

# Free Music for Kids: Collaborative Music and Well-being in Educational Practices

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This paper examines the transformative potential of music for enhancing well-being by challenging traditional roles in education. It asks: *How does removing predefined hierarchies in collaborative music-making settings with children, families, and musicians influence participant agency, well-being, and creativity?*

Drawing on case studies from the “Free Music for Kids” project, the study explores how role fluidity shapes agency, well-being, and creativity at both individual and group levels, with a particular focus on shared agency, mutual respect, and creative participation.

Previous research has highlighted the significance of peer-to-peer learning as an effective pedagogical approach, demonstrating its many benefits in promoting learner agency and improving overall educational outcomes. For instance, Orff-Schulwerk and the Suzuki method investigate what happens when children’s musical contributions are treated as equal to those of adults in co-creative contexts.<sup>1</sup> However, few studies have examined the specific dynamics of collaborative instrumental music-making, leaving a gap in our understanding of the creative potential within these interactions. Notable exceptions include Edwin Gordon’s Music Learning Theory, and the MIROR project reflective environments where children and teachers co-create music with instruments, encouraging creativity through direct interaction and collective musical construction.<sup>2</sup>

This study seeks to address this gap by examining case studies derived from the Free Music for Kids project, developed in collaboration with Francesco Colocci.

Improvisation and collaborative music-making offer unique opportunities for individuals to express themselves and engage in authentic musical dialogue. These processes foster shared creative environments, enabling each participant to contribute ideas and collectively develop musical material in real time. Within this context, the educator’s functions extend beyond facilitating interaction to include guiding emergent compositional practices, actively supporting participants as they explore and develop new musical possibilities.

1 Carl Orff, *Music for Children*, with Gunild Keetman and Margaret Murray (Schott, 1958); Shin’ichi Suzuki, *Nurtured by Love: The Classical Approach to Talent Education*, 2nd ed., trans. Waltraud Suzuki (Summy-Birchard, 2018).

2 Anna Rita Addressi, “La piattaforma MIROR per la creatività musicale e motoria dei bambini in ambienti riflessivi,” preprint, 2017, <https://doi.org/10.13140/RG.2.2.27567.53920>; Edwin E. Gordon, *Learning Sequences in Music: A Contemporary Music Learning Theory* (GIA Publications, 2007).

### Research questions

This research investigates the pedagogical potential of interactive and exploratory approaches in music education, with a particular focus on enhancing well-being, motivation, and agency in young children and their parents. Informed by contemporary scholarship in music pedagogy, psychology, and community engagement, this study addresses the following core questions:

- How does a pedagogical approach to music contribute to the well-being of young children and their parents by fostering musical creativity and a sense of communality?
- In what ways can music education enhance motivation and agency among young children?
- What is the significance of co-creation with parents within music education, and what are the associated benefits for both children and their families?

These questions guide the selection and integration of relevant theoretical models and support an analysis of how music education can promote holistic development and relational well-being in early childhood contexts.

### Theoretical background and key concepts

#### *Educational psychology*

Vygotsky's socio-cultural theory posits that cognitive development occurs primarily through social interaction and cultural mediation, with higher mental functions first emerging on the social plane and subsequently being internalized by the individual. Central to this perspective is the concept of the Zone of Proximal Development (ZPD), defined as the gap between what a learner can accomplish independently and what they can achieve with guidance from a more capable peer or adult. In music education, collaborative environments—in which children, parents, and educators participate together—provide rich opportunities for musical learning and enhanced well-being by situating learners in their ZPD, where support, modeling, and shared understanding facilitate growth. The process of scaffolding, as developed from Vygotsky's ideas, enables adults and peers to structure musical activities so that children can internalize new skills and concepts, fostering autonomy and relational confidence. Parent and peer involvement in music learning acts as a *mediating tool*, shaping not only musical abilities but also broader socio-emotional development.<sup>3</sup>

3 Vera John-Steiner and Holbrook Mahn, "Sociocultural Approaches to Learning and Development: A Vygotskian Framework," *Educational Psychologist* 31, nos. 3–4 (1996): 191–206, [https://doi.org/10.1207/s15326985ep3103&4\\_4](https://doi.org/10.1207/s15326985ep3103&4_4); L. S. Vygotsky and Michael Cole, *Mind in Society: Development of Higher Psychological Processes* (Harvard University Press, 1978).

Self-Determination Theory (SDT), as articulated by Ryan and Deci, posits that satisfying three basic psychological needs—autonomy, competence, and relatedness—is fundamental for nurturing motivation, agency, and well-being in children. Intrinsic motivation thrives when educational and musical contexts support these needs, enabling children to engage out of genuine interest or enjoyment, in contrast to extrinsic motivation, which depends on external rewards or pressures.<sup>4</sup>

Research in music education has shown that experiences designed to fulfill autonomy (such as offering choices in creative activities), support competence (through progressive and achievable challenges), and foster relatedness (via collaboration with peers and teachers) significantly enhance motivation, persistence, and emotional well-being among young learners. Structuring musical environments around these psychological needs empowers children to become self-directed learners and increases their engagement and positive development both in and outside music practice. Key studies, including those by Ryan and Deci and recent empirical work focused on musical participation and well-being, confirm the centrality of SDT for designing inclusive, motivating, and supportive strategies in music education.<sup>5</sup>

Positive psychology, as articulated by Seligman, emphasizes the promotion of well-being, flourishing, and the experience of positive emotions and resilience within individuals and groups. When applied to music, this approach highlights how musical engagement supports not only skills acquisition but also psychological and social flourishing.<sup>6</sup>

Music activities promote positive emotions such as joy, gratitude, and connectedness, serving as powerful tools for enhancing well-being within the group and for developing socio-emotional competencies.

Research demonstrates that group music-making, singing, and creative musical expression can foster resilience, aid stress management, and build social bonds, contributing to both individual and collective flourishing. Educational interventions using the PERMA framework (Positive Emotion, Engagement, Relationships, Meaning, Accomplishment) have shown notable improvements in students' academic performance, resilience, and well-being when music activities are integrated with positive psychology principles.

Thus, integrating positive psychology into music education provides a robust foundation for designing activities that transcend musical skills, nurturing holistic development and cultivating emotional health and happiness for children and their families.<sup>7</sup>

4 Richard M. Ryan and Edward L. Deci, "Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being," *American Psychologist* 55, no. 1 (2000): 68–78, <https://doi.org/10.1037/0003-066X.55.1.68>.

5 Ryan and Deci, "Self-Determination Theory," 72; Amanda E. Krause et al., "Using Self-Determination Theory to Examine Musical Participation and Well-Being," *Frontiers in Psychology* 10 (2019): 405, <https://doi.org/10.3389/fpsyg.2019.00405>.

6 Martin E. P. Seligman, *Flourish: A Visionary New Understanding of Happiness and Well-Being* (Free Press, 2011).

7 Seligman, *Flourish*, 68.

Improvisation pedagogy and community music theory foreground the role of *spontaneous creativity, participatory music-making, and social interaction* in fostering both individual and collective growth. Christopher Small's concept of *musicking* shifts the focus from music as a product to music as an *activity*, emphasizing that meaning emerges through active social participation in musical events.

Within educational contexts, improvisation activities empower learners to explore sound, express personal ideas, and collaboratively construct meaning, nurturing creativity, agency, and a sense of belonging among participants. Through shared creative processes, individuals experience musical and social inclusion, build confidence, and develop attentive listening and flexible response skills, reinforcing communal ties and mutual respect.

By employing *musicking* as a framework and incorporating educational improvisation, community-based music activities become powerful means for cultivating expressive freedom, collaborative agency, and a vibrant communal identity.<sup>8</sup>

### *Key concepts*

At the center lies *well-being*, understood as a multifaceted concept encompassing psychological, emotional, and social flourishing. In the context of music education, well-being extends beyond individual happiness or positive affect, encompassing resilience, self-confidence, and the nurturing of identity formation through shared musical experiences.<sup>9</sup>

Closely connected is the notion of *communality*, which draws from Small's theory of *musicking*—the idea that the value of music is generated through a network of participatory relationships. Communality refers to the sense of belonging, social cohesion, and shared purpose created through collective musical engagement, particularly evident in community music and family settings.<sup>10</sup>

*Engagement*—and its closely related concepts, *musical flow* and *motivation*—functions as a dynamic process underpinning creative involvement and sustained participation. Engaged participants demonstrate attentiveness, persistence, and energetic investment, while optimal states of flow are characterized by absorption, effortless attention, and a merging of action and awareness. Self-Determination Theory (SDT) emphasizes the importance of intrinsic motivation, arguing that contexts supporting autonomy, competence, and relatedness foster deeper and more joyful musical involvement.<sup>11</sup>

8 Christopher Small, *Musicking: The Meanings of Performing and Listening* (University Press of New England, 1998).

9 Krause et al., "Self-Determination Theory," 405; Susan Hallam, "The Power of Music: Its Impact on the Intellectual, Social and Personal Development of Children and Young People," *Research Studies in Music Education* 32, no. 2 (2010): 173–95, <https://doi.org/10.1177/0255761410370658>.

10 Small, *Musicking*.

11 Mihaly Csikszentmihalyi, *Flow: The Psychology of Optimal Experience* (Harper & Row, 1990; repr., Harper Perennial Modern Classics, 2009).

*Music improvisation* and *instant composition* represent practices in which creativity and agency are actively enacted. Improvisation, as discussed by Burnard and Biasutti, embodies spontaneous, real-time problem solving, often in collaborative contexts, while instant composition blurs the boundaries between improvisation and composition, inviting both structure and unpredictability. These forms exemplify *spontaneous musical practice*, where music emerges organically, guided not by set curricula but by curiosity and playful experimentation.<sup>12</sup>

Improvisation is increasingly described as a professional teaching skill, rather than a simple manifestation of spontaneity. Authors such as Aadland, Egil Arnesen and Espeland emphasize that effective improvisation in teaching relies on balancing structure (planning, curriculum knowledge, methodological repertoire) and freedom—the capacity to adapt to the unexpected and respond flexibly in unpredictable contexts. Teachers rely on their expertise and flexibility to interpret and reconstruct lesson plans in the face of sudden challenges or opportunities. The typology outlined by Aadland and colleagues distinguishes between sequential improvisation (responding to small variations), dialogic improvisation (adapting communicatively with students), and exemplary improvisation (modeling strategies and behaviors). Improvisational skill develops with increased content mastery and professional experience: “Improvisation abilities develop over time, as teachers become more attuned to pedagogical challenges and more adept at using their repertoire flexibly.” This view directly links improvisation to pedagogical models built on complexity, authentic interaction, and co-creation. Recent literature suggests that improvisation should be “professionalized and explicitly included in teacher education.” As Espeland notes, “the dialogic, open-scripted and interactive aspects of improvisation are essential to the teaching profession.”<sup>13</sup>

Central to both creative and learning processes is *agency*, defined here as the capacity for participants—children, parents, or ensembles—to make meaningful choices, initiate actions, and influence musical outcomes. Agency is fostered in environments that value voice, choice, and collaboration, linking directly to the affordances of community music and informal learning.<sup>14</sup>

12 Pamela Burnard, *Musical Creativities in Practice* (Oxford University Press, 2012); Michele Biasutti, “Teaching Improvisation through Processes. Applications in Music Education and Implications for General Education,” *Frontiers in Psychology* 8 (2017): 911, <https://doi.org/10.3389/fpsyg.2017.00911>; Margaret S. Barrett, “Inventing Songs, Inventing Worlds: The ‘Genesis’ of Creative Thought and Activity in Young Children’s Lives,” *International Journal of Early Years Education* 14, no. 3 (2006): 201–20, <https://doi.org/10.1080/09669760600879920>.

13 Helga Aadland, Magne Espeland, and Trond Egil Arnesen, “Towards a Typology of Improvisation as a Professional Teaching Skill: Implications for Pre-Service Teacher Education Programmes,” *Cogent Education* 4, no. 1 (2017): 1295835, <https://doi.org/10.1080/2331186X.2017.1295835>; Kari Holdhus, Sissel Høisæter, Kjellfrid Mæland, et al., “Improvisation in Teaching and Education—Roots and Applications,” *Cogent Education* 3, no. 1 (2016): 1204142, <https://doi.org/10.1080/2331186X.2016.1204142>.

14 Meghan A. Benson, “Effective Mentoring for New Music Teachers: An Analysis of the Mentoring Programs for New Music Teachers as Described in the Literature,” *Update: Applications of*

A nuanced understanding of musical compositional forms and structures in this research centers on their deliberate use by the music educator as dynamic pedagogical tools to provoke and guide participants' musical responses. Rather than functioning merely as organizational frameworks, resources such as riffs, call and response, breaks, recall, and strategies translating movement or gesture into sound are mobilized to spark collaborative engagement and musical interaction within the group. These practices serve as catalysts for creativity, embodied involvement, and group flow, supporting participants in collectively inhabiting and shaping the musical environment.

In particular, such compositional and improvisational strategies form the core of educational interventions designed to scaffold participation, enhance expressiveness, and foster the co-construction of shared musical narratives. Through their skilled application, the educator can activate a musical "flow state" in the group, enabling participants to experience and explore the expressive potential of music as an interactive, responsive medium for learning and artistic discovery.<sup>15</sup>

Also pivotal is *parental involvement*, conceptualized in this research as a dynamic process arising from the legitimation and acceptance of the child's sonic productions. Rather than mere encouragement or logistical support, parental engagement is seen as a form of validating the child's musical sound in its physical essence, signifying a deep acceptance and recognition of the child as a creative agent within the family context. This approach has meaningful implications for the broader parent-child relationship: the act of listening and accepting the child's music becomes a powerful modality for expressing parental attunement, acceptance, and responsive care. Musical improvisation thus functions as a magnifying lens, illuminating and enhancing the relational qualities between parents and children, as well as among children and among adults themselves. The practice of shared improvisation not only reflects but also shapes the characteristics of parenthood—fostering an environment of exploration, trust, and reciprocal creativity. In this way, parental involvement not only strengthens motivation and participation, but also transforms the musical space into a site for relational growth and emotional connection.<sup>16</sup>

A key construct for this work is the *creative mindset*. This can be defined as an attitude that encourages individuals to view situations from different perspectives and to identify innovative solutions to problems, driving them toward the future. Accessing

*Research in Music Education* 26, no. 2 (2008): 42–49, <https://doi.org/10.1177/8755123308317953>; Sidsel Karlsen, "Using Musical Agency as a Lens: Researching Music Education from the Angle of Experience," *Research Studies in Music Education* 33, no. 2 (2011): 107–21, <https://doi.org/10.1177/1321103X11422005>; Göran Folkestad, "Formal and Informal Learning Situations or Practices vs Formal and Informal Ways of Learning," *British Journal of Music Education* 23, no. 2 (2006): 135–45, <https://doi.org/10.1017/S0265051706006887>.

<sup>15</sup> Burnard, *Musical Creativities*, 45; Biasutti, "Teaching Improvisation," 911.

<sup>16</sup> Stine L. Jacobsen, Gustavo Gattino, Ulla Holck, and Julie Ørnholt Bøtker, "Music, Families and Interaction (MUFASA): A Protocol Article for an RCT Study," *BMC Psychology* 10, no. 1 (2022): 252, <https://doi.org/10.1186/s40359-022-00957-8>; Barrett, "Inventing Songs," 201.

and nurturing creativity is essential for everyone: it means reinterpreting reality, adapting it to one's needs, improving oneself, making daily tasks enjoyable, imagining new possibilities, playing, and gaining a deeper understanding of one's desires and preferences. In this sense, creativity is crucial for both personal and collective growth. Human thinking relies on curiosity and creative abilities to understand, manage, and transform a constantly evolving world. Creativity is not reserved for a select few; it is inherently part of everyone's life and is necessary for innovative thinking and action in a society that demands our participation. It enables us to move beyond limited perspectives, transform everyday life, and face challenges with novel solutions, reinforcing problem-solving abilities, communication, collaboration, and a broader, more inclusive outlook.

As Tanggaard argues, it is important to abandon the notion of creativity as a quality reserved for specific domains, subcultures, or special occasions, and instead see it as a lifestyle that can be cultivated and promoted. Educational institutions are particularly crucial in encouraging this in our fast-paced, global society.

Another key aspect concerns the value of experiences of feeling lost, facing obstacles, or frustration, which can create opportunities for practical creativity. From a pragmatic perspective, creativity emerges through the process of learning from difficulties, marking a significant departure from the aesthetic and humanist views of the 18th and 19th centuries, where creativity was seen as an innate, individual trait. As Pope (cited in Tanggaard) notes, it is necessary to move beyond "stereotypical romantic notions" and recognize that genuine creativity develops through concrete challenges and real experiences.<sup>17</sup>

*Trust* represents a critical construct in both educational contexts and music pedagogy. In free instrumental music practices, genuine trust must be placed by the educator in the child's musical gestures, recognizing each sonic expression as valuable and worthy of consideration. By embracing students' musical contributions as legitimate, the educator creates an environment where creativity and authentic musical dialogue can flourish. This process mirrors broader pedagogical theories emphasizing the building of trusting relationships as fundamental to learner growth and self-development.

Human development is deeply dependent on trust; doubt or skepticism from educators shapes learners' self-perception, often reinforcing the very limitations that were originally feared. As Nicolai Hartmann notes, "Belief can transform a person for the worse or for the better, depending on the direction of belief." Trust has transformative power, but it is not automatic—accepting the uncertainty and vulnerability inherent in trusting another person is a key challenge for every educator. Hartmann describes trust as a venture, requiring moral courage and effort: "All trust and all belief are a venture; it always requires moral courage and spiritual strength. It always requires a human effort."<sup>18</sup>

17 Lene Tanggaard, "A Situated Model of Creative Learning," *European Educational Research Journal* 13, no. 1 (2014): 107–16, <https://doi.org/10.2304/eerj.2014.13.1.107>.

18 Hartmann quoted from Otto Friedrich Bollnow, *Existenzphilosophie und Pädagogik: Versuch über unstetige Formen der Erziehung*, Kohlhammer-Urban-Taschenbücher 59 (Kohlhammer, 1959).

While pragmatic approaches might promote reserving trust or maintaining skepticism, educational theory and practice—such as Rodari’s emphasis on a climate of trust, Bryk and Schneider’s exploration of the pivotal role of relational trust in school improvement, Maniglia and Chioda’s findings on creative self-esteem and Raider-Roth’s analysis of authentic classroom trust—demonstrate that conditional or insincere trust is pedagogically ineffective.<sup>19</sup> Research consistently shows that true growth and learning emerge only within a context of genuine acceptance, collaboration, and relational trust between educators and participants. True trust must be fully internalized and sincerely invested by the educator; without this authenticity, students perceive trust as false, and its impact is lost. Nevertheless, genuine trust does not entail naive optimism—it must coexist with a realistic understanding of human nature and the possibility of disappointment. Maintaining this balance, and finding the strength to renew trust after setbacks, is one of the greatest demands placed on educators. The capacity to resist cynicism and continue fostering environments where trust guides growth and learning is what keeps teaching alive and meaningful.

Within music education, collaborative learning requires a high level of trust among all participants, regardless of age or background. In ensembles, trust is a musical necessity: every contribution, whether unconventional or refined, is valued as an authentic form of expression. The music educator must position themselves not as a director, but as a musician among musicians, sharing the creative experience and encouraging risk-taking through openness and respect. When students feel that their input is genuinely received, technical and artistic growth is joined by increased confidence and deepened self-expression. Thus, trust is not simply a pedagogical principle but a vital musical skill, shaping the learning process and the artistic journey itself.

Finally, the *informal context* is not a neutral backdrop, but a vibrant setting characterized by social, flexible, and interest-driven learning. Informal contexts foster exploration and innovation, inviting learners and families to see music-making as a lived, co-constructed social practice rather than the exclusive domain of formal expertise or instruction.<sup>20</sup>

19 Gianni Rodari, *Grammatica della fantasia: Introduzione all'arte di inventare storie*, 19a rist., Piccola Biblioteca Einaudi 221 (Einaudi, 2000); Anthony S. Bryk and Barbara Schneider, *Trust in Schools: A Core Resource for Improvement*, The American Sociological Association’s Rose Series in Sociology (Russell Sage Foundation, 2004); Valentina Chioda and Luigi Maniglia, *Improvviso educativo: Per una didattica reidratante* (La Meridiana, 2019); Miriam B. Raider-Roth, “Trusting What You Know: Negotiating the Relational Context of Classroom Life,” *Teachers College Record: The Voice of Scholarship in Education* 107, no. 4 (2005): 587–628, <https://doi.org/10.1177/016146810510700403>.

20 Folkestad, “Formal and Informal Learning,” 135; Lucy Green, *How Popular Musicians Learn: A Way Ahead for Music Education*, 1st ed. (Routledge, 2002).

### *Pedagogical models*

Among the pedagogical frameworks most pertinent to this research, Edwin Gordon's Music Learning Theory (MLT) stands out for its foundational emphasis on improvisation as a central learning process. In Gordon's conception, improvisation is not a peripheral activity but is essential for nurturing children's divergent thinking, creativity, self-esteem, and adaptability. Through both structured and open-ended improvisational activities, children are consistently encouraged to explore their sonic potential without fear of judgment, engaging in individual musical expression and collaborative problem-solving. Such improvisation empowers the mind to think flexibly and originally, making musical learning personal, relevant, and responsive.<sup>21</sup>

The impact of MLT extends beyond musicianship, actively supporting children's well-being by cultivating emotionally secure and stimulating musical environments. Structured listening, imitation, and improvisational practice help children develop emotional regulation, resilience, and self-confidence, while also fostering positive bonds with peers, parents, and teachers. Recent research confirms that MLT-based interventions can significantly enhance social-emotional learning (SEL) skills alongside musical aptitude. Gordon's approach, particularly as articulated in *Music Learning Theory for Newborn and Young Children*, emphasizes nurturing musical aptitude through listening, imitation, and improvisation, with both family and educators co-creating a learning environment that is intentionally systematic yet playfully creative. The active and participatory role of parents, teachers, and musicians is fundamental: through musical games and improvisation, they foster not just musical development but also broader social and emotional growth.<sup>22</sup>

Closely aligned with this perspective, play theorists such as Parten, Piaget, and Vygotsky have long emphasized the essential value of play in early childhood, highlighting how intrinsically motivated, process-oriented engagement is a fundamental driver of learning.<sup>23</sup> Free musical play, as observed by Smithrim, allows children to develop abilities, engage in focused exploration, invent musical games, teach peers, and use instruments in innovative ways.<sup>24</sup> Researchers agree that children should have the freedom to listen, observe, and explore music in their own way, even if adults sometimes overlook these activities as "non-musical." Despite strong theoretical and empirical support for the

21 Edwin E. Gordon, *Learning Sequences in Music: A Contemporary Music Learning Theory* (GIA Publications, 2007).

22 Gordon, *Learning Sequences in Music*, 45; Senim Çenberci and Enver Tufan, "Effect of Music Education Based on Edwin E. Gordon's Theory on Children's Developmental Music Aptitude and Social Emotional Learning Skills," *International Journal of Music Education* 43, no. 2 (2023): 189–203, <https://doi.org/10.1177/02557614231196973>.

23 Thomas, Howard, and Roberts, "The Role of Play in Children's Development."

24 Smithrim referenced in Audrey A. Berger and Shelly Cooper, "Musical Play: A Case Study of Preschool Children and Parents," *Journal of Research in Music Education* 51, no. 2 (2003): 151–65, <https://doi.org/10.2307/3345848>.

connection between learning and play, music education programs often lack sufficient opportunities for free exploration.<sup>25</sup>

The attitudes and behaviors of adults are also determinative: Berger and Cooper noted that adults can either extinguish or enhance musical play. When adults intervene to correct or impose traditional practices, children's creative engagement is often curtailed. In contrast, when adults withhold judgment and value all types of musical behavior, children's agency and natural flow of musical expression are supported, allowing their play to flourish and their creative impulses to develop authentic musical meaning.

Taken together, Gordon's Music Learning Theory and the broader literature on play reinforce the pedagogical imperative to create environments where improvisation and exploratory musical play are central. By valuing the process over mere product, these frameworks situate the child as an active agent in musical development, highlight the importance of emotional security and community, and advocate for adult roles that empower rather than constrain musical creativity.<sup>26</sup>

The *Montessori model* represents a comprehensive pedagogical framework that fundamentally integrates spontaneity, music, and improvisation as essential components of holistic child development. It operates through a philosophy that prioritizes freedom, intrinsic motivation, and carefully structured environments designed to foster repeated, joyful creative engagement. Maria Montessori's approach positions spontaneous activity as the foundation of authentic education, drawing parallels between physical and intellectual development to demonstrate that children achieve optimal learning when they are free to explore and interact with their environment according to their natural impulses. This spontaneous engagement, rather than being chaotic, naturally evolves toward order when supported by a prepared environment, ultimately cultivating attention, character development, and intellectual growth—foundation for genuine creative processes such as musical improvisation.<sup>27</sup>

Central to Montessori pedagogy is the concept of the *prepared environment*, a meticulously designed space in which materials and stimuli are thoughtfully introduced to awaken children's self-directed interest and sustained concentration. Through this structure, children typically progress from initial exploratory chaos to deep, focused engagement, often culminating in what Montessori termed *explosions* of creativity and learning—a developmental pattern that directly parallels the emergence of improvisational skill in musical contexts. The joy and satisfaction children derive from choosing

25 Berger and Cooper, "Musical Play."

26 Berger and Cooper, "Musical Play," 151.

27 Maria Montessori, *Maria Montessori's Spontaneous Activity in Education*, trans. Florence Simmonds (Read & Co. Books, 2023); Aurelia S. Calderon, "The Impact of Montessori Education on Creative Expression in Preschoolers," *Research and Advances in Education* 3, no. 8 (2024): 39–48, <https://doi.org/10.56397/RAE.2024.08.06>.

and persisting with creative activities mirrors the state of flow experienced by musicians during improvisation, suggesting a fundamental connection between the Montessori approach and the psychological conditions necessary for spontaneous creative expression.<sup>28</sup>

Montessori's identification of an *internal impulse* within each child—an innate drive to act, create, and develop—manifests particularly powerfully in artistic and musical domains. When children are given the freedom to make choices and permitted to repeat activities according to their internal rhythms, they naturally develop concentration, self-discipline, and structured forms of “work” that are simultaneously expressive and ordered. This developmental trajectory mirrors the process by which musicians internalize musical structures through free, repeated improvisation, gradually enhancing both technical skill and expressive capacity through intrinsically motivated practice. The Montessori emphasis on attention arising from internal need rather than external imposition—what she called *spiritual hunger*—creates conditions in which children engage in extended periods of pleasurable repetition, closely resembling the engaged practice fundamental to musical improvisation.<sup>29</sup>

The pedagogical framework places exceptional value on emotional engagement and joy as essential components of healthy, holistic development, positioning creative expression—particularly musical activity—as a developmental necessity rather than merely supplemental enrichment. Montessori's observations of children's satisfaction and “joy of work” in creative, self-chosen activities directly correspond to the fulfillment experienced by musicians during improvisational and spontaneous creative acts, suggesting a deep structural analogy between the conditions that foster general creativity and those specific to musical improvisation. In practical application, Montessori classrooms incorporate activities where children naturally “compose rhythms, songs, and movements” in response to their environment—practices that are inherently improvisational and emerge from the pedagogical structure rather than being imposed as separate musical instruction.<sup>30</sup> These activities approach music not as rote learning but as opportunities for children to discover and express patterns, emotions, and ideas with genuine freedom, enhancing both specific musicality and general capacity for spontaneous expression.

The sustained emphasis throughout Montessori pedagogy on free choice, repetition for mastery, and creative *explosions* of interest provides a comprehensive framework for musical education that centers improvisation, experimentation, and authentic self-expression over predetermined outcomes, establishing musical creativity as integral to, rather than

28 Diana R. Dansereau e Brooke Wyman, “A Child-Directed Music Curriculum in the Montessori Classroom: Results of a Critical Participatory Action Research Study,” *Journal of Montessori Research* 6, n. 1 (2020): 19–31, <https://doi.org/10.17161/jomr.v6i1.10631>; David J. Fleming, Brooke Taylor Culclasure, e Daniel Zhang, “The Montessori Model and Creativity,” *Journal of Montessori Research* 5, no. 2 (2019): 1–14, <https://doi.org/10.17161/jomr.v5i2.7695>.

29 Calderon, *The Impact of Montessori Education on Creative Expression in Preschoolers*, 42; Fleming et al., “Montessori Model and Creativity,” 5.

30 Montessori 1966, 145

separate from, overall intellectual and emotional development. This integration positions the Montessori model as uniquely suited to fostering the psychological conditions—freedom, intrinsic motivation, sustained attention, and joy in creative work—that research demonstrates are essential for both musical improvisation and broader creative capacity.<sup>31</sup>

## Methodology

### *Case study: Free Music for Kids – Musicians on the Spot*

The pedagogical approach examined in this research centers on shared and spontaneous musical creation within informal environments. The initiative, titled “Free Music for Kids” and subtitled “Musicians on the Spot,” features musicians who are invited to improvise and interact musically and artistically with other participants.

This study employs a qualitative case study methodology, drawing on detailed observations, audio and video recordings, and immediate post-session reflections collected during the Free Music for Kids project. Thirty sessions were conducted in public playgrounds and libraries, with data gathered on participation patterns, modes of interaction, and the effects of role fluidity within collaborative music-making. Systematic analysis of field notes and recordings enabled the identification of behavioral, musical, and relational dynamics, providing a comprehensive understanding of how diminished hierarchies influence agency, well-being, and creativity among children, parents, and musicians.

All research activities involving children and parents adhered to established ethical guidelines for educational studies, specifically the British Educational Research Association (BERA) Ethical Guidelines for Educational Research. These guidelines emphasize obtaining informed consent from both children and parents, ensuring children’s ongoing assent, minimizing potential risks, and respecting children’s dignity and rights throughout the research process. Informed consent was obtained from parents prior to participation, and privacy was safeguarded through anonymization and secure handling of recordings. Importantly, because the activities took place in a public playground with people joining and leaving freely, a clear written sign was prominently displayed throughout the research area to inform everyone present about ongoing audio and video recording.<sup>32</sup>

31 Fleming et al., “Montessori Model and Creativity,” 5; Montessori, *Spontaneous Activity in Education*, 45; Calderon, “Impact of Montessori Education,” 42; Dansereau and Wyman, “Child-Directed Music Curriculum,” 25.

32 British Educational Research Association (BERA), *Ethical Guidelines for Educational Research*, 5th ed. (BERA, 2024), <https://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-fifth-edition-2024>.

### *Setting*

Playgrounds, frequented by children aged 0 to 12 years—accompanied by adults or, occasionally, alone—serve as the primary environment. The initiative is organized in partnership with playground staff, who actively publicize the events. Consequently, while some participants attend intentionally, the majority join incidentally during unrelated visits.

A designated area within the playground is selected to balance proximity to other play activities with sufficient space for group music-making. Here, three suitcases filled with a wide assortment of percussion instruments are placed so as to maintain both independence and visibility, encouraging spontaneous engagement from passersby.

In the initial phase, musicians or educators improvise individually throughout the space, playing their instruments and drawing inspiration from children's movements, other participants' activities, or environmental cues. Interaction with the surroundings and auditory commentary are encouraged. Musicians perform at the highest possible artistic level, utilizing all available musical and instrumental resources.

Following this initial intervention, the musicians gather near the instrument cases. Over time, interaction with the soundscape created by other participants becomes increasingly central. One musician opens the cases and arranges instruments around the space, offering them to interested individuals. Musical objects and instruments, selected for their timbral diversity, are made available to participants, including:

- approximately 15 egg shakers
- about 7 other shakers and larger maracas
- 2 cabacas
- approximately 7 tambourines
- hand drums
- around 5 cymbals of various sizes
- guiro
- claves
- around 10 tuned soundtubes
- xylophone and glockenspiel
- 4 tongue drums
- ukulele
- darabuka

The setting is designed to encourage individual exploration and the gradual development of musical moments, with the potential for varying dynamics and intensity.

During this phase, musicians continue to improvise, using melodic fragments or rhythmic cells generated by participants as initial compositional material. This process of instant composition incorporates and transforms participants' contributions—whether

elaborate or spontaneous—into the evolving collective musical texture. The musician-educator facilitates collective creation through musical gestures and bodily movement: physical proximity, eye contact, imitation, repetition, intentional use of silence, and reiteration of musical motifs.

Participants are free to enter or leave the musical activity according to their motivation and needs. They may choose when and how to participate musically, select instruments of interest, or simply observe.

#### *Observations:*

The observations focus on quantifying the number of individuals who actively participate in musical improvisation, as well as examining their age, mode of engagement, duration of participation, and the manner of involvement. Further inquiries address the extent of participant involvement and identify the musical elements that elicit musical responses—such as imitation, call and response, or alternation between sound and silence. Consideration is also given to how specific musical features guide participants' behavior and choices throughout the activity. Special attention is paid to the varying approaches based on different age groups, the spontaneous creation of subgroups, and the emergent patterns of organization observed among participants. Are there musical and behavioral patterns that guide and contribute to musical flow, facilitating integration among diverse physical and musical abilities? What compositional strategies can support co-creation, promote participant engagement, foster a sense of belonging, and expand opportunities for expression through voice and instruments?

This study investigates the presence of specific musical and behavioral conduct that underpin collective musical flow, enabling the integration of varied competencies and physical abilities. Particular attention is devoted to compositional strategies that structure and direct collaborative creative processes, enhance sustained engagement, and cultivate an inclusive environment where participants can explore and express themselves both vocally and instrumentally. Such strategies may include modeling egalitarian participation, sequencing timbral and dynamic changes, encouraging risk-taking, and utilizing facilitative gestures and cues to support the emergence of a shared sense of ownership and belonging within the musical activity.

Furthermore, the research examines how musicians, educators, and facilitators, by legitimizing and accepting the sounds produced by children—incorporating these as genuine artistic expressions—are able to guide and manage potential instances of sonic chaos or lapses in concentration. This process involves recognizing children's musical contributions as meaningful and purposefully integrating them into the collective activity. The analysis also considers whether a distinct teacher-student dichotomy persists, or if a reversal and blending of roles occurs, resulting in a more fluid and amalgamated interchange among participants and facilitators within the musical context.

*Fieldwork Presentation*

The setting is the playground in Wesselsgade, located in the city center of Copenhagen. This event is part of the Free Music for Kids series held throughout August, promoted on the organizers' social media channels and websites as an accessible, free initiative.

The participating musicians in this session include myself, fellow educator Francesco Colocci, and double bassist Asger Thomsen. We reach consensus on a selection of melodies, referred to as "folk songs," which form a "simulated repertoire." These pieces are not performed prescriptively but remain available for organic integration as the musical context evolves. This method encourages vocal participation within a defined harmonic framework and allows analysis of its impact on participants, highlighting differences from more unstructured, spontaneous segments.

The scene is set at 3 p.m., with light attendance: a couple of preschool-aged children are on the swings with their parents, and a small group of teenagers are mostly engrossed in their smartphones.

A video camera records the session from a distance, ensuring a comprehensive view while maintaining transparency through an informational sign. Our suitcases are centrally placed and contain a range of musical instruments, which we gradually unpack and distribute throughout the surrounding space.

The musicians begin with free improvisation, gradually moving closer together and initiating musical interaction. The objective is to demonstrate creative music-making and to provide instruction through embodied, visible practice.

Our aim is for the performative dimension to gradually and seamlessly merge with the inclusive, pedagogical plane and the active engagement of those present. This transition is guided by our capacity for observation and empathic attunement to others, informing our choice of approach. The method consists of moving into physical proximity, establishing eye contact, and gently offering an instrument—or, more neutrally, positioning it nearby. This transitional phase is delicate, serving as a bridge between performance and participation. We have found egg shakers to be the most suitable instrument for facilitating this passage, given their small size, ease of handling, and their effectiveness in producing a soft sonority for younger participants while providing an enjoyable experience for older ones.

We proceed by unpacking the suitcases and distributing the instruments throughout the space. Percussion instruments are selected for their diverse sounds and flexibility, making them suitable for various age groups and accommodating a wide range of physical abilities.

The initiative's design actively encourages parental involvement, fostering intergenerational and interdisciplinary participation in the collective musical experience.

The younger children initially remain observers, whereas the adolescents display the most pronounced and energetic reaction. They promptly disengage from their smartphones and, driven by curiosity, begin to explore the instruments. This initial curiosity leads them to use musical objects as tools for social interaction with peers, resulting in expressions of joy, laughter, and playful exchanges.

After several minutes, the scene becomes more densely populated with children, parents, and additional adolescents. The observation phase is prolonged, especially among parents and younger children.

Throughout the intervention, at least two of the musicians are almost always engaged in musical interaction, while the third alternates between distributing instruments, approaching individuals who express interest and curiosity, and engaging in sound-based dialogues with participants.

During the performance, as the flute and double bass play, a girl begins to produce a persistent, rhythmic motif on a tuned tube. This draws the double bassist, who reinforces and harmonizes with her pattern, allowing the motif to persist. A six-year-old girl, whom we will call Giovanna, sits down with a ukulele, actively engaging in interplay with the musicians. This exchange is characterized by eye contact, musical imitation, care for the instrument, persistence, exploration, and sonic dialogue—coupled with a search for different sounds and playing techniques. Giovanna then sets aside the ukulele, picks up the guitar, and maintains her musical exploration with the same intensity. Nearby, other children and parents become actively involved in music-making using tuned tubes and shakers. The group improvisation continues seamlessly, without interruption.

At one point, another girl approaches Giovanna to invite her away, but Giovanna assertively declines, emphasizing her intense engagement with the guitar at that moment.

Several layers of participation can be identified: a central group—the core participants—actively engages through a manifestly musical attitude, taking an active role in the collective music-making. Surrounding them, others listen attentively while engaged in parallel activities, such as riding moon cars or playing on the slide, while another group merely observes.

Notably, a mother with her two children, aged around 9–10, forms a self-managed ensemble, organizing their own orchestral arrangement and making collaborative decisions, all while coexisting with the broader soundscape created by the other participants.

The musicians are attentive and profound listeners, seeking musical forms that generate spaces—forms receptive to the sounds produced by others. The double bassist creates alternating riffs and silences as a group of children, approximately eight years old, begin to play the tubes with great energy. The interplay of sounds and silences emerges immediately, initiating an interactive musical dialogue that unfolds intuitively, without the need for verbal explanation.

The environment and its spatial configuration play a fundamental role in shaping the experience. The setting offers each child, adult, or parent the opportunity to engage

at the level most suited to their individual needs and inclinations. The choice to position oneself closer to or farther from the core group is significant, as the outdoor space helps to moderate the inherent chaos of the activity. This openness enables children to selectively filter and attend to the elements that interest them most.

Some children choose to observe from a distance, while others take up instruments and move away, either individually or in small groups. Some integrate musical activity with other forms of play, while others seek involvement from their parents—or are themselves invited to participate. These varied behaviors serve as valuable indicators for adults, offering insights into each child's dispositions and preferences. In this context, the perceived chaos becomes a mechanism for self-selection and individualized participation.

### *Conclusions*

This study highlights the transformative power of collaborative, improvisational music-making in informal educational settings. By intentionally reducing hierarchical roles and embracing peer-to-peer interaction among children, families, and musicians, the “Free Music for Kids” project fostered environments where agency, creativity, and well-being were tangibly enhanced. The case studies demonstrate that when musical contributions from all participants are legitimized—regardless of age or expertise—shared agency and mutual respect emerge naturally, promoting authentic engagement and a genuine sense of belonging.

Findings confirm that improvisation and instant composition are powerful means for promoting learner autonomy, creative participation, and social cohesion. The educator's shift from a directive role to that of a facilitator and co-creator is crucial for sustaining emergent, responsive, and inclusive musical processes. Supporting children's natural curiosity, privileging process over product, and cultivating emotionally secure and stimulating environments are shown to be essential both for individual flourishing and for group cohesion.

Moreover, the integration of parents as active participants—and the legitimation of each child's sonic expression—enriches both the musical process and the parent-child relationship, underlining the importance of family engagement in educational creativity. The study's interdisciplinary, community-based approach suggests that music education can serve as a powerful lever for social inclusion, resilience, and lifelong well-being beyond conventional classroom boundaries.

In conclusion, improvisational, collaborative music practices—when structured around trust, creative freedom, and shared responsibility—can redefine educational experience as a dynamic, participatory, and holistic space for learning and personal growth. Future research should explore how these findings may inform broader pedagogical models and community music initiatives, deepening our understanding of the intricate links between creativity, agency, learning, and well-being.

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## Abstract

This paper explores the transformative role of collaborative music-making in educational contexts, particularly when traditional hierarchies are softened or removed. Drawing on case studies from the Free Music for Kids project, the study investigates how role fluidity among children, musicians, and families fosters agency, well-being, and creativity. The findings highlight that improvisational practices support shared agency, mutual respect, and authentic engagement. The research draws on contemporary theories in music pedagogy, psychology, and community engagement to demonstrate how informal, peer-driven musical environments promote motivation, resilience, and emotional development. The paper underscores the importance of adult and parental involvement, showing that legitimizing children's musical contributions enhances family relationships and supports social inclusion beyond conventional classroom boundaries.

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