the necessary financial backup and the infrastructure for quality training and education in music, and children from such backgrounds are likely to encounter other problems that make them unable to participate in musical instrument training and private lessons. Thus, the research raises important considerations regarding the importance of designing measurable policy and practice frameworks that aim at offering free and equal access to musical education for children with diverse socioeconomic statuses. Music education is also most useful for learners with a disability. It has therapeutic and developmental relevance to learning, yet these students face various barriers, such as limited access to adapted programs, teachers' inadequate preparation in working with such children, and physical inaccessibility.

The findings of this study support previous research that underlined the importance of music education for students' development in social, emotional, and intellectual aspects. Previous studies have also revealed that students score better in social skills, cooperation, and cultural and public awareness after taking music lessons. This can range from an increase in self-confidence to a decrease in anxiety and emotional intelligence. The positive influence of music instruction on learners' cognition is well documented by research highlighting the gains in areas including but not limited to spatial-temporal learning, language acquisition, and self-regulation skills. Music education has positively affected children's neural functioning and brain development, thus improving learning outcomes. As described by scholars, the diversification and integration of music education more and more often focus on the problem of systemic approaches in the development of various models of learning management.

Limitations

The study's limitations consist of the use of secondary data, cross-sectional research design, and difficulties connected with the generalization of the outcomes. The research involves collecting secondary data by using questionnaires and developing quantitative historical research from the selected schools within the counties. Thus, despite the numerous benefits of secondary data analysis, including reduced cost and availability of large data samples, the method is not without limitations. On the weakness of the secondary data, the following is the conclusion based on the literature review: mental health secondary data may be characterized by the following data quality problems: missing values, data inconsistency, and data inaccuracy. These problems impact the validity and reliability of the results generated by the research studies.

In the case of this research, the researcher was not involved in acquiring the data and, therefore, cannot confirm the validity and timeliness of the data. Secondary collected data might not contain details about students' experience with music in school. For instance, information regarding the forms of music undertaking, the extent of the engagement, and the views and interests of learners are usually not revealed in architectures of external sources. This lack of specificity greatly hinders the depth of analysis that can be achieved and, thus, conclusions that are not so restrictive. The secondary data adopted by the study might be somewhat expired, thereby exhibiting conditions and practices in education from previous years. Since contextual and policy changes occur in an institution for a certain period, the obtained results may not reflect the current situation. This temporal disconnection may lead to applying the study's findings to today's educational environments.

The type of research design used in the study is cross-sectional because data is collected simultaneously. This design is helpful for locating associations or trends, although it has

substantial drawbacks. A cross-sectional study is also limited by the inability to establish causality relationships due to the data collection and analysis timeframe. Therefore, although the given study can establish relations between music participation and students' results, it cannot be claimed that music education leads to these results. The causal relationships and the temporal effects of music education on development should require a longitudinal design in which the individuals are followed over time. Several environmental factors affect the connection between music education and students' performance. In separate studies, it was noted that the amount of home support realized by the child and family socioeconomic status strongly determines students' involvement in music and, more generally, human development. Thus, the study might not have considered these external influences that could vibrate the observed relationships. It is also worth stating participation in other extracurricular activities like sports and art activities may also impact students' development. There is a possibility that the study will not separate these effects with much clarity because it is difficult to isolate the impact of music education alone.

Cross-sectional research is merely a study of a given time. It is not very helpful in establishing the developmental process of music education, let alone the potential impacts. For instance, the short-term employable values for music learning, as seen in the research, may not tally with long-term effects on students' lives. Longitudinal studies are needed to portray these development trajectories and give insight into the long-term advantages of learning music. Another consideration is the level of generalizability of the results obtained in the course of the study.

The major limitation of the study is that it deals with specific county schools, and therefore, some results may not apply in other settings. Differences in resources available at the school site, students and families, and local education contexts can affect the outcomes of music

instruction, hence, the study results may not apply to other schools with different characteristics, such as schools located in urban areas, schools with different funding for music curriculum, or schools with different cultures supporting music education. The study may also have inadequacies in terms of the cultural and socioeconomic diversity of the student population. The use of music education can have different meanings and issues raised in different cultural and socioeconomic realities.

Several education policies and strategies concerning music education might differ in some aspects between one locality and another. This means that the methods used to teach the subject, the curriculum, the qualifications of the teachers, and the funding for the programs can affect music education. Therefore, the study's implications may not hold true for areas with disparate policies on education. Another shortcoming is the methodology of the research and the instruments for outcomes assessments. Some of the instruments used to record the results relating to students' emotional, social, and cognitive progress may be questionable regarding validity and reliability. The results can be threatened if the measures do not operationalize the constructs they are assumed to measure. It is important to make sure that the evaluation tools used are reliable and validated for the purpose. There are some drawbacks related to the used measure if the study is based on the students' or teachers' self-report data, which can be affected by such bias as social desirability or recall bias. Students would give results that overestimate their involvement or what they stand to gain from music education. At the same time, teachers might be compelled to provide results that portray their teaching in a positive light. Music education implies activities and methodologies within a comprehensive set of programs, including instrumental lessons on ensuring, choral singing, and music theory.

Recommendations for Future Study

The current study offers a good platform from which one may appreciate how music education enriches K-12 students' psychological, sociological, and curricular well-being, however, several limitations and gaps noted in the research indicate areas through which future studies can be conducted to improve what is currently known, and that was exhibited as follows. The following recommendations are intended to chart a course for the next series of research endeavors to advance the findings made in this study and offer improved and inclusive information concerning music education. Further research should be done on the prospective research to provide detailed and long-term effects of music education on students. While cross-sectional studies may help point out correlation in a specific period, longitudinal studies can demonstrate how consistent students' exposure to music education modifies their behaviors progressively. More research studies need to be conducted longitudinally from early elementary to high school to assess the impact of students' musical learning in various cognitive, social, and emotional domains. This will aid in distinguishing between the capacity of the nutrients to further improve on the benefits recorded in short-term studies or reduce them as the long-term effects reveal, therefore, researchers should focus on assessing as many variables as possible, such as academic achievements, interpersonal skills, students' psychological well-being, and various cognitive functions, to comprehend musical activities comprehensively' uses.

It is also recommended that future studies recruit demographically diverse participants drawn from a range of institutions to increase the generalizability of the obtained results. Moreover, there should be the inclusion of students from diverse SES (socioeconomic status), race and ethnic groups, and regions. Efforts should also be made to examine how music education affects particular groups, such as those from families with low incomes and students

from rural academies. It also constitutes an area of concern for future research on the experiences and achievements connected with music learning of students with disabilities. This entails discovering the particular gains and sources of difficulty the inhabitants have and designing versatile courses to improve engagement.

Further research should use systematic approaches to gather data to understand the experiences of students in music education to the fullest extent. The use of questionnaires can be complemented with interviews, focus groups, and case studies that will offer more extensive data about students' attitudes toward music classes and personal experiences regarding those classes. Education stakeholders can use this to highlight attributes that facilitate students' participation and achievement in music lessons. The results of the impact of music education should be gathered from multiple data sources, including the reports from students themselves, teachers, and documents such as academic transcripts.

These future studies should expound on the moderator variables that determine the degree of association between music education and students' achievements. Whether or not it directly states hypotheses, questions like exploring how the quality of instructional music and teacher-student interactions affect the outcomes resulting from learning music can be helpful in enhancing the learning process. Future studies should focus on parents' interactions with their children regarding musical experiences. The information about which family and home factors influence students' learning activities and achievements can help elaborate on how to increase parental support.

Research areas should examine the effectiveness of implementing music across the curriculum and with specific content like mathematics and language arts in students' learning and development. This may enable the determination of ways to improve the benefits of music

education across the different disciplines. Further studies should examine the effects of educational policies and financing on the opportunities for musical instruction. This involves analyzing the policies on such aspects as curriculum content, standards of qualifications for teachers, and resources. Future studies should compare how funding influences penetrations of music learning within low-income and minority-deprived groups. Thus, understanding the major approaches to funding and determining how resources can be allocated fairly are crucial for providing students with quality music teaching.

More research should be done on how new technologies can be incorporated into improving music teaching and learning. Considering the possibilities of online platforms for music education, digital musical instruments, and virtual learning settings, it is possible to understand how technological advances can contribute to and enhance the students' opportunities to learn music. Future studies should investigate the effectiveness of blended learning incorporating face-to-face and online learning on learners' performance in music programs. The presented information enables knowing the strengths and weaknesses of these models and contributes to creating an efficient and sensitive educational program. Further research to provide a more detailed picture of the effects of music education on K-12 students and the ways to strengthen them can consider the mentioned recommendations. Continuity of research, large and diverse population samples, assortment and integration of data collection methods, analysis of variables that mediate or moderate relationships, examination of policies and funding sources, and the identification of technological advances are more steps toward improving the music education discipline and providing all students with this powerful asset.

Implications for Practice

Music education has also been proven to enhance the student's social adjustment, thus providing a positive spin to its inclusion in the K-12 curriculums. Teachers and government officials should do all they can to maintain music classes should focus on group forms of dancing like choir, band, and orchestra. Such programs help develop collaboration, interpersonal relations, and social responsibility among persons in learning institutions. Schools need to implement ensemble performances, combined compositions, and group rehearsing and performing schemes. These activities not only help in sharpening the musical skills of a student but also help develop social behavior such as sharing, commanding, and showing concern. Music educators should ensure the curriculum addresses a variety of musical styles as well as the cultural sensitiveness of music. By taking students through different modes of music presentation, the schools will be able to instill tolerance in the learners regarding diversity.

Emotional traits, including confidence and feelings, make musical classes essential for students' development, indicating that music programs are valuable for students' welfare. Educationists should embrace musical education as a learning facility that supports children's emotional well-being. Musical professionals should offer students class performances and let them demonstrate their skills. The students can boost confidence when performing, playing, or singing in public shows like performances, recitals, and school concerts. Schools should incorporate music therapy for learners benefitting extra counseling services. The above methods are more effective for students with physical, emotional, and behavioral disorders since music therapy offers students another way of expressing themselves besides words.

Positive effects on learners' cognition and learning ability are the areas such as memory, attention, and academic achievement that establish the need to incorporate music into the general

education delivery model. Music education should be defended in schools as one of the fundamental aspects of a child's cognitive development and effective academic performance. Teachers need to consider implementing cooperation where students learn information from one discipline with the facts from a different discipline in the form of music. For instance, music rhythms applied to teaching math can be fun and more helpful than the regular customs of teaching math or incorporating song lyrics to teach language. Instead, it is imperative that music educators stress that children also acquire learning that may be used in other areas of their myriad learning disciplines like critical thinking, issue solving, and even bearing. Explaining these skills above can enable the students and the parents to see and learn more about the academic value of joining musical activities.

This means that several inclusion challenges in education must be eliminated so that schools can offer music education for all students. This ranges from establishing impartiality in offering chances of learning that do not depend on the student's status or disability. Schools should adopt policies allowing all children to participate in music class activities. These may include money for instruments, grants for music lessons for individual students, and guaranteeing that there is music education in every school, even for those less fortunate to have resources.

Music educators are responsible for addressing the learning needs of people with disabilities in their classes by issuing and providing all needed instrumentalities to the students. This involves enshrining teachers who can accommodate techniques and make instruments and materials easily accessible to the learners. To obtain the maximum effect of music teaching and learning, it is crucial to enhance the quality and expertise of music instructors. Qualified teachers are essential to achieving quality learning in music education to address various students' needs. Teachers should have professional development, and this should be mainly conducted in schools.

This can be in the form of workshops, conferences, and courses in the current teaching practices, technologies, and methods that are sensitive to learners' needs. Getting in groups of music teachers to enable them to share and get assistance from their colleagues can promote teaching strategies. Vet teachers can teach new teachers techniques and resourceful ways of teaching to use in their classroom.

The use of technology in education is a new opportunity to improve music education. Technology must be used in schools to enhance and increase opportunities for offering music programs. Adaptive strategies can involve incorporating online music education platforms so that students can have other additional resources to use for learning. Lessons via Skype, helpful applications that help understand music theory and other facilities can be beneficial adjuncts to live classes and make music education more universal. Schools should explore the possibility of incorporating digital instruments and software into the teaching curriculum. This equipment can capture students' attention with various modalities of learning and expose them to more contemporary ways of music production. If effectively managed, the eight practical implications laid out in the document can greatly improve K-12 students' learning through music and their social growth, emotional health, acquisition of knowledge, and integration of learning abilities for increased accessibility.

Summary

This thesis aimed to identify the social and emotional perspectives of K-12 participation, where students' learning experiences are examined in terms of how they contribute to enriching students' actualization, cognitive, and affective domains. The study's findings support the effectiveness of music education in improving the students' mental, social, and academic development through the analysis of retrospective data and the use of quantitative methods of the

research. The inference from the findings is that music education results in emotional stability and improve thinking skills, leading to improved performance. The findings of this study correspond with theories like social cognitive theory and the social theory of learning, which prove that music education enhances a person's individual identity, interaction, and multiculturalism. As in any scientific research, there are benefits regarding health and self-esteem in music, and research also shows that musical training may be one of the most potent changes in character development and positive emotional and persuasive influence of intellectuality.

Policy implications include the need to persuade educational stakeholders to view music education as one of the foundational aspects of K-12 education for all children, irrespective of the diverse backgrounds. This comprises sound funding, appropriate resources, and qualified teachers to establish linguistic, emotional, physical, and mental safety. Intended practice areas need to underscore the role of music in the development of the whole person with the desired qualities and the appropriate cognitive and emotional capacities alongside approaches that would enhance the correlation of teaching music with the rest of the subjects and the overall curriculum. The study found that more education and awareness of the benefits of music to children's mental development should be available to K-12 students. The study called for increased inclusiveness and support for music in schools by comparing past and present practices and integrating connections to theoretical perspectives and matters concerning policy. It not only accelerates the students' academic growth but also the growth of their persons as a whole.

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