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To cite this article: Jennifer Nikolai (23 Sep 2024): Dancing the Cross-Lateral: Variations on a Brain Dance Theme, Journal of Dance Education, DOI: [10.1080/15290824.2024.2360894](https://doi.org/10.1080/15290824.2024.2360894)

To link to this article: <https://doi.org/10.1080/15290824.2024.2360894>



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Published online: 23 Sep 2024.



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Dancing the Cross-Lateral: Variations on a Brain Dance Theme

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ABSTRACT

This article reflects on observations as a dance pedagogue, adapting Gilbert's BrainDance to a range of learning and teaching opportunities in intergenerational classroom contexts. Initially applied in an early childhood education context, BrainDance provided a point of departure into conversations and observations with teachers on how the children moved, took risks or not, within their Early Childhood Center. Findings from the initial project inspired my adaptation of BrainDance elements into an entire lesson for undergraduate dance students, as a structure for a primary school drama class warm-up, and for a circle-based warm-up for a class of adults age 65+ in their fitness and training program. Using Schön's praxis of reflection-on-action, this article proposes the intergenerational links that may inspire or inform dance teachers, educators, curriculum designers, or physical activity facilitators. I propose that crossing the midline, the lifespan line, parallels moving with young and old—spanning generational dance praxis.

KEYWORDS

Dance studies; pedagogy;
creative dance

Background: BrainDance and No More Monkeys

No More Monkeys Jumping on the Bed was a collaborative research project between my colleague Professor Andrew Gibbons, myself, and a group of Early Childhood Education (ECE) teachers at an Early Childhood Center (ECC) in Tāmaki Makaurau Auckland. Reflecting on the findings from that research inspired me, as a dance pedagogue, to apply BrainDance (Gilbert 2019) as a structural framework for a primary school warm-up, for an entire lesson for a dance undergraduate workshop, and for a circle-based warm-up for a group of adults in a 65+ fitness and training program. These four dance contexts with distinct age groups and intentions all constituted a theme and variation compositional form. Theme and variation in-practice contextualizes my application as a dance pedagogue of Gilbert's BrainDance as theme, with adapted variations in four teaching contexts. Gilbert's (2019) Brain-Compatible Dance Education methodology is a sequential, holistic aligning of the body, an approach aimed to involve numerous parts of the brain supportively, offering meaningful movement opportunities.

Reflection-on-action (Schön 1991) guides this retrospective reflection on the intergenerational links toward future approaches to BrainDance variations that I continue to trial reflexively.

Creative dance, music, and play constitute an integral part of *Te Whāriki* (New Zealand early childhood curriculum) (Ministry of Education 2017) and informs ECC

activities on a daily basis. Creative dance and play in the NZ Early Childhood setting are highly encouraged, yet commonly viewed as structured activities to occur at "mat time." Dance, as a mind/body form of practice, implicitly relies on somatic awareness and presence in a shared experience, so as researchers, we opened a process with ECE teachers on observing their awareness of mind/body choices children were making in their activities at the ECC in Aotearoa New Zealand. As a form of Physical Activity that is aesthetic and highly engaging, dance is included in mat-times as it has many benefits for preschool children (Gilbert 2019; Sansom 2009). These benefits align with the principles, strands, and goals of *Te Whāriki* (Ministry of Education 2017), since the curriculum proposes principles of holistic development (Sansom 2015). However, children are exposed to dance as a structured activity and dancing is limited to teacher-centered activities. The title of our research project, *No More Monkeys Jumping on the Bed*, refers to the mat time song whereby children as a group are jumping, on the spot, then on cue, falling on the spot, or "off" the bed, as imagined by the child, guided vocally by the teacher.

As opposed to structured dance, creative movement provides scope for divergent learning and inclusivity and transcends boundaries (Kaufmann 2005). Our critical interrogation of allocating dance lessons such as these archetypal exercises in a center's learning, aims to encourage teachers to move away from archetypal song

and dance action learning and widen explorations based on how each child wishes to move, autonomously (Gibbons and Nikolai 2019).

Risky play research critically applied in this context, addresses the relationship between healthy outdoor play and healthy childhood development. Research concerned with the rising deficit of daily movement exploration and outdoor play in recent generations encourages risky outdoor play activities (Brussoni et al. 2015). Aligning with Ball, Gill, and Spiegel, the application of the term “risk” in the context of this research and reflection refers to “risk” as a situation “whereby a child can evaluate a challenge and decide on a course of action” (2012, 120). Our research with early childhood teachers also addressed indoor and outdoor play in a manner that may lead to challenging the body in otherwise under-challenged ways; ideally guided by the child (as opposed to adult guided play).

In response, the ECE risky play research project referred to above conducted a preliminary focus group with early childhood teachers regarding their thoughts on the topic of “risky play” in their center setting. Teachers were asked to answer focus group questions about what “risky play” meant to teachers and center managers. The preliminary focus group with teachers provided a platform to inform the content and approach to a dance workshop aimed at integrating teachers’ awareness of dance concepts that aimed to provide a conduit for teacher observations of center children, fostering ongoing support for children to move with confidence and exploration.

Movement is the key to learning at all stages. For teachers of children in the early years, BrainDance elements sequentially support primary developmental movement connecting our central nervous system with the brain, preparing the mover in a wide range of contexts (Gilbert 2019). The collaborative *dance as a conduit for risky play* workshop also opened dialogue toward teacher reflections on what they observed in their children after the *dance as a conduit for risky play* practical workshop was shared. The workshop was based on BrainDance elements and the open-ended discussion and action points between teachers and researchers, inspired by Gilbert’s BrainDance, advocating for the early years as critical in brain development. From a baby’s first year, these fundamental patterns establish future neurodevelopmental patterning as a child moves, plays, and interacts socially with peers (Gilbert 2019).

After the initial focus group, I prepared a workshop based on a provocation model aimed at weaving between discussions and practice, then further discussing and reflecting on each of the eight elements of BrainDance applied within the center’s indoor and

outdoor activities. After experiencing the workshop, the teachers shared their reflections on the focus group and dance workshop experiences, in a summative focus group. Subsequent reflections suggest that situating dance as a conduit for risky play may open observations on how each individual child moves and how dance concepts may cater to learners. In their stages of individual development and creative exploration, children may be gaining confidence in their body’s capacity, building awareness from head-to-toe, reaching across the midline, sensing tactile awareness to self and environment, and testing vestibular actions in moments (of falling, catching, transferring weight, inverting). The eight BrainDance movement patterns to be danced sequentially in this order include: breath, tactile, core-distal, head-tail, upper-lower, body-side, cross-lateral, and vestibular (Gilbert 2019).

The collaboration between researchers and the teachers aimed to foster increased awareness and application of dance and movement possibilities, inspired by specialist ECE spaces and the outdoors, essential in early childhood learning (Hanna 1999). The benefit of *breath* as the first in a sequence of BrainDance patterns, is that breath as deep breath is vital for a fully functioning brain and body connection, central to all movements. Discussions on the value of deep breath, offered us thoughtful reflections with suggestions on the importance of children using diaphragmatic breath for stability, calm, ease, and post-recovery (from a fall or fright). The second sequential pattern is *tactile*, or our touching of body parts to body parts or objects. Various sensory textures, temperatures, and qualities may lead to bonding, sensory integration, and proprioception—central to balancing central movements in our everyday lives with ourselves and others. Tapping body parts as self-awareness supported a range of open-ended discussions on body awareness and confidence.

Cross-lateral movement in the toddlers, still locomoting on the floor, on the belly, lifting themselves up to a secure object or reaching for an item, opened discussions on the significance of cross-lateral reaching—for ascending a tree as much as descending a tree when climbing a structure where risk may be implied. As the second to final sequential pattern, cross lateral connects body parts from opposite quadrants. Cross-lateral movements support complex three-dimensional movements, including crossing the midline and connecting both sides of the brain through the corpus callosum; this is integral to higher thinking development.

We discussed ways of moving for teachers who admitted to the stigma of not being “dancers” themselves. We gave weight to this vulnerability, admittance, and a tendency to hold back adult teachers

from embracing dance as guided by the children they teach. Teachers' lack of confidence or professional development in using dance as a subject often deters dance as an entrance point to discovery (Snook 2012). The *dance as a conduit for risky play workshop* guided by a dance educator/academic in the early childhood center after the teaching day was positioned as a point of departure for awareness in teachers in the early childhood setting.

Where to next? We observed children patting themselves, breathing, and crossing their midlines—all of which support their future risk-taking. These patterns revealed a foundational language for their movement, across a range of contexts. So, when teachers want to integrate something as part of a lesson or a curricular objective toward encouraging risky play, they create a language-rich environment to be applied in various contexts. The teacher and child already have that context. Take the opportunity to know that child in and around their moving patterns. Get to know them further as the dancers they already are and can be.

The objective of this research project, to continuously support confident movers within their bodies relating to space and others, applies in my ongoing reflection-on-action as a dance pedagogue as I continue to teach in a range of contexts whereby these shared aims are consistently considered. In this in-practice reflection-on-action (Schön 1991), I consider variations on a theme as adaptable approaches to *dance as a conduit for risky play* in various learning and teaching settings, intergenerationally spanning the lifespans. Reflection-on-action further supports professional, pedagogical reflexivity, cyclically guiding future adaptations of BrainDance as the reflection-in-action. The process is synonymous with retrospective reflection (Cattaneo and Motto 2021).

Theme and Variation

Theme and variation are compositional music and dance structures used to adapt variations to the theme (as the concept). For example, for children climbing on their own box structure to reach the top of the fence (theme), all possible variations on how each child moves based on the climbing to the top may support teachers in observing movement considerations for that child. The BrainDance theme was then varied in the second context with adult undergraduate students. The students were learning brain-body compatible education approaches and were already informed of BrainDance.

Variation 2: An Entire Lesson for Undergraduate Dance

The class structure I developed for an undergraduate dance class followed the eight elements of BrainDance as a point of departure for a 90-minute class with adults who had previous experience in physical education, sports, or dance. I was asked to conduct a “guest” class for undergraduate students, whereby their classroom theory lessons would align with my practice workshop. Over a 90-minute studio class, I allocated *breath* and *tactile awareness* to a circle-based, self-awareness floor-to-standing warm-up sequence. I then introduced a center practice of pliés, tendus, transfer of weight, and swinging phrases; this led to movements which focused on *core-distal*, *head-tail*, *upper body*, and *lower body*. Included were phrases or locomotor sequences across the floor, within the center floor space, both on the floor at a low level and upright at a high level; all engaged *body side*, *cross-lateral*, and *vestibular*. Dancing the cross-lateral in this context became most significant in that the cross-lateral element, through a range of phrases, was integrated most holistically into all of the latter phrases that were summative of the class themes. The cross-lateral in this context was observed to be the most complex and challenging and required repetition and practice as an approach to confidently prepare the students to perform their own version of the phrase, integrating cross-lateral progressions throughout with great effort and concentration.

I also observed a freedom or release of movement patterns in the cross-lateral phrases, allowing for a sensation of flow, opening the spine, and engaging a vocalization of breath as released. The cross-lateral sequence marked the climax of the integration of all class themes before the denouement of the slow, gentle, and safe approach to vestibular movement as a closing to the class. Where to next? We encourage students to be self-aware of the elements in the application as deepening their dance praxis and their own variations in improvisation or choreographic composition or in their daily lives outside of the studio context.

Variation 3: Structure for a Primary School Drama Class Warm-up

The warm-up I developed for primary school drama/dance workshops over three months followed the eight elements as a circle warm-up for breath and body, confidence building, and a sense of play in preparation for the improvisation workshop to follow. In a primary school drama workshop with 9-year-olds, BrainDance gets us laughing and aware of the fun we are having. A circle-style warm-up always allowed me to view the

large group of children and take cues from them regarding their energy levels, focus, and movement preferences. For example, sounding *breath* was effective for introducing a vocal warm-up, and *upper* and *lower body* tasks allowed me to observe their general awareness of space in relation to others and how they preferred to move on that day.

To start with, the warm-up is a way of preparing the child for focused activities where moving, speaking, calling, and projecting the voice may also be required in an upcoming drama improvisation. The warm-up ideally encourages a daily focus, preparing a child's self-awareness and tactile relationship to (a) self, (b) their material world, and (c) the world of others within the school day demands; these demands include sitting at desks, listening, and speaking in turn. BrainDance addresses the sequential tools that can support movement as self-awareness in a manner that engages the body/brain in its sequence of awareness, in this instance, during the school day, where academic subjects and working in the classroom always precluded the dance/drama sessions. Starting with the role of the *breath*, the awareness of the source of diaphragmatic breath, and then moving into *tactile* awareness provided a focus that led improvisers into their scenes. As points of departure, these elements inform the child of their relationship to—and respect for—self and others in the space.

Where to next? Integrating the elements into improvisation tasks, character development, and scene development would continue to reinforce the repetition of the elements as supportive in “impromptu” moments, where offering a response in a moment of conflict or challenging situation in the child's life may have been role-played, even practiced in the dramatic context. The BrainDance wakes up the child's awareness of their own breath, their tactile awareness, upper and lower body, and body sides that inform character development. The movement sequences provide supportive mechanisms within the school day, be that while tumbling, rolling, reaching, jumping, or falling. Complementary to BrainDance is an emphasis on awareness of alignment of the child in support of their own efficient movement patterns required in dramatic contexts and in their daily lives.

Variation 4: 65+ Adults in their Fitness and Training Program

BrainDance establishes a community of safe movers. The older adults I was asked to provide a dance warm-up for were mobile and strong, as they were enrolled in a regular class of gym-based sessions three days per week focusing on strength, endurance, and connecting to a community of like-minded, fit seniors. The

BrainDance structure allowed me to introduce some brain-based research on the impact of dance as affecting positive aging (Gilbert 2019). The adults in this fitness class encouraged us to all sing together to perform in a circle with confidence, to connect with peers, and end the movement class on an inspirational note. Schwaiger (2005, 2012) suggests that mature performers have subverted ageist stereotypes, as in the case of these adults; their intention was to counter ageism in their dancing and singing as our class ended. The older adults were particularly vocal about their preferences to (a) being challenged to listen to musical accompaniment that they enjoyed and (b) using their voices—such as singing—as a closure to their sessions, which they found added to the socially bonding experience.

The BrainDance awakens older adults' awareness of their use of breath and the sequencing of movement that provides supportive mechanisms for what may occur as the day progresses: changing levels, walking, running, reaching, falling, and recovering. The emphasis on awareness of alignment may support the adults' efficient movement patterns: Movers would (a) return to the center of gravity from a reach or a fall and (b) link the *core* to *distal* relationship of reaching from a secure place, before attempting another potentially complex action. Returning the body back to the center with awareness of *breath* and alignment during high-impact and endurance-based activities was an important factor in movement efficiency.

Where to next? Applying these principles using postural models and dynamic alignment may also support weight training, endurance training, relaxation, and durational activities such as walking briskly or dancing for an extended period.

Dancing the Cross-Lateral; Crossing the Midline

Dancing the cross-lateral challenges the most complex integration of elements in an active adult's life, while attempting to retain fitness, bear weight, and engage in endurance activities safely. With safe practice considered, older adults may yearn to push perceived boundaries surrounding the mature, moving body (Ali-Haapala, Moyle, and Kerr 2021). Equally as thoughtful for intergenerational consideration is the key suggestion from Early Childhood Teachers that teachers provide *tactile* stimulation with babies with the use of their hands, and possibly other materials such as feathers or soft fabrics. Materials and human touch encourage and support tactile awareness.

This proposition applies intergenerationally. Crossing the midline as a toddler or as a 65-year-old adult may foster wellness, paralleled to the touch of the loving hand of a fellow nurturer, family member, or friend. As

variations on the BrainDance theme continue, crossing our lifespan midlines integrates higher thinking development in supportively increasing our awareness of dance elements in the early years and creative aging as life-long movers. Dancing in a group with others may improve one's quality of life. Gilbert (2006) advocates for dance as an invitation for social interaction. As children, adults, and older adults, interacting with peers is an essential element in our stages of development. Even further, if dance is in the hands of the student, the mover, or the learner, they are encouraged to take charge of their own learning and their own problem solving. Gilbert encourages teachers to be facilitators and mentors, stating: "Approaches that alternate between directed teaching and student exploration/creation lead to greater student involvement and enhanced learning" (2006, 13). Older adults' active involvement in dance groups or communities of dance enhances their sense of community and belonging, and fosters mutual understanding within the group (Paulson 2005; Cooper and Thomas 2002).

Dance encompassing both musical and kinetic skills (a) supports positive well-being, (b) encourages a sense of belonging and satisfaction for older adults (Zygmunt et al. 2023), and—I would argue—(c) crosses the midline (of the brain) in early childhood groups of dancing children, nine-year-olds, and early adult students. I have observed that cross-lateral movements performed as later progressions in the BrainDance sequencing support safe complexities in movement choices. Reflections-on-actions as a dance pedagogue illuminate how to adapt to crossing the midline and expanding or extending this gesture or phrase to further challenge movers as learners throughout our long, dancing lives.

Acknowledgments

Thank you to Professor Andrew Gibbons, fellow research collaborator, colleague, and friend.

Disclosure Statement

No potential conflict of interest was reported by the author.

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