

A Literature Review of Cooperative Learning in Music Education

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To Link this Article: <http://dx.doi.org/10.6007/IJARPED/v13-i3/22272> DOI:10.6007/IJARPED/v13-i3/22272

Published Online: 14 August 2024

Abstract

In the contemporary educational landscape, cooperative learning has emerged as a prominent student-centred approach. This literature review explores its application in music education, emphasising its benefits and effectiveness. The problem statement identifies a gap in understanding the integration and outcomes of cooperative learning in music contexts. The research objectives include identifying relevant past studies and drawing insights from their findings. The literature review examines existing research to uncover common themes and differences. Key theories underpinning cooperative learning, such as social interdependence theory and constructivism, provide a framework for understanding its impact. The review includes eight selected studies, each contributing to a comprehensive understanding of cooperative learning in music education. Findings indicate that cooperative learning enhances both professional quality and teaching abilities in higher education and significantly boosts academic performance and student satisfaction when integrated with technology. Long-term benefits are observed through retrospective self-accounts, highlighting the lasting value of early cooperative learning experiences. The integration of digital media and social media further enhances learning outcomes, and network teaching environments amplify student interest and engagement. These findings suggest that cooperative learning not only improves academic outcomes but also fosters essential social skills and long-term appreciation for music. Moving towards more interactive, student-centred approaches can address engagement challenges in music education. Recommendations include leveraging technology to facilitate cooperative learning and incorporating diverse, collaborative teaching methods to enrich the educational experience. In conclusion, the literature review demonstrates the multifaceted benefits of cooperative learning in music education, advocating for its broader implementation to enhance both educational and social outcomes.

Keywords: Literature Review, Cooperative Learning, Music Education.

Introduction

In the contemporary era, numerous 21st-century learning methods have emerged. A prominent approach among these is cooperative learning, which emphasises student-centred learning. To introduce, cooperative learning is a teaching method that allows students to work in smaller groups to achieve a common learning goal under the guidance of teachers. This

method encourages active participation, communication, and collaboration among students, fostering a more engaging and interactive learning environment. According to Silva et al. (2021), cooperative learning helps students develop critical thinking and problem-solving skills by encouraging them to engage with their peers, discuss ideas, and arrive at solutions collectively. This method not only enhances academic performance but also builds social skills and teamwork.

Furthermore, cooperative learning has a rich history, having been introduced and developed over the past four decades. Johnson and Johnson (2009), noted that it has evolved significantly since its inception, adapting to various educational contexts and needs. This method has been extensively studied, with over 900 studies conducted across a century, demonstrating its positive effects in multiple domains such as learning success, attitude, and motivation. For instance, research showed that cooperative learning could lead to higher academic achievement, improved attitudes towards learning, and increased intrinsic motivation among students (Slavin, 1980). Hence, cooperative learning is a well-established, student-centred teaching method that promotes collaboration, critical thinking, and social skills. Its effectiveness has been validated by extensive research, making it a valuable approach in contemporary education.

This study examined the integration of cooperative learning within music education. Cooperative learning, which emphasises student collaboration and active engagement, aligned well with the inherently collaborative nature of music education, where ensemble performance, peer feedback, and collective creativity were integral to the learning process. The objective of this study was to conduct a literature review of cooperative learning in music education. By examining existing research, the study aimed to understand the application and effectiveness of cooperative learning strategies in music education. Two research questions guided this review:

- i) What were the relevant past studies?
- i) What insights were drawn from the results?

Literature Review

Cooperative learning is a pedagogical approach defined in various ways by different scholars. Johnson and Johnson (1994), pioneers in cooperative learning research, defined it as the instructional use of small groups so that students work together to maximise their own and each other's learning. This definition emphasises the mutual benefits among group members in the learning process. Furthermore, Kagan (1989), described cooperative learning as a teaching arrangement that refers to small, heterogeneous groups of students working together to achieve a common goal, highlighting the structured, diverse group composition and shared objectives. Moreover, Slavin (1980) defined cooperative learning as a variety of teaching methods in which students work in small groups to help one another learn academic content, underscoring the mutual support and academic focus. Finally, Renström et al. (2024) described it as a pedagogical practice that orchestrates positive interdependence among learners through small group, face-to-face interaction, which generates individual accountability, social skills, and group processing. Despite slight variations in emphasis, these definitions converge on the fundamental principle of cooperative learning: structured interaction within groups aims at enriching each member's learning experience through

collaboration, mutual support, and shared goals. In light of this consensus, this study defined cooperative learning through teaching behaviours that included these core elements.

The concept of cooperative learning is underpinned by several influential theories. Social Interdependence Theory (Johnson & Johnson, 1994) highlights the importance of positive interdependence in cooperative learning, where students perceive their success as linked to the success of their peers, thereby promoting collaboration and shared goals. Following that, constructivism emphasises active learning, wherein students construct their own knowledge (Bell, 2020). Next, cooperative learning aligns with constructivism by encouraging social interaction and collaborative problem-solving. In addition, sociocultural Theory (Vygotsky, 1978) focuses on the role of social interaction and cultural context in learning. Subsequently, cooperative learning engages students in the Zone of Proximal Development (ZPD), where they can perform tasks with guidance and support, facilitating cognitive development through peer scaffolding and collaborative dialogue. Collectively, these theories provide a robust foundation for cooperative learning, emphasising the significance of interdependence, active engagement, and social interaction in educational settings.

Many scholars have developed theories of cooperative learning. According to Johnson and Johnson (2009), there are at least four middle-range theoretical perspectives that have guided research on and the practice of cooperative learning. These perspectives include social interdependence, cognitive-developmental, social-cognitive, and behavioural theories. To initiate, social interdependence theory emphasises the importance of interdependent interactions among group members in achieving shared goals. It focuses on how the interdependence among group members affects interaction, which in turn influences outcomes, and is foundational for understanding cooperative learning's impact. Next, cognitive-developmental theory includes perspectives from Piaget and Vygotsky, emphasising cognitive growth through cooperation, socio-cognitive conflict, and the zone of proximal development. Following that, social cognitive theory, particularly Bandura's work, views cooperation as a shared belief in collective power and emphasises the role of modelling, coaching, and scaffolding in learning. It highlights the significance of social context, modelling, and observational learning in cooperative settings. Lastly, behavioural-learning theory considers the role of rewards and incentives in cooperative efforts, assuming that individuals work diligently on tasks that yield rewards.

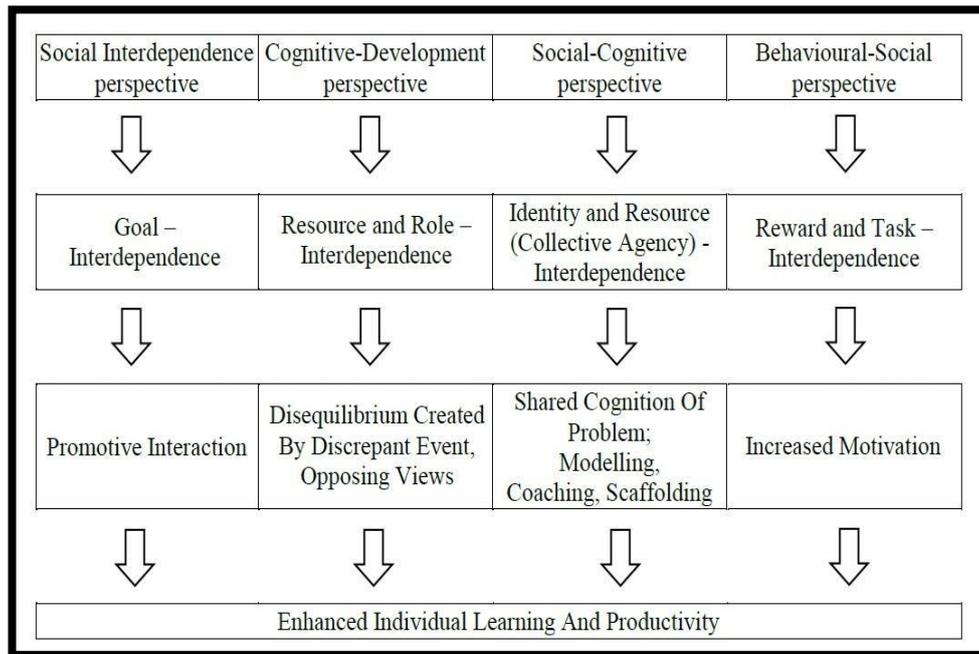


Figure 1. General theoretical frameworks of cooperative learning (Johnson & Johnson 1989)

To continue, Laal (2013), identified five essential elements necessary for cooperative learning. Segundo Marcos et al (2020), also discussed these fundamental components. First and foremost, positive interdependence requires students to fully participate and contribute effort within their group, with each member having a specific task, role, or responsibility, ensuring they are accountable for both their own learning and that of their group (Segundo Marcos et al., 2020). Next, face-to-face promotive interaction mandates that members promote each other's success by explaining their learning and assisting one another with understanding and completing assignments (Gkloumpou & Germanos, 2022). Then, individual and group accountability ensures each student demonstrates mastery of the content and is accountable for their work, thereby eliminating social loafing. Later, social skills, including effective communication, leadership, decision-making, trust-building, friendship development, and conflict management, must be taught for cooperative learning to succeed. Also, group processing involves group members reflecting on helpful actions and deciding which actions to continue or change to improve the group's effectiveness in achieving its goals (Yilmaz & Karaoglan Yilmaz, 2020). Therefore, cooperative learning is not simply synonymous with students working in groups; a learning exercise qualifies as cooperative learning only if these five elements are present (Cecchini et al., 2021).

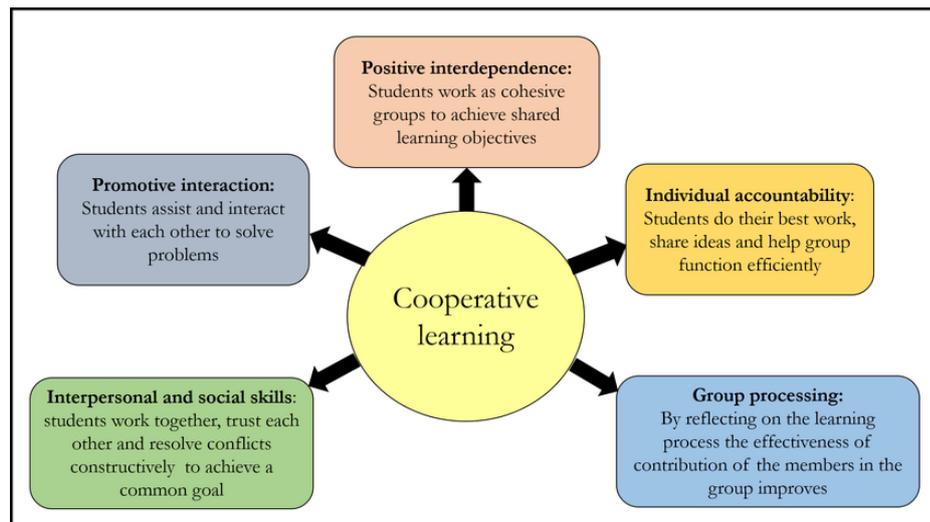


Figure 2. Five elements in cooperative learning (Prashanti, Kiran & Abdul,2017)

Methodology

To address the research question, suitable past studies were selected. Initially, a search on Google Scholar using the keywords “cooperative learning” and “music education” yielded 996,000 results, making it challenging to manage. Consequently, the Scopus database was utilised with similar keywords to identify relevant studies. This search produced twenty studies. However, five articles published in Spanish were excluded, along with two conference papers and one conference review. After screening, four articles were found to be related to music education but not cooperative learning, and thus, they were excluded. Ultimately, eight articles were selected for review.

Findings***What were the relevant past studies?***

A table is shown below to illustrate the relevant past studies. They were all elaborated.

| Author(s) | Year | Title |
|--------------------|-------------|--|
| Zhang | 2022 | <i>Exploring the Independent Learning of Music Students in Higher Teacher Training Colleges in a Pluralistic Network Environment</i> |
| Palazón-Herrera | 2021 | <i>Secondary school music education students' perception of technology-assisted cooperative learning</i> |
| Matsunobu | 2021 | <i>Exploring the unmeasurable: valuing the long-term impacts of primary music education</i> |
| Bai | 2019 | <i>Influence of social media assisted teaching environment on students digital media music education cooperative learning and learning results</i> |
| Hu | 2019 | <i>Influence of cooperative learning on music education learning interests in the network teaching environment</i> |
| Richmond et al. | 2016 | <i>Engagement and skill development through an innovative classroom music program</i> |
| Ballantyne & Baker | 2013 | <i>Leading together, learning together: Music education and music therapy students' perceptions of a shared practicum</i> |
| Scheib | 2012 | <i>Empowering preservice music teachers through the dialogue-centered methods class</i> |

First of all, Zhang (2022), asserted that as the primary institutions for training teachers, normal colleges and universities not only cultivate a significant number of talents for the teaching profession but also enhance the professional quality and teaching abilities of educators. Conducting research on music education in these institutions can address the diverse needs of contemporary society for music talents and promote the artistic and cultural development of music students. This study examines the preparatory work of higher normal music colleges under the new curriculum standards, focusing on four aspects: experiential learning, independent learning, cooperative learning, and inquiry-based learning. Subsequently, through a questionnaire survey, the study analysed the independent learning motivation of 325 music education students, exploring their independent learning experiences with online resources and discussing learning strategies from the perspectives of students, teachers, and the institution. By examining the current state of music teaching in higher teacher training colleges and providing relevant recommendations based on the survey results, the paper aims to contribute to the transformation of music teaching methods in China.

Next, Palazón-Herrera (2021), highlighted that cooperative learning has become a prominent methodological approach in recent decades due to its empirically proven benefits. The integration of technologies to support this methodology plays a crucial role in its effective implementation. This study involved music students in the third year of ESO (Enseñanza Secundaria Obligatoria, or Compulsory Secondary Education) (n = 145) and aimed to understand their perceptions of technology-assisted cooperative learning, which is vital for organising complex creative projects. A quasi-experimental design with repeated measures for pre- and post-tests was adopted, involving a control group and an experimental group. The results indicated statistically significant differences in academic performance and satisfaction with the methodology. The conclusions suggest that technology-assisted cooperative work is one of the few methodological alternatives that can effectively contribute to the implementation of creative projects.

Then, Matsunobu (2021), aimed to explore the long-term impacts of primary music education in a progressive school in Tokyo, where cooperative learning, democratic decision-making, and mutual sharing of interests and purposes by students form the pedagogical basis. Establishing a causal relationship between music learning and its impact later in life is challenging due to numerous confounding factors. Rather than seeking measurable effects, this study drew on students' retrospective self-accounts. Although retrospective accounts may be viewed as less reliable, they allow students to assess what they consider to be the true value of their education. Positing that retrospective accounts can form the focus of a long-term impact study, this research targeted former sixth-grade students who had become university students ten years later. While at primary school, these students had been actively involved in music making. A decade later, they were asked to reflect on their primary school music learning experiences. Based on their, and their teachers', self-accounts, the research explored what they had learned in their music classes and how they valued their learning experiences.

In addition, Bai (2019), contended that with the rise of global information, interpersonal interaction is no longer constrained by time and space, allowing many individuals to leverage this convenience to learn various subjects. The Internet era has transformed lifestyles, with social media becoming a prevalent channel for information dissemination. Social media facilitates not only interaction with others but also the maintenance of personal relationships. This study employed an experimental design model involving 252 students from a university in Jiangsu Province, who participated in a 15-week, three-hour experimental teaching study. The findings indicated that: (1) the social media-assisted teaching environment significantly impacts music learning outcomes; (2) digital media collaborative learning significantly impacts music learning outcomes; and (3) the combination of a social media-assisted teaching environment with digital media collaborative learning significantly impacts music learning outcomes. Based on these results, the study suggested strengthening students' passion for participation, ensuring that experience and information are continuously accumulated, updated, and innovated, thereby enhancing the effectiveness of music education.

Furthermore, Hu (2019), posited that since ancient times, music has been used to enhance moral education and inspire virtue through beautifying sound. In school aesthetic education, music learning is regarded as an experience of foreign language aesthetics. Therefore, music teachers should guide students to engage in diverse, rich, and vivid music teaching activities

to feel, understand, and express music. A total of 202 students from a university in Shanghai were selected as experimental subjects, and an experimental design model was employed. The experimental teaching was conducted for three hours per week over 15 weeks. The study found that: (1) cooperative learning significantly influences learning interest; (2) the network teaching environment significantly impacts learning interest; and (3) cooperative learning integrated with a network teaching environment significantly improves learning interest. Based on these results, the author proposed several suggestions to address problems encountered in music teaching and offered improvement strategies to enhance students' interest in music, serving as a reference for other teachers.

Similarly, Richmond et al (2016), observed that rates of music participation are low in developed nations, partly due to the failure of school music programs to sufficiently engage children and motivate them to continue learning and participating in music. The Harmonix program of classroom music education was tested, designed to maximize engagement in music learning. The program employs new, harmonically tuned percussion instruments, using cyclical, self-cuing patterns, and hierarchical rhythmic structures that match complexity with ability. Graphical scores reduce cognitive load and assist students in composing music from the first class. Cooperative learning activities consolidate learning and further stimulate engagement through personal and group expression. Using a combination of timely self-reports and objective measurements, it was found that student learning and skill acquisition increased over the six-week program while maintaining high engagement. Engagement measures also increased within each session. However, no significant changes were observed in attitudes toward music over the six weeks of the program.

Following that, Ballantyne and Baker (2013), asserted that the health benefits of musical engagement extend across the lifespan, with research documenting developmental and quality of life outcomes in senior adulthood. While the psychological functions of music encompass cognitive, emotional, and social domains, the social aspects of music consumption have largely been overlooked. This project is based on the understanding that students "construct" their own knowledge through engagement with others and reflects the belief that learning can be linked to action through a reflective process within small cooperative learning groups. This article reports on a collaborative creativity leadership project implemented by music therapy and music education students, specifically exploring their perceptions as they conducted a teaching/therapeutic intervention with elderly participants from a local private retirement village. The project involved lyric rewriting and singing performance. Analysis of students' reflective journals and interview transcripts revealed four themes related to their learning experience: learning about facilitating, learning about self, learning about the musical process, and learning about the context of ageing. Each of these themes is explored before drawing conclusions about the process of leading a creative collaboration. The implications of this analysis extend beyond the retirement village context to various educational and therapeutic settings where creative collaboration is facilitated.

Finally, Scheib (2012), highlighted the potential pitfalls of the front-loaded lecture, which can create passivity among students and disengage them from the teaching-learning process. Many teachers consider frontal lecturing the most efficient way to deliver content—the path of least resistance. Unfortunately, these teachers do not view course content as an inquiry but as an established body of knowledge possessed solely by the teacher. In contrast, some

In addition, Hu (2019), observed that cooperative learning, especially when integrated with network teaching environments, significantly boosts students' interest and engagement in music learning, indicating that blending cooperative methods with modern technology can address some of the challenges in music education. Richmond et al (2016), noted that cooperative learning activities within the Harmonix program improved student engagement and skill acquisition in music classes, although attitudes towards music did not significantly change over the six-week program. This suggests that while cooperative learning can enhance engagement, changing long-term attitudes may require more sustained efforts.

Then, Ballantyne and Baker (2013), highlighted the broader health and social benefits of musical engagement across the lifespan. Their study on a collaborative creativity leadership project showed that students learned about facilitation, self-awareness, the musical process, and the context of ageing, reflecting the multifaceted benefits of cooperative learning in music education. Scheib (2012), criticised traditional lecture-based teaching for creating student passivity and disengagement, advocating for problem-posing, student-led debates, small group projects, and peer teachings as ways to transform music education into a more interactive and empowering experience for students.

Similarities across several studies (Palazón-Herrera, 2021; Bai, 2019; Hu, 2019) included the integration with technology, highlighting its positive impact on cooperative learning in music education, enhancing both academic outcomes and student engagement. Furthermore, multiple studies (Hu, 2019; Richmond et al., 2016) emphasised that cooperative learning boosts student interest and engagement in music classes. A notable difference was in the focus on long-term versus immediate impacts. Matsunobu (2021), concentrated on long-term impacts through retrospective self-accounts, while Richmond et al (2016), measured immediate changes in engagement and skill acquisition, demonstrating differing approaches to evaluating the effectiveness of cooperative learning. Additionally, the studies covered various educational levels, from primary education (Matsunobu, 2021) to higher education (Zhang, 2022; Bai, 2019), and secondary education (Palazón-Herrera, 2021), showing the versatility of cooperative learning across different contexts. Cooperative learning not only enhances academic performance but also promotes social skills, teamwork, and long-term appreciation for music. The integration of digital tools and social media can significantly enhance the effectiveness of cooperative learning by providing new avenues for interaction and creativity. Moving away from traditional lecture-based methods to more interactive and student-centred approaches can address disengagement and foster a deeper connection with music education.

This literature review reveals that cooperative learning in music education significantly enhances academic performance, engagement, and social skills across various educational contexts. Integrating technology and adopting interactive teaching methods further amplify these benefits, suggesting a multifaceted approach to improving music education outcomes.

Discussion

The findings of this literature review underscore the substantial benefits of cooperative learning in music education, highlighting its role in enhancing professional and teaching abilities, improving academic performance, and fostering student engagement. Zhang (2022), emphasised that cooperative learning in music education within normal colleges significantly

enhances the professional quality and teaching abilities of future educators. This aligns with the broader educational goal of nurturing skilled music teachers who can address the diverse needs of contemporary society and promote cultural and artistic development among students. The emphasis on professional development reflects the findings of similar studies in different educational contexts, reinforcing the universal applicability of cooperative learning principles (Johnson & Johnson, 2019).

Next, Palazón-Herrera (2021), demonstrated the effectiveness of integrating technology with cooperative learning. Technology-assisted cooperative learning significantly improved academic performance and student satisfaction, particularly in managing complex creative projects. This integration addresses a critical need in modern education to blend traditional pedagogical approaches with digital tools, as echoed by studies like those of Yan (2021), which highlight the positive impact of technology on learning outcomes when used effectively. The seamless integration of technology not only facilitates better learning experiences but also prepares students for the technologically driven world they will encounter in their professional lives.

Moreover, Matsunobu (2021), explored the long-term impacts of primary music education rooted in cooperative learning. The study's retrospective approach revealed that students value their cooperative learning experiences even a decade later, indicating a lasting positive impact. This long-term benefit aligns with theories of lifelong learning and the sustained impact of early educational experiences on personal and professional development (Chuang, 2021). However, the challenge of establishing causal relationships due to confounding factors remains, suggesting a need for longitudinal studies with more controlled variables. The retrospective nature of Matsunobu's study provides valuable insights into the enduring influence of cooperative learning, underscoring the need for more systematic, long-term research to further validate these findings.

Then, Bai (2019), found that digital media and social media-assisted environments significantly enhance music learning outcomes. This finding underscores the importance of leveraging social media to foster participation and continuous innovation in music education. The role of social media in education is increasingly recognised, with studies by Greenhow et al (2023), highlighting its potential to create engaging and collaborative learning environments. Social media platforms offer unique opportunities for students to share their work, receive immediate feedback, and collaborate with peers, which can significantly enhance the learning experience and outcomes.

Subsequently, Hu (2019), observed that cooperative learning, especially when integrated with network teaching environments, significantly boosts student interest and engagement. This finding is particularly relevant in addressing the challenges of disengagement in music education. The integration of modern technology with cooperative learning methods provides a dynamic and interactive approach, resonating with students' digital literacy and preferences (Latorre-Coscolluela et al., 2021). This blend of traditional and contemporary teaching methods helps maintain students' interest and enthusiasm, which are crucial for effective learning.

Also, Richmond et al (2016), noted that cooperative learning activities within the Harmonix programme improved student engagement and skill acquisition, though long-term attitude

changes towards music were less significant. This suggests that while cooperative learning can enhance immediate engagement, sustained attitude changes may require more prolonged and consistent efforts. This aligns with the findings of Malek et al. (2020) on intrinsic motivation and the need for ongoing reinforcement to maintain positive attitudes. The Harmonix programme's design, which matches complexity with ability and uses graphical scores to reduce cognitive load, provides a practical model for implementing cooperative learning in music education.

Additionally, Ballantyne and Baker (2013), highlighted the broader health and social benefits of musical engagement across the lifespan. Their study on collaborative creativity leadership projects with elderly participants demonstrated the multifaceted benefits of cooperative learning in music education, including facilitation skills, self-awareness, and understanding the context of ageing. This reflects the holistic impact of music education, supporting the notion that cooperative learning extends beyond academic outcomes to enrich social and emotional well-being (Váradi, 2022). The findings suggest that music education can play a vital role in enhancing quality of life, particularly for older adults, by promoting active engagement and social interaction.

Finally, Scheib (2012), criticised traditional lecture-based teaching for creating student passivity and disengagement, advocating for more interactive and student-centred approaches. This criticism is supported by the findings of several studies in this review, which highlight the effectiveness of cooperative learning in promoting active engagement and deeper connections with music education. Moving away from traditional lecture methods to incorporate problem-posing, student-led debates, and small group projects can transform music education into a more dynamic and participatory experience.

Conclusion

The literature review on cooperative learning in music education reveals a compelling case for its widespread adoption and integration. Cooperative learning, characterised by student collaboration and active engagement, significantly enhances professional and teaching abilities, academic performance, and student engagement. Studies by Zhang (2022), and Palazón-Herrera (2021), highlight its effectiveness in higher education, particularly when combined with technology, while Matsunobu (2021), underscores its long-term benefits. The integration of digital and social media tools, as discussed by Bai (2019), and Hu (2019), further enhances these outcomes by offering dynamic and interactive learning environments. The multifaceted benefits of cooperative learning, extending beyond academic performance to include social and emotional development, are evident in studies by (Ballantyne and Baker 2013; and Richmond et al., 2016). These findings suggest that cooperative learning is not only effective across various educational contexts but also crucial for fostering a holistic educational experience.

The implications of these findings are profound for educators, policymakers, and curriculum developers. First, the enhancement of professional and teaching abilities through cooperative learning supports the development of skilled educators who can adapt to and meet the diverse needs of students. This is particularly relevant in music education, where the ability to engage and inspire students is critical. Second, the positive impact on academic performance and student satisfaction highlights the potential of cooperative learning to improve educational outcomes. Integrating technology with cooperative learning can address

the challenges of traditional teaching methods and align with students' digital preferences, making learning more relevant and engaging.

Moreover, the long-term benefits of cooperative learning, as evidenced by Matsunobu (2021), suggest that early educational experiences can have lasting impacts on personal and professional development. This emphasises the importance of implementing cooperative learning strategies from an early age. Additionally, the role of social media and digital tools in enhancing learning outcomes underscores the need for educators to embrace these technologies to foster participation and continuous innovation. Finally, the broader health and social benefits of musical engagement, highlighted by Ballantyne and Baker (2013), indicate that cooperative learning can contribute to overall well-being, making it a valuable approach not only in education but also in broader social and therapeutic contexts.

Despite the promising findings, several limitations must be considered. One significant limitation is the challenge of establishing causal relationships due to confounding factors, as noted by (Matsunobu, 2021). Longitudinal studies with more controlled variables are needed to better understand the long-term impacts of cooperative learning. Additionally, the variability in study designs and educational contexts makes it difficult to generalise the findings universally. The reliance on self-reported data in some studies may also introduce bias and affect the reliability of the results. Furthermore, the integration of technology, while beneficial, may not be equally accessible to all students and educators, potentially widening the gap between those with and without access to digital tools.

To address these limitations and build on the current findings, several suggestions for future research and practice are proposed. First, more longitudinal studies are needed to examine the long-term impacts of cooperative learning in music education, aiming to control for confounding variables to establish clearer causal relationships. Second, exploring the integration of emerging technologies, such as virtual reality and artificial intelligence, with cooperative learning methods could provide further insights into innovative educational practices. Third, research should investigate the specific elements that contribute to sustained attitude changes towards music and how these can be effectively reinforced over time.

Additionally, educators and policymakers should consider ways to make digital tools and technologies more accessible to all students to ensure equity in educational opportunities. Professional development programmes for teachers should include training on cooperative learning strategies and the use of technology to enhance teaching and learning. Finally, interdisciplinary research involving education, psychology, and technology fields could provide a more comprehensive understanding of the multifaceted impacts of cooperative learning in music education.

In conclusion, cooperative learning in music education offers significant benefits across various educational contexts. By addressing the limitations and implementing the suggested strategies, educators and researchers can further enhance the effectiveness of cooperative learning, ultimately enriching the educational experiences and outcomes for students.

Theoretical and Contextual Contribution

This literature review made a significant contribution to the theoretical understanding and contextual application of cooperative learning within music education. The research not only reinforced established theories such as Social Interdependence Theory and Constructivism by

demonstrating their relevance in a musical context, but also highlighted the unique advantages of cooperative learning when integrated with digital and social media tools. The findings suggested that cooperative learning was instrumental in bridging traditional and modern pedagogical approaches, fostering both academic and socio-emotional development. This was particularly significant as it provided a framework for educators to adapt to the evolving educational landscape while addressing the specific needs of music education. By situating cooperative learning within the context of music education, this review underscored its role in enhancing not only academic performance but also the cultural and artistic development of students, making a compelling case for its broader implementation in educational curricula.

References

- Bai, Q. (2019). Influence of social media assisted teaching environment on students digital media music education cooperative learning and learning results. *Journal of Environmental Protection and Ecology*, 20(Special issue A), S286–S290.
- Ballantyne, J., & Baker, F. A. (2013). Leading together, learning together: Music education and music therapy students' perceptions of a shared practicum. *Research Studies in Music Education*, 35(1), 67-82. <https://doi.org/10.1177/1321103x13488471>
- Bell, R. (2020). Adapting to constructivist approaches to entrepreneurship education in the Chinese classroom. *Studies in Higher Education*, 45(8), 1694-1710. <https://doi.org/10.1080/03075079.2019.1655724>
- Cecchini, J. A., Fernandez-Rio, J., Mendez-Gimenez, A., Gonzalez, C., Sanchez-Martinez, B., & Carriedo, A. (2021). High versus low-structured cooperative learning. Effects on prospective teachers' regulation dominance, motivation, content knowledge and responsibility. *European Journal of Teacher Education*, 44(4), 486-501. <https://doi.org/10.1080/02619768.2020.1774548>
- Chuang, S. (2021). The applications of constructivist learning theory and social learning theory on adult continuous development. *Performance Improvement*, 60(3), 6-14. <https://doi.org/10.1002/pfi.21963>
- Gkloumpou, A., & Germanos, D. (2022). The importance of classroom cooperative learning space as an immediate environment for educational success. An action research study in Greek kindergartens. *Educational Action Research*, 30(1), 61-75. <https://doi.org/10.1080/09650792.2020.1771744>
- Greenhow, C., Lewin, C., & Willet, K. B. (2023). Teachers without borders: Professional learning spanning social media, place, and time. *Learning, Media and Technology*, 48(4), 666-684. <https://doi.org/10.1080/17439884.2023.2209326>
- Hu, M. (2019). Influence of cooperative learning on music education learning interests in the network teaching environment. *Journal of Environmental Protection and Ecology*, 20(Special Issue A), S291–S295.
- Johnson, D. W., & Johnson, R. T. (1994). *Learning together and alone: Cooperative, competitive, and individualistic learning* (5th ed.). Prentice-Hall.
- Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher*, 38(5), 365-379. <https://doi.org/10.3102/0013189x09339057>
- Kagan, S. (1989). *Cooperative learning: Resources for teachers*. University of California, Riverside.
- Laal, M. (2013). Collaborative learning; Elements. *Procedia - Social and Behavioral Sciences*, 83, 814-818. <https://doi.org/10.1016/j.sbspro.2013.06.153>
- Latorre-Cosculluela, C., Suarez, C., Quiroga, S., Sobradiel-Sierra, N., Lozano-Blasco, R., & Rodriguez-Martinez, A. (2021). Flipped classroom model before and during COVID-19: Using technology to develop 21st century skills. *Interactive Technology and Smart Education*, 18(2), 189-204. <https://doi.org/10.1108/itse-08-2020-0137>
- Malek, S. L., Sarin, S., & Haon, C. (2020). Extrinsic rewards, intrinsic motivation, and new product development performance. *Journal of Product Innovation Management*, 37(6), 528-551. <https://doi.org/10.1111/jpim.12554>
- Matsunobu, K. (2021). Exploring the unmeasurable: Valuing the long-term impacts of primary music education. *Music Education Research*, 23(1), 14-27. <https://doi.org/10.1080/14613808.2020.1834524>

- Palazon-Herrera, J. (2021). Secondary school music education students' perception of technology-assisted cooperative learning (*Percepción del alumnado de música de educación secundaria sobre el aprendizaje cooperativo asistido POR tecnología*). *Culture and Education*, 33(1), 160-188. <https://doi.org/10.1080/11356405.2020.1859737>
- Renstrom, A., Stenling, C., & Fahlen, J. (2024). Developing athletes into cooperative learners: The potential in viewing coaches as educators and coaching as teaching. *Sport, Education and Society*, 1-13. <https://doi.org/10.1080/13573322.2024.2334426>
- Richmond, J., McLachlan, N. M., Ainley, M., & Osborne, M. (2016). Engagement and skill development through an innovative classroom music program. *International Journal of Music Education*, 34(2), 143-160. <https://doi.org/10.1177/0255761415584289>
- Scheib, J. W. (2012). Empowering Preservice music teachers through the dialogue-centered methods class. *Journal of Music Teacher Education*, 22(1), 103-112. <https://doi.org/10.1177/1057083711430394>
- Marcos, S. R. I., Fernandez, L. V., Gonzalez, D. M. T., & Phillips-Silver, J. (2020). Promoting children's creative thinking through reading and writing in a cooperative learning classroom. *Thinking Skills and Creativity*, 36, 100663. <https://doi.org/10.1016/j.tsc.2020.100663>
- Silva, R., Farias, C., & Mesquita, I. (2021). Cooperative learning contribution to student social learning and active role in the class. *Sustainability*, 13(15), 8644. <https://doi.org/10.3390/su13158644>
- Slavin, R. E. (1980). Cooperative learning. *Review of Educational Research*, 50(2), 315-342. <https://doi.org/10.3102/00346543050002315>
- Varadi, J. (2022). A review of the literature on the relationship of music education to the development of socio-emotional learning. *SAGE Open*, 12(1), 215824402110685. <https://doi.org/10.1177/21582440211068501>
- Vygotsky, L. S., & Cole, M. (1978). *Mind in society: Development of higher psychological processes*. Harvard university press.
- Yan, E. M. (2021). Embracing digital teaching and learning: Innovation upon COVID-19 in higher education. *COVID-19 Pandemic, Crisis Responses and the Changing World*, 299-327. https://doi.org/10.1007/978-981-16-2430-8_19
- Yilmaz, R., & Karaoglan Yilmaz, F. G. (2020). Examination of the effectiveness of the task and group awareness support system used for computer-supported collaborative learning. *Educational Technology Research and Development*, 68(3), 1355-1380. <https://doi.org/10.1007/s11423-020-09741-0>
- Zhang, L. (2022). Exploring the independent learning of music students in higher teacher training colleges in a pluralistic network environment. *Journal of Environmental and Public Health*, 2022, 5024006. <https://doi.org/10.1155/2023/9854532>