

Using Movement to Enhance Musical Understanding in Early Childhood

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Abstract: Movement is essential to musical development and to enable performing and listening to music with comprehension. However, the investigation of the role of body and movement in music pedagogy is relatively new; therefore, there is now increased interest in examining ways in which movement could be integrated into music learning contexts, especially in early childhood. In this article, I discuss findings that have confirmed the importance of the use of movement for enhancing musical understanding. I also present curricula considerations based on the movement framework of Rudolf Von Laban, derived from the manner in which Edwin Gordon incorporated this framework into music learning theory.

Key words: musical understanding, movement, early childhood, Laban movement framework, music learning theory

1. Introduction: Using Movement to Enhance Musical Understanding in Early Childhood

In the past decades, the importance of movement for individuals' musical growth has received attention from researchers and music educators in terms of the notion of active music engagement, which supports musical understanding. Nowadays, movement is situated at the center of music pedagogy, transforming music learning into a more child-centered approach that provides individuals with living experiences. However, the incorporation of movement in the music teaching and learning context has only gradually occurred since the end of the 19th century.

Today's music pedagogy recognizes that movement is an essential "component" of music development; therefore, its integration into different musical learning contexts is considered essential (Campbell, 1991). Numerous scholars have emphasized the need to integrate movement into the music classroom at the preschool and early school levels (Achilles, 1991; Metz, 1989; Sims, 1985). The extension of the use of movement into other music learning programs, such as instruments and vocal ensembles, is also significant (Cheek, 1979; Conway, 2003; Gordon, 1997; Westervelt, 2002).

This article presents the inseparable relationship between music and movement, as well as the critical role of the integration of sensorimotor activities in early childhood to enhance musical comprehension. As the studies in the present review have suggested, movement has a crucial role in affording children with unique musical experiences and increasing musical understanding. Considering the positive pedagogical results found regarding the use of movement in music teaching-learning contexts and the ways Rudolf Von Laban's (1971) elements of

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movement are integrated into Edwin Gordon's (2003) music learning theory, I propose novel practical suggestions that might interest music educators and early childhood teachers who want to plan appropriate movement activities with children. What is also significant here is that the practical implications presented are systematically structured for the gradual development of movement vocabulary to encourage the perception of rhythm, melodic contour, and musical form, and to support expressive music performance. Most importantly, the suggested activities provide a framework for valuable musical experience and enjoyment.

2. Movement as an Integral Part of Music Engagement

Movement is evident in children's musical behaviors from infancy. From birth, children love to move, and their cognitive development is supported by the motor skills they develop (Bruner, 1990; Neill, 1990; Piaget, 1952). The first musical responses of infants and toddlers' first musical responses include free and spontaneous movements. In the framework of communicative musicality, which has been defined as a primary form of artistic creation and expression, Malloch and Trevarthen (2009) recognized that infants and caregivers attune musically through vocal and motor interactions (Malloch, 1999; Trevarthen 2002). Physical gestures that are encompassed in the "protoconversations" of the infant/parent dyad are significant in musical communication and work, constituting vehicles that carry emotion from one subject to the other (Malloch, 1999). In sum, movement acts as a tool in the music learning process (Swanwick & Runfola, 2002).

Bowman considered music making a unique physical experience, incorporating both physical and psycho-spiritual involvement that allow a deeper understanding of its meaning (Bowman, 1998). One of the most important concepts related to the inseparable relation between body and mind was adopted by Stubley (1998), who referred to the symbiotic attunement of the body and mind during the musical act. Linked to that, Krueger (2009) highlighted that "we listen to music with our muscles" to support the connection of the enactive model of perceiving and experiencing music. According to Krueger, music listening episodes are instances of doing and, therefore, sensorimotor engagement to music enhances the comprehension of musical structure.

Referring to the spontaneous musical play of children from different countries, cultures, and civilizations (e.g., India, Malaysia, China, and Latin America), Lew and Campbell (2005) concluded that children in all global societies participate spontaneously in playful musical activities that allow them to move, entertain, socialize, and express themselves. Singing, rhythmicking, jumping, and dancing have been revealed as fundamental to music engagement (Campbell, 2010). Further, the incorporation of movement has been identified in the "singing games" or "play-songs" that children use in their social interaction and musical engagement (Trehub & Trainor, 1998).

Blacking (1967) was the first to recognize and emphasize the social context of children's musical practice and highlight the importance of including dance and musical games with movement in children's musical activities. Later, further research analyzed the content and processes that children follow in learning songs in the places where they play and identified fundamental use of movement in these practices (Campbell, 1998). Riddell (1990) specifically collected and analyzed the content and body movements that accompanied elementary school children's musical performances and concluded that movement was very significant to children's musical practice. The abovementioned research has revealed that through movements such as hand clapping, dancing, and circle songs, children develop rhythmic skills and are able to perform music expressively (Campbell, 1991; Marsh, 2008, Riddell, 1990).

3. The Use of Movement in Music Education

The use of movement in music education was established at the beginning of the 20th century. Conservative theorists such as Earhart, Giddings, Kwalwasswer, and Seashore had hindered the incorporation of movement into music learning as they believed that movement was not necessary for rhythmic development (Campbell, 1991). At times, rhythm was considered an innate skill and, therefore, did not require improvement. Thus, activities such as rhythmic movement, dancing, or jumping were considered unnecessary for individuals' rhythmic development: As Giddings (1910) stated, "Do not rhythm, work as it is usually done. No dancing, drawing, hopping or other nonsense in the music lessons...." According to Giddings (1929), performing rhythmic accompaniments using percussion instruments should not be part of music teaching. However, his views were criticized by Mursell and Glenn (1931), who argued in their book *The Psychology of School Music Teaching* for the importance of the body's involvement in the musical experience. The authors stated that the response to music should be performed through large muscular movements and that the sensation of the measures cannot be established without massive, intense movements that involve the whole body.

Emile Jaques-Dalcroze's (1930) pioneering method, eurhythmics, in which students were encouraged to hear, feel, and express music with their whole being, as well as Dewey's (2016) views on "learning by doing," reformed music education. Movement was demonstrated to be necessary for musical consciousness as it transforms music experience into a practice in which perceiving and responding to music through muscular involvement supports the internalization of music aspects. Great music educators after Dalcroze, such as Orff, Kodaly, and Gordon, argued for the importance of using movement for musical development, especially in the early stages of the learning process (Chomsky, Abramson, Gillespie, & Woods, 1986). For example, the Orff method combines music, movement, and speech, while Kodaly observed that Hungarian children strengthened their rhythmic competency through movement and learning traditional dances. Similarly, Gordon emphasized the importance of body movement for rhythmic comprehension and underlined that performing rhythm should begin from movement that engages an individual's whole body (Gordon, 2003).

4. Movement and Musical Understanding

The integration of movement into music education has been identified as fundamental for an in-depth understanding of music. Research with children of both pre-primary and lower primary age has shown that the incorporation of Dalcroze's eurhythmics in music classrooms and the psychomotor experience it offers children improve their understanding of the concept of melody (Crumpler, 1983) and strengthen their comprehension of musical structure (Cheek, 1979). The essential role of movement integration in improving the performance of musical instruments was also demonstrated by Rohwer (1998). In this case, the children seemed to develop a steady pulse and to effectively understand concepts such as duration and musical expression. The above findings were confirmed by Conway (2003), who suggested the integration of movement as a strategy for developing a steady pulse and rhythmic precision in instrumental ensemble performances. It has also been shown that the kinesthetic experiences offered by the integration of movement into music lessons develop children's imagination and help build kinesthetic images or musical schemata that provide the foundations for understanding how to listen to music (Cohen, 1999; Shiobara, 1994). Movement, as mentioned by Cohen (1999) and Shiobara (1994), acts as a physical representation of acoustic musical events: The demonstrated schematic gestures fit the music

that is perceived, and these gestures help children remember music after a long time. The aforementioned studies have suggested that the kinaesthetic images created by children during music engagement indicate their musical understanding.

Building a movement vocabulary is also important for the development of stylistic performance in early childhood. In addition to the positive effect of kinesthetic experience on musical perception and understanding, research has revealed the importance of using movement to form positive attitudes and behaviors toward musical practice. The research by Carlson (1983), Dunn (1999), Taebel (1974), and Young (1982) firmly emphasized the relationship between the use of movement and the enjoyment of musical engagement among children. When incorporated in music classrooms, movement activities increase children's motivation and interest to participate in music and transform music learning into a preferred and valuable activity. Carlson (1983) observed that students express their preference for engaging in movement activities during music listening and noted that dancing, rhythmicking, and clapping during music lessons signify their musical experience.

5. The Integration of Movement Through the Lenses of Edwin Gordon and Rudolf Laban

Gordon (1997) developed a sequential theory to explain how individuals learn music. Music learning theory outlines the gradual process of music learning, offering teachers an organized path through which people learn music. According to Gordon (1997), music is learned in the same way as a language; thus, like language learning, music learning begins with the development of a listening vocabulary. He recommended that children should be immersed in a rich musical environment (including different tonalities and meters) where they develop beneficial listening vocabularies that enable them to communicate musically with others, while developing a speaking vocabulary at the same time. Within this aural-speaking stage, children should engage in singing and chanting tonal and rhythm patterns regularly; prior to reading and writing music, children should be capable of communicating aurally in a fluent manner and develop thinking and comprehension skills.

The concept of audiation was conceived by Gordon to describe the process of thinking and comprehending music and is considered as the nucleus of music learning theory. Describing audiation in relation to music learning, Gordon (2003) stated that “[it] is what thought is to language.” According to Gordon (2003), people audiate when they understand music in their minds while listening to, recalling, performing, interpreting, composing, improvising, or reading it. In other words, for someone to comprehend and translate what is happening in music, they must audiate music, and enjoying music is facilitated by audiation.

One of the fundamental principles of music learning theory is the incorporation of Rudolf Laban's elements of movement in the teaching-learning process. Gordon believed that experiencing the effort elements defined by Laban and consequently acquiring a movement vocabulary is fundamental to fostering beat competency and developing stylistic performance. The intersection of movement in the learning context using Laban's effort elements, as well as non-locomotor and locomotor movement, singing games, and dances, is believed to support musical understanding.

As he observed dancers, Laban (1971) analyzed and labeled four effort elements, including time, weight, space, and flow, as follows:

- 1) Time refers to how sustained or quick the movement is.
- 2) Weight refers to how strong or gentle the movement of the body is.
- 3) Space refers to the direction of movement.

4) Flow refers to how free or bound the bodily tension is.

None of these elements exists in isolation; rather, they appear on a continuum with interaction and combination. Laban (1971) argued that the structure of music can be expressed through movement and is inseparably linked to the perception and understanding of musical concepts. As he advocated, teaching music by implementing the above elements fosters perceptions of rhythm and encourages the performance of music with expressiveness. Music learning theory emphasizes that all children must experience Laban's elements of movement prior to developing beat competency, and movement activities based on Laban's elements of movement are incorporated in the teaching resources of *The Gordon Institute of Music Learning*.

5.1 Practical Suggestions in Early Childhood

Considering the incorporation of movement activities in the music learning context, I suggest that motor skills should be cultivated systematically and gradually in early childhood. A general instruction that is addressed to children to "move," without any other condition or description, is often insufficient to unlock and activate their bodies. Therefore, the movement activities employed in the teaching-learning process should be well organized and structured so as to enhance children's repertoire of movement vocabulary.

Below, I present practical suggestions for the implementation of movement in early childhood, with the aim of enhancing musical understanding.

- Body awareness is considered to be a preliminary attainment for children in early childhood. Focusing initially on the use of body parts in different ways supports a more complex movement repertoire that integrates the whole body in the kinesthetic praxis. Using various methods, we can encourage students to feel comfortable with their bodies, relax, and focus on a specific body part. Real-life scenarios or imaginative situations could frame an authentic movement experience. Encouraging students to push a wall, melt like ice cream, or even pretend to be a balloon that gradually inflates and grows bigger are some ideas that offer solid movement experience. Imaginary painting using different body parts could also enhance body awareness; students could suggest body parts that they want to involve in the painting, such as the feet, head, hips, and shoulders.
- The use of materials can be extremely helpful in encouraging children to move. Pillows, scarves, ribbons, balloons, balls, and rubber bands all become means of expression for children and, in combination with playful musical activities, ensure a safe environment in which they can experiment with their body and achieve a better quality of movement. Encouragements such as, "Dance with your scarf as you listen to the melody," "Balance your pillow on your head," or "Make a shape using your ribbon," can inspire even the shyest children who lack the confidence to experiment with their bodies. All these ideas could be introduced to the students via songs performed by the teacher.
- It is important that students develop non-locomotor movements before incorporating locomotor movements. What I suggest here is that large non-locomotor movements, such as making small or large shapes individually, in pairs, and in groups, encourage coordination and contrast, which are associated with the expressive qualities of music. A huge shape could represent a loud part of a melody, while a tiny shape could represent a soft phrase. Bouncing, swaying, and twisting are also recommended, especially for experiencing pulse. Encouraging students to twist their bodies to the pulse of a melody or hold hands in pairs and move back and forth to the pulse could also enhance rhythmic understanding.
- The development of locomotor movement skills could begin with a move-freeze activity. In such an

activity, the teacher sings a song while students are encouraged to move, filling the space of the classroom. When the singing stops, students must freeze. The different music aspects inherent in the song's structure could foster different ways of movement in the classroom, such as straight or curvy paths, large or small steps (long value, short value), strong or gentle movements, and quick or slow movements (based on the tempo). The change of meter in a melody could be experienced with different types of locomotor movement, and students could be encouraged to imitate animals and their movements. I propose that students use jumping, hopping, or galloping related to the musical aspects inherent in specific songs, such as articulations or rhythmic patterns. For example, hopping could be used with melodies performed in staccato. Imaginary scenes such as a slippery floor, where the feet and body move and slide smoothly, or a sandy floor, where the feet and body sink, could be an added tool to help students comprehend the stylistic interpretation of a melody.

- Gordon (2003) advocated the importance of incorporating continuous flow movement to establish rhythmic development. Through continuous free flow movement, children have the opportunity to concentrate on music, enjoy the musical experience, and cultivate their imagination. This manner of movement allows children to experience balance and offers awareness of the dimension of time in relation to space. The association between time and space appears to be the foundation for rhythmic competency. Gordon (2003) noted that tempo instabilities are the result of an individual's inability to place their weight over time. The movement in flow facilitates the coordination of the body and constructs audiation and musical thinking; thus, at the preliminary stage, students should experience flow, while listening to or performing music and not tapping or clapping the pulse. At a later stage, and along with continuous flow movement, students should be encouraged to use pulsations in body parts such as the hands to perform the felt pulse of the music. Experiencing pulse in groups using a scrunchy band or hula hoops could be also effective. To embody the experience of pulse, students could be encouraged to move their bodies to the pulse while singing the song in their heads. Side-to-side or up-and-down movements using the feet are another option for supporting a steady beat. The movement of an object, for example, a soft ball, to the pulse while students are sitting in a circle is another good idea for strengthening their understanding of pulse.
- Rhythmic patterns could also be presented in movement patterns (movement schemas), incorporating body parts such as the shoulders, head, hips, hands, and legs. Students appear to be really creative when asked to present a rhythmic pattern using a movement gesture.
- Movement in space (lower, middle, or high) could represent the melodic contour of a song and enhance the understanding of the melodic line. The use of ribbons for this activity is effective. Students are encouraged to move their ribbons according to the melodic line of the song, and ribbons could shape lines in the air that correspond to the melodic contour.

6. Closing Remarks

Movement is an essential “component” of music-making. The perception and understanding of the entire spectrum of music “pass” through the human body, which unquestionably participates in every musical experience. Children love to move and celebrate musical engagement through movement such as dances, singing games, rituals, and clap songs. Laban (1971) argued that the architecture of music can be expressed and experienced

through movement, and his effort elements are associated with the perception and understanding of musical concepts. Meanwhile, Gordon (2003) emphasized incorporating movement activities in Laban's framework to facilitate the perception of rhythm and encourage expressive music performance. Designing and implementing movement activities in the early childhood context supports the construction of an essential movement vocabulary that enhances musical comprehension. Moreover, the establishment well-organized movement activities from the early years, derived from Laban's movement elements, could function as a foundation for performing music expressively and provide the necessary background for enjoying the musical experience (Conway, 2003).

References

- Andress B. (1991). "From research to practice: Preschool children and their movement responses to music", *Young Children*, Vol. 47, No. 1, pp. 22–28.
- Achilles E. (1991). "A review of research involving movement responses to music among preschool children: 1980–1990", *Music in Early Childhood: A Research Journal*, Vol. 1, No. 1, pp. 8–11.
- Blacking J. (1967). *Venda Children's Songs: A study in Ethnomusicological Analysis*, Chicago: The University of Chicago Press.
- Bowman W. D. (1988). *Philosophical Perspectives on Music*, Oxford: University Press.
- Bruner J. (1960). *The Process of Education*, Harvard University Press.
- Campbell P. (1991). *Lessons From the World: A Cross-Cultural Guide to Music Teaching and Learning*, Schirmer Books.
- Campbell P. (1991). "Rhythmic movement and public school music education: Conservative and progressive views of the formative years", *Journal of Research in Music Education*, Vol. 39, No. 1, pp. 12–22, doi: <https://doi.org/10.2307/3344605>.
- Campbell P. (2010). *Songs in Their Heads: Music and Its Meaning in Children's Lives*, Oxford University Press.
- Carlson D. L. (1983). "The effect of movement on attitudes of fifth grade students toward their music class", *Dissertation Abstracts International*, Vol. 44, No. 4, p. 1015A.
- Cheek H. Y. (1979). "The effects of psychomotor experiences on the perception of selected musical elements and the formation of self-concept in fourth grade general music students", *Dissertation Abstracts International*, Vol. 40, No. 5, p. 253A.
- Chomsky L., Robert A., Avon G. and David W. (1986). *Teaching Music in the Twentieth Century*, Prentice-Hall.
- Cohen V. W. (1999). "Emerging harmonic schema as observed in children's kinesthetic analogues", *Bulletin of the Council for Research in Music Education*, Vol. 142, pp. 78–79.
- Conway C. (2003). "Good rhythm and intonation from day one in beginning instrumental music", *Music Educators Journal*, Vol. 89, No. 5, pp. 26–31, doi: <https://doi.org/10.2307/3399916>.
- Crumpler S. E. (1983). "The effect of Dalcroze eurythmics on melodic musical growth of first grade students", *Dissertation Abstracts International*, Vol. 43, No. 8, p. 2587A.
- Dewey J. (2016). *Democracy and Education*, Perennial Press.
- Dunn R. E. (1999). "Stop, look, listen, and move: Children's perceptual modalities and music listening", in: *Zimmerman Conference on Cognitive Processes of Children Engaged in Musical Activity*, University of Illinois at Urbana, Champaign, IL.
- Giddings T. P. (1910). *School Music Teaching*, C. H. Congod.
- Giddings T. P. (1929). "Seeing rhythm", *Music Supervisors Journal*, Vol. 15, No. 3, pp. 23–26, doi: <https://doi.org/10.2307/3382943>.
- Gordon E. (1997). *Learning Sequences in Music: Skill, Content, and Patterns*, GIA Publications.
- Gordon E. (2003). *A Music Learning Theory for Newborn and Young Children*, GIA Publications.
- Harwood E. (1998). "Music learning in context: A playground tale", *Research Studies in Music Education*, Vol. 11, No. 1, pp. 52–60, doi: <https://doi.org/10.1177/1321103X9801100106>.
- Jaques-Dalcroze E. (1930). *Eurhythmics, Art and Education*, translated by Frederick Rothwell, Chatto & Windus.
- Krueger J. W. (2009). "Enacting musical experience", *Journal of Consciousness Studies*, Vol. 16, No. 2–3, pp. 98–123.
- Laban R. (1971). *Rudolf Laban Speaks About Movement and Dance*. Laban Art of Movement Centre.
- Lew J. C-T. and Campbell P. S. (2005). "Children's natural and necessary musical play: Global contexts, local applications", *Music Educators Journal*, Vol. 91, No. 5, pp. 57–62, doi: <https://doi.org/10.2307/3400144>.
- Malloch S. N. (1999). "Mothers and infants and communicative musicality", *Musicae Scientiae*, Vol. 3, No. S1, pp. 13–18, doi: <https://doi.org/10.1177/10298649000030S104>.

- Malloch S. N. and Trevarthen C. (Eds.) (2009). *Communicative Musicality: Exploring the Basis of Human Companionship*, Oxford University Press.
- Marsh K. (2008). *The Musical Playground: Global Tradition and Change in Children's Songs and Games*, Oxford University Press.
- Metz E. (1989). "Movement as a musical response among pre-school children", *Journal of Research in Music Education*, Vol. 37, No. 1, pp. 48–60, doi: <https://doi.org/10.2307/3344952>.
- Moog H. (1976). *The Musical Experience of the Preschool Child*, C. Clarke Trans., Schott & Co.
- Mursell J. L. and Mabelle G. (1931). *The Psychology of School Music Teaching*, Silver Burdett.
- Neill J. (1990). "Elementary music Con Moto", *Music Educators Journal*, Vol. 76, No. 5, pp. 29–31, doi: <https://doi.org/10.2307/3400988>.
- Piaget J. (1952). "The origins of intelligence in children", *Norton*, doi: <https://doi.org/10.1037/11494-000>.
- Riddell C. (1990). "Traditional singing games of elementary school children in Los Angeles", doctoral dissertation, University of California, available online at: <https://search.proquest.com/docview/303827713?accountid=10394>.
- Rohwer D. (1998). "Effect of movement instruction on steady beat perception, synchronization, and performance", *Journal of Research in Music Education*, Vol. 46, No. 3, pp. 414–424, doi: <https://doi.org/10.2307/3345553>.
- Shiobara M. (1994). "Music and movement: The effects of movement on musical comprehension", *British Journal of Music Education*, Vol. 11, No. 2, pp. 113–127, doi: <https://doi.org/10.1017/S0265051700001005>.
- Sims W. L. (1985). "Young children's creative movement to music: Categories of movement, rhythmic characteristics and reactions to changes", *Contributions to Music Education*, Vol. 12, pp. 42–50.
- Stubley E. V. (1998). "Being in the body, being in the sound: A tale of modulating identities and lost potential", *Journal of Aesthetic Education*, Vol. 32, No. 4, pp. 93–105, doi: <https://doi.org/10.2307/3333388>.
- Swanwick K. and Runfola M. (2002). "Developmental characteristics of music learners", in: R. Colwell & C. Richardson (Eds.), *The New Handbook of Research on Music Teaching and Learning: A Project of the Music Educators National Conference*, Oxford University Press, pp. 373–397.
- Taebel D. K. (1974). "The effect of various instructional modes on children's performance on music concept tasks", *Journal of Research in Music Education*, Vol. 22, No. 3, pp. 170–183, doi: <https://doi.org/10.2307/3345139>.
- Trehub S. E. and Trainor L. (1998). "Singing to infants: Lullabies and play songs", in: C. Rovee-Collier, L. P. Lipsitt & H. Hayne (Eds.), *Advances in Infancy Research*, Vol. 12, Ablex Publishing Corporation, pp. 4–77.
- Trevarthen C. (2002). "Origins of musical identity: Evidence from infancy for musical social awareness", in: R. A. R. MacDonald, D. J. Hargreaves & D. Miell (Eds.), *Musical Identities*, Oxford University Press, pp. 21–38.
- Westervelt T. G. (2002). "Beginning continuous fluid Motion in the music classroom", *General Music Today*, Vol. 15, No. 3, pp. 13–19, doi: <https://doi.org/10.1177/104837130201500305>.
- Young L. P. (1982). "An investigation of young children's music concept development using nonverbal and manipulative techniques", *Dissertation Abstracts International*, Vol. 43, No. 5, p. 1345A.