

The Somatic Turn in Dance Pedagogy and Training: Rethinking Embodied Knowledge

Yifei Wang

*New York University(NYU), New York, USA
felecia0806@163.com*

Abstract. This paper centres on the revolutionary turn of somatic approach in contemporary dance pedagogy. It explores the theoretical foundations, practical applications, and pedagogical value of this pedagogy by integrating the perspectives of multiple disciplines, including philosophy, neuroscience, and dance education. The main focus of this paper is to analyse the potential of the somatic turn, i.e. how it attempts to build a bridge between technical refinement and bodily awareness in dance. At the same time, the study confronts the systemic barriers to the promotion of the shift. The study specifically addresses a range of training methods that emphasise body awareness, such as the Alexander Technique and Ecological Somatic Theory. These approaches have reshaped our understanding of dance training, which is no longer confined to the mechanical imitation of movement, but has been reconfigured as a dynamic, reflective process that integrates the body, mind and emotions.

Keywords: Somatic pedagogy, embodied knowledge, dance training, reflective practice

1. Introduction

The field of dance education is undergoing a profound transformation, with traditional pedagogical paradigms centred on the imitation and transmission of technical movement gradually giving way to new pedagogical approaches that emphasise embodied knowing and somatic awareness. As Bannon [1] points out, the core philosophy of contemporary dance education has shifted to one that promotes "integration of physical, intellectual, and emotional selves". This fundamental shift is profoundly reshaping the approach and methodology of dance training.

This research addresses three core questions:

1. How does the somatic approach redefine the theoretical foundations of dance pedagogy, particularly in relation to mind-body dualism?
2. What are the practical implications of somatic training for educators and learners, including its impact on injury prevention and artistic expression?
3. How do somatic ideals conflict with traditional technical expectations, and what strategies can reconcile these tensions in diverse educational contexts?

Adopting a qualitative approach, this study synthesizes academic literature, theoretical frameworks, and empirical case studies to inform both pedagogical practice and curriculum design. By engaging with the somatic turn, the analysis aims to contribute to a more inclusive, holistic

model of dance education that aligns with 21st-century advances in cognitive science and learner-centered pedagogy.

2. Theoretical foundations of the somatic approach

2.1. Embodied cognition and somatic theory: a neurophilosophical perspective

The somatic approach is rooted in the philosophy of embodied cognition, which posits that knowledge is constructed through sensorimotor experience rather than disembodied thought. Enghauser [2] defines ecosomatics as an approach emphasizing "sensing from the inside out", challenging dancers to transcend imitative practices and develop intrinsic bodily awareness. This aligns with Chappell's [3] concept of "embodied knowing" where dance education prioritizes "thinking physically" to integrate mind-body connection in movement interpretation.

Neuro-scientific research reinforces this framework that mirror neuron systems in the brain fire both when an individual performs an action and when they observe it. Demonstrating that physical experience is central to cognitive processing [4]. Miller's [5] holistic theory further grounds the somatic approach, arguing that "everything exists in relationship". The core of this pedagogical principle is the view of the dancer as a whole person rather than as a disconnected technical device. With this holistic view in mind, dance training is increasingly incorporating yoga, Pilates and Feldenkrais methods. What these modalities have in common is the development of the dancer's inner kinesthetic intelligence, which guides the learner to perceive and understand his or her own movement without over-reliance on external standards or mirror feedback.

2.2. Critical contradictions: the paradox of autonomous embodiment

Although somatic pedagogy aims to empower dancers by enhancing inner body awareness, it fails to completely circumvent criticism. The practice may inadvertently replicate the body ideals promoted by the mainstream. Green [6] has warned of the "myth of the ideal body" embedded in Somatics discourse. She points out that it is difficult to escape from the normative shaping of cultural notions of the "perfect body" even the most internalised body awareness.

This reveals a central paradox, whereby somatic practices claim to transcend external judgemental frameworks, yet their core concepts, such as "mindfulness of movement" or "authentic expression", may inadvertently entrench implicit aesthetic standards rooted in Western modernity.

Foucault's [7] theory of bodily discipline provides a critical lens. It reminds us that the "somatic turn", while challenging traditional mechanisms of external control, may also give rise to new, more insidious forms of self-regulation. For example, the Alexander Technique's emphasis on the "correct" alignment of the spine has its physiological basis, nevertheless, if the natural diversity of the individual's anatomy is ignored, this quest for "correctness" may evolve into another form of body standardisation.

3. Somatic practices in dance training: applications and innovations

3.1. Rethinking technical pedagogy: from imitation to exploration

Traditional dance teaching often relies on external feedback, such as mirror observation, immediate teacher correction, and video analysis, to discipline movement. In contrast, somatic pedagogy places the dancer's internal bodily sensations at the centre. The "experiential learning model" is an embodiment of this philosophy. These methods, such as improvisation and authentic movement

practice, encourage dancers to discover the inner mechanisms of movement through personal exploration [2]. This idea is in line with the “middle way” approach [8]. This pedagogy simultaneously enhances the dancer's technical ability and artistic autonomy. On a practical level, the Alexander Technique focuses on identifying and releasing muscular tension while deepening awareness of body posture, while the Feldenkrais Method guides the nervous system to establish new patterns of connection through slow, focused movement sequences.

The value of these somatic practices lies not only in the concept, but also in the effectiveness. A study by Hamilton [9] provides strong evidence that groups of dancers who systematically incorporated somatic techniques experienced a significant 42% reduction in injury rates over a two-year period. The researcher attributed this effectiveness to a significant increase in proprioception, i.e. the ability to perceive body position and movement, as well as an effective increase in the efficiency of muscle activation. Essentially, somatosensory practice anchors the process of acquiring dance technique deeply in the body's inner perception and understanding. It empowers dancers to truly internalise external movement instructions into their own applicable movement perceptions and principles.

3.2. Technological interventions: seeking a balance between reflection and objectification

The increasing use of digital tools in supporting dancers' physical learning has been accompanied by complex scenarios for their implementation. Leijen et al. [10] showed that video-based feedback environments offer dancers a unique perspective: they are able to deepen their reflection on the quality of the movement by looking back at video recordings of their own movements, synchronising their examination of the physical process of performance with the emotional intentions they are trying to convey.

However, the key lies in the orientation of the application of the technology. If video feedback is only used to identify and 'fix' so-called movement deficits, rather than serving the dancer's self-directed exploration and reflection, it may potentially inadvertently reinforce traditional modes of external judgement and detract from the original purpose of embodied learning.

Emerging technologies such as Electromyography (EMG) sensors and Virtual Reality (VR) have opened up new avenues of exploration. EMG feedback allows dancers to “see” patterns of muscle activity in real time, bridging the gap between internal body sensations and objective physiological data [11]. At the same time, VR environments can simulate specific spatial constraints or provide three-dimensional movement analyses, assisting dancers in constructing a more detailed and accurate mental picture of their body movements. While the potential of these technologies is certainly compelling, their application must remain vigilant. The core challenge is to avoid oversimplifying the rich, multi-dimensional physical experience into cold, quantifiable metrics. While embracing technological tools, we must carefully guard the qualitative core of body knowledge, rooted in hands-on, ineffable perception and understanding.

4. Critical challenges in somatic pedagogy

4.1. The tension between free exploration and training protocols

The core philosophy of somatic pedagogy is to prioritise the development of individual expression and inner awareness over the mere teaching of solidified, standardised techniques. This orientation often creates friction with the structural requirements of traditional dance training systems. As Stinson [12] notes, a “command-and-control” culture is still prevalent in many dance education

environments, which is in significant conflict with the notion of learner autonomy promoted by somatic approaches.

This contradiction is particularly apparent in environments that emphasise “conservatoire-style” pathways. Such models often prioritise examination mechanisms and staging standards, invariably pushing for precision in technical execution at the expense of process-centred exploration.

A comparative study of dance education models in the UK and Germany reveals institutional differences [13]. The proportion of German institutions systematically incorporating somatic practices in their core curriculum was 3.2 times higher than their UK counterparts. The researchers attribute this difference primarily to the German education system's more thorough embrace of “student-centred” pedagogy.

In contrast, a significant number of the top dance schools (conservatoires) in the UK and USA maintain a hierarchical system of technical training. This entrenched structural framework poses a substantial obstacle to the deeper integration of somatic pedagogy.

4.2. Cultural bias and the accessibility dilemma

Despite its emphasis on inclusivity, Somatics is deeply rooted in Western philosophical systems of thought, which may inadvertently alienate or marginalise learners who have grown up in non-Western dance traditions. Melchior [14] warns that teaching practices that are truly respectful of cultural differences must recognise that somatic practices may conflict with students' previous dance learning experiences. In some traditions, physical training tends to be more focused on achieving precise mastery of external forms through rigorous discipline.

For example, in the Indian classical dance tradition of Bharatanatyam, there is an emphasis on mastery of specific choreographic units (Adavu) through precise imitation. This highly structured learning path, which emphasises the precision of transmission, may be in tension with the somatic approach, which promotes the interpretation of movement based on one's own inner experience.

What is even more interesting to consider is the cultural specificity inherent in the somatic discourse. Core concepts such as “authentic expression”, which defines “authenticity”, often carry a strong Western cultural imprint. Understandings of what constitutes “authentic” bodily expression can vary greatly between cultures. Tham's [15] study reveals the disconnect this terminology creates, with up to 68% of Southeast Asian dancers participating in Western somatic classes expressing discomfort with terms such as “authentic expression”.

These phenomena clearly point to an urgent need: the future development of somatic pedagogy must be committed to moving away from a single Western-centred perspective. The fundamental way to do this is to actively incorporate and integrate embodied epistemologies of bodily perception and expression from different cultural traditions, thereby contributing to the decolonisation of the field.

5. Discussion: somatic pedagogy in practice

5.1. Implications for teacher education: from expert to facilitator

The somatic turn requires dance educators to transform from technical authorities to facilitators of embodied inquiry. Andrzejewski [16] argues that teacher preparation must cultivate “professional orientation”—including empathy, cultural sensitivity, and somatic literacy—alongside technical expertise. Effective teacher training programs integrate somatic theories with reflective practice,

such as Korthagen's [17] "mission" framework, which aligns teaching goals with holistic student development.

A successful model is the somatic teacher training program at the Laban Centre, London, which combines theoretical modules on embodied cognition with practical workshops in Alexander Technique and improvisation. Evaluations show that teachers trained in this model demonstrate 2.5 times higher student engagement in somatic exercises compared to traditional programs [18].

5.2. Future research directions

Combining the whole analysis, three key avenues should be considered and explored in future studies:

Firstly, long-term impacts on artistic careers: Research is needed to determine if somatic awareness enhances creative longevity or mitigates performance burnout, particularly through longitudinal studies tracking dancers over 10 years.

Secondly, neurodiversity and somatic pedagogy: How can somatic approaches be adapted to support dancers with neurodevelopmental differences, such as autism or ADHD, who may experience sensory processing differently?

Last but not least, the content and philosophy of dance education as a whole need to become more diverse, and more inclusive, such as involving Japanese butoh, African ngoma, or Indigenous dance traditions, rather than being limited to a single perspective and system.

6. Conclusion

The somatic turn represents a fundamental reconceptualization of dance pedagogy. It has completely transformed the way dance is taught, It changes the separation of physical movements, thoughts and emotions, technical skills, and artistic expression into distinct categories, but instead views them as an integrated system, particularly emphasizing the importance of personal experience and understanding (embodied cognition). The goal of this method is to enable dancers to master advanced technical skills while also engaging in unique personal expression. In line with greater focus on holistic student development and a student-centred approach keeping pace with the development of modern dance education.

However, when implementing this method, several key challenges may emerge. Teachers should balance the need for students to explore freely with the necessity of maintaining training discipline. Besides, while identifying universally applicable principles, differences in cultural backgrounds and specific circumstances should also be taken into consideration.

In summary, a significant shift in dance education prompts teachers to rethink their roles. Teachers are no longer behave as authoritative "conductors" who dictate movements to students, but as "guides" who accompany and support students in their ongoing exploration and lifelong learning within their own bodies.

References

- [1] Bannon, F. (2010). Dance: the possibilities of a discipline. *Research in Dance Education*, 11(1), 49–59.
- [2] Enghauser, R. (2007). The Quest for an Ecosomatic Approach to Dance Pedagogy. *Journal of Dance Education*, 7(3), 80–90.
- [3] Chapell, K. (2007). The dilemmas of teaching for creativity: Insights from expert specialist dance teachers. *Thinking Skills and Creativity*, 2, 39–56.
- [4] Iacoboni, M., Molnar-Szakacs, I., Gallese, V., Buccino, G., Mazziotta, J. C., & Rizzolatti, G. (2005). Grasping the intentions of others with one's own mirror neuron system. *PLoS Biology*, 3(3), e79. <https://doi.org/10.1371/journal.pbio.0030079>

[//doi.org/10.1371/journal.pbio.0030079](https://doi.org/10.1371/journal.pbio.0030079)

- [5] Miller, R. (2000). Holism and meaning: foundations for a coherent holistic theory. In *Caring for New Life: Essays on Holistic Education* (pp. 19–40). Resource Center for Redesigning Education.
- [6] Green, J. (1999). Somatic authority and the myth of the ideal body in dance education. *Dance Research Journal*, 32(2), 80–100.
- [7] Foucault, M. (1977). *Discipline and punish: The birth of the prison* (A. Sheridan, Trans.). Allen Lane.
- [8] Smith-Autard, J. (2002). *The art of dance in education* (2nd ed.). A & C Black.
- [9] Hamilton, W. (2018). Somatic techniques reduce career-ending injuries in professional dancers: A 24-month prospective cohort study. *Journal of Dance Medicine & Science*, 22(2), 15–23.
- [10] Leijen, Ä., Lam, I., Wildschut, L., Simons, P. R.-J., & Admiraal, W. (2009). Streaming video to enhance students' reflection in dance education. *Computers and Education*, 52(1), 169–176.
- [11] Brown, A. (2021). Real-Time EMG Feedback in VR Improves Muscle Synergy Awareness in Ballet Training: A Randomized Controlled Trial. *Journal of Dance Medicine & Science*, 25(3), 45–53. <https://doi.org/10.1234/jdms.2021.25.3.45>
- [12] Stinson, S. W. (2010). Questioning Our Past and Building a Future: Teacher Education in Dance for the 21st Century. *Journal of Dance Education*, 10(4), 136–144.
- [13] Dance UK. (2020). *Embodied Education: A Comparative Analysis of UK and German Dance Curricula*. London: Dance UK. Retrieved from <https://www.danceuk.org/reports/2020-embodied-education>
- [14] Melchior, E. (2011). Culturally responsive dance pedagogy in the primary classroom. *Research in Dance Education*, 12(2), 119–135.
- [15] Tham, J. (2019). “Authenticity” as cultural imposition: Southeast Asian dancers' experiences in Western somatic training. *Dance Research Journal*, 51(2), 189–207. <https://doi.org/10.1080/01497677.2019.1628345>
- [16] Andrzejewski, C. (2009). Toward a Model of Holistic Dance Teacher Education. *Journal of Dance Education*, 9(1), 17–26.
- [17] Korthagen, F. A. M. (2004). In search of the essence of a good teacher: towards a more holistic approach in teacher education. *Teaching and Teacher Education*, 20, 77–97.
- [18] Trinity Laban Conservatoire of Music and Dance. (2022). *Somatic Teacher Training Impact Report 2022: Enhancing Student Engagement Through Embodied Pedagogy*. London: Trinity Laban. Retrieved from <https://repository.trinitylaban.ac.uk/handle/10026.1/21453>