



Research paper

Inhabiting the body through the arts in teacher education: The experience and relevance of an enhanced somatic dimension

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ABSTRACT

This article focuses on a meeting between the fields of teacher education, arts education and somatic education. Somatic education, the process of learning to experience the body from the inside, is a lesser-known modality within teacher education, and this research sought to explore its potential scope and relevance within this context. The article thereby offers a theoretical discussion on the relevance of somatic principles and practices for the arts education component of teacher education, and goes on to provide a particular illustration of the experience of its integration within an Irish pre-service context. The data for analysis within the phenomenological case study included participant journals, post-module questionnaires, and interviews which drew on aesthetic and embodied modalities. Ultimately, the somatic-aesthetic relationship which evolved was considered to be critical to experiences of flow, presence and attunement within the arts, and to related dispositional and perceptual shifts in identity and professional orientation.

1. Introduction

This article focuses on a meeting between arts education and somatic education in the context of initial teacher education, and the significance of emergent experiences and understandings of flow, presence and attunement as they arose within this frame of engagement. Somatic education, a lesser-known domain within the field of teacher education, was first coined by Thomas Hanna who described it as “the field which studies the *soma*: namely, the *body* as perceived from within by first person perception” (Hanna, 1988, p. 31). The orientation of somatic education may thus be considered to address in practice a broader theoretical concern with the phenomenon of embodiment, which has been amplified across a range of academic disciplines since the mid-1950s. Embodiment is an umbrella term, associated initially with the phenomenological writings of Merleau Ponty, and more recently elucidated within the fields of cognitive science, social studies, and the performing arts. It represents a critique of dualistic conceptions of mind, and orients towards an integrated understanding of the relationship between the physical and experiential body (Bresler, 2004a; Merleau-Ponty & Smith, 1962; O’Loughlin, 2006; Van Manen, 2023; Varela et al., 1991).

As a teacher educator, the particular impetus for the somatic focus within my own praxis arose from my accreditation in somatic education

and therapy at the Gorse Hill Centre in Greystones Ireland in 2016 (ISMETA approved¹). The four-year foundational programme for this accreditation was entitled ‘Origins’, and was led by pioneering dance artist and psychotherapist, Joan Davis (Davis, 2007, 2018). The accreditation was completed by practitioners from a range of therapeutic, artistic and educational backgrounds and included a particular value for the embodiment process of the somatic facilitator. I subsequently wished to explore the noticeable impacts of this process on my work as a teacher educator and arts educator at Dublin City University. The fieldwork for this study thereby took place in light of the advancement of a new module, which I was developing as part of an arts-based specialism within the Bachelor of Education and Post-graduate Masters in Education programmes at the university.

On one level, this effort was with a view to improving and understanding the potential nature and purpose of my own emerging somatic practice within this convergence of disciplines. However, it also aimed to address wider theoretical concerns which have become more pertinent within the teacher education field regarding the embodied nature of teacher identity formation (Korthagen, 2004; Van Manen, 2007, 2016; Rogers, 2020) and the role of arts education in addressing such issues in practice (Eisner, 2002a; Hadjipanteli, 2020). This coincides with related concerns within the arts education field itself, regarding an under-recognition of the significance of the embodied dimension of arts

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education practice, and the limitations this can imply for the proposed benefits of these modalities (Bowman & Powell, 2007; Davidson, 2004; Stinson, 2016). With such concerns in mind, I propose that the relative absence of dialogue between the somatic education and teacher education fields is worthy of particular attention at this time, and underscores the need for increased exploratory research within this domain.

In recognition of the novel nature of this study, the research questions were purposefully qualitative and experiential in nature, and were situated within a broadly phenomenological research design. Furthermore, due to the inclusion of my own experiences as facilitator, it also included influences from the fields of autoethnography, aesthetic based research and somatic education itself. The research questions aimed to address the following questions.

- *What is the lived teaching and learning experience of an enhanced somatic dimension within an arts education module in a teacher education programme?*
- *What relevance does such experience have for the identity formation of student teachers?*

The next section provides a more substantial context for these questions in relation to the three fields in question. Due to the relative dearth of empirical studies related to these questions, the discussion is theoretical in emphasis.

2. Somatic education

Significant research has advanced in recent decades in relation to the historical roots of the somatic field and the crystallisation of its fundamental principles (Barbour, 2016; Brodie & Lobel, 2014; Eddy, 2017; Fortin, 2002, 2017; Fraleigh, 2015; Green, 2002; Hartley, 2022; Mangione, 1993; Mullan, 2014; Whatley et al., 2015). The better-known somatic disciplines that have emerged predominantly in the Western world during the twentieth century include - authentic movement, Bartenieff fundamentals, body-mind centering, continuum, eutony, Feldenkrais method, ideokinesis, sensory awareness, Skinner releasing technique, Rosen method, and Topf technique (Eddy, 2017; Mangione, 1993; Mullan, 2014). While distinctions between these practices and their emphases evidently exist, a somatic approach to learning tends to distinguish itself by encouraging a heightened experiential awareness of the integrated nature of the human nervous system. It notably places a particular emphasis on a sensory or 'felt-sense' awareness of the cells, tissues and systems of the body, as the most effective means of accessing the wider intelligence of the body-mind system. Indeed it is this emphasis on felt-sense awareness that tends to be credited for the expansion of perception and the related physical and psychological repatterning that is commonly associated with somatic practice (Bainbridge-Cohen, 1993; Cohen et al., 2012; Fraleigh, 2015; Gendlin & Olsen, 1970; Hartley, 2022). Hanna used the term 'somatic learning' and later 'somatic education' to describe the incremental process of consciously accessing and utilizing such knowledge on the part of the participant (Hanna, 1988, p. 34).

Historically, somatic practice has been shown to evolve across a range of contexts, but its original explorations in the early twentieth century tended to focus on the sphere of physical injury (Eddy, 2017; Hanna, 1988; Johnson, 1995; Mangione, 1993). However, it was through the later integration of somatics into the field of professional dance, that a clearer understanding of the wider aesthetic, therapeutic and social benefits of the approach began to crystallise. From a dance perspective it has been the particularly internal sensory and self-led orientation of a somatic lens that has tended to be credited for a significant evolution from technician to artist within the dancer. (Batson et al., 2012; Brodie & Lobel, 2014; Dragon, 2015; Enghauser, 2007; Schupp, 2017). Such outcomes have also been shown to coincide with a recognition of the therapeutic benefits of such practices in terms of a

fundamental empowerment and actualisation of the individual (Adler, 2002; Bacon, 2015; Collinson, 2015; Hartley, 2014, 2022; Payne et al., 2015). Fraleigh's definition of somatic inquiry, is noteworthy in this regard wherein she describes it as:

a field of study and practice concerned with holistic body-centered approaches to assist people in experiencing and transforming the self through awareness relative to the living world, the environment and others (Fraleigh, 2015, p. 5).

Whether practitioners demonstrate an artform or personal development orientation in the emphasis of their somatic practice, these goals are not considered to be mutually exclusive. Indeed for many dance practitioners a focus on the wholeness of the person has been found to be one of the key ingredients in the development of artistry over technique (Batson et al., 2012; Brodie & Lobel, 2004; Enghauser, 2007; Schupp, 2017).

From an empirical perspective, it is noteworthy that much of the research in this field to date has been largely confined to the health, therapy and professional dance sectors. Significant gaps remain in terms of the wider application of somatic practice, particularly in the context of teacher education. Nonetheless, a number of exploratory PhD studies from the Canadian context have focused on the engagement of practicing teachers with such principles. By way of illustration, Rosehart's (2013) phenomenological study draws on artography to focus on the experience of supporting recertifying teachers to access somatically held beliefs and experiences related to professional identity. Emond's (2022) later phenomenological study focuses on the experience of five elementary teachers who were facilitated to explore bodily learning processes using somatic approaches. In both cases, significant impacts were demonstrated at the level of professional identity and self-perception, while the Emond study demonstrated related effects on the participant's quality of teaching, often at a relational level. Both studies notably identify a lacuna in relation to such practice and research at pre-service level, and recommend future investigation within this domain.

3. Embodiment and teacher education

Notwithstanding the dearth of research in this area, it is worth noting at this juncture that issues of embodiment have become a more significant point of concern within the field of education in recent years. Significant shifts in the understanding of the nature of cognition and learning, arising initially within educational philosophy and more recently within the fields of embodied cognition and neuroscience, have fuelled a robust critique of the persistent dualistic conceptions of mind that have characterised much educational theory and practice within the Western world (Csordas, 1993; Damasio, 2021; Dewey, 1928, 1938; Greene, 1994; Lakoff & Johnson, 1999; Merleau-Ponty & Smith, 1962; O'Loughlin, 2006; Siegel, 2007, 2020; Stolz, 2015; Varela et al., 1991). Unsurprisingly such critique has also more recently extended to the field of teacher education, and tends to align with shifts in emphasis from teacher training to teacher education, from content delivery to identity, and from competency to disposition. In light of such concerns, a vigorous rearticulation of the fundamentally personal, relational and situated nature of the practice of teaching and learning has become central to counteracting the renewed attempts to narrow the field of teacher education in recent times (Baltodano, 2012; Beijjaard & Meijer, 2017; Bullough, 1997; Cochran-Smith, 2021; Conway, 2013; Greene, 1994; Korthagen, 2004, 2014, 2017; Korthagen & Nuijten, 2022; Palmer, 2007; Todres, 2008; Van Manen, 2007, 2016).

Of particular interest to this study is the related fledgling but growing body of literature which points to the essentially tacit and embodied nature of teacher identity, and questions how this feature may be addressed more effectively in the education of teachers. (Andrews, 2018; Korthagen, 2004; Latta & Buck, 2008; Todres, 2008; Van Manen, 2016). Korthagen for example extends the more characteristic

understandings of the relationship between identity and practice in the literature, which tend to focus on issues of autobiographical history, belief systems, and pedagogical understanding. In his efforts to encourage a more holistic approach to teacher education, he draws attention to the dispositional manifestations of such personal content in his assertion that “professional identity often takes on the form of a Gestalt: an unconscious body of needs, images, feelings, values, role models, previous experiences and behavioural tendencies, which together create a sense of identity” (Korthagen, 2004, p. 85). From this perspective, I would suggest that teacher identity might be better understood as a mode of being over knowing. With this in mind, it is worth noting that some authors have further extended considerations of teacher identity to bring more attention to the significance of a teacher's particular state of consciousness in a given pedagogical moment, with a particular focus on their quality of presence (Korthagen & Vasalos, 2009; Rodgers, 2020; Rodgers & Raider-Roth, 2006; Roefs et al., 2021). By illustration Rodgers & Raider-Roth describe presence in teaching as

a state of alert awareness, receptivity, and connectedness to the mental, emotional, and physical workings of both the individual and the group in the context of their learning environments, and the ability to respond with a considered and compassionate best next step (Rodgers & Raider-Roth, 2006, p. 265).

In a similar vein, phenomenologist Van Manen has given much attention to the significance of a present moment orientation in teaching, and what he refers to as the ‘pedagogical tact’ that it requires (Van Manen, 2007, 2016). For Van Manen pedagogical tact “shows itself as subtle influence, as holding back, as openness to the child's experience, as attunement to subjectivity, as situational confidence, as improvisational gift” (Van Manen, 2016, p. 79). In particular, he would argue that it is central to a relational quality of ‘attunement’ upon which all effective teaching encounters hinge, regardless of subject matter. Of particular interest to this study is the significance he attaches to the embodied, pre-reflective and pathic nature of one's quality of attunement, wherein he proposes that,

Professional knowledge is pathic to the extent that the act of practice depends on the sense and sensuality of the body, personal presence, relational perceptiveness, tact for knowing what to say and do in contingent situations, thoughtful routines and practices, and other aspects of knowledge that are in part pre-reflective, pre-theoretic, pre-linguistic (Van Manen, 2007, p. 20).

Notably, Van Manen not only draws attention to the somatic nature of sensitive teaching, but he also provokes his readers to consider the question of how such a sensitivity and responsiveness might be cultivated (Van Manen, 2016). Exploring the complexity of the task in question, he suggests that the process cannot be a matter of teaching superficial gestures and signals, because pedagogical tact ultimately manifests from a deeper mode of relational being.

3.1. The arts and embodied teacher disposition

In light of such concerns a similarly growing body of literature suggests that the arts offer a particularly valuable antidote to dualistic approaches to education from an embodiment perspective, not least within the field of teacher education (Bresler, 2004a; Doddington, 2014; Greene, 1984; Eisner, 2002a, 2002b, 2003; Powell, 2007; Powell & Lajevic, 2011; Schusterman, 2004, 2020; Stinson, 2016). Foundational in this regard are Eisner's (2002a, 2003) seminal observations about the significance of the somatic dimension of aesthetic experience in relation to a teacher's wider dispositional orientation, or what he and other theorists have come to refer to as ‘teacher artistry’ (Andrews, 2018; Dunn, 2016; Eisner, 2002a; Hadjipanteli, 2020; Lutzker, 2012). In this regard, he explains that,

Teaching profits from—no, requires at its best—artistry. Artistry requires sensibility, imagination, technique, and the ability to make judgments about the feel and significance of the particular (Eisner, 2002a, p. 382).

As a mode of preparation for the development of such qualities, Eisner argues that in the absence of algorithms or ‘rules’ for judgement within an aesthetic process, one must rely on one's somatic knowledge. He describes this as “the sense of closure that the good gestalt engenders in embodied experience” (Eisner, 2003, p. 377). Furthermore, he explains that in the course of aesthetic activity, “the body is engaged, the source of information is visceral, the sensibilities are employed to secure experience that makes it possible to render a judgement and to act upon it” (Eisner, 2002b, p. 201).

However, while Eisner argues that the arts offer a preferable alternative to mechanistic conceptions of education from an embodied or dispositional perspective, a number of theorists have raised concerns about the quality of arts education theory and practice in terms of this pursuit (Bowman, 2004; Bowman & Powell, 2007; Bresler, 2004b; Davidson, 2004; Osmond, 2007; Powell, 2007; Stinson, 2004). Such concerns are generally considered to be related to the distorted impact that traditional cognitive theory has had on understandings of the nature of aesthetic process. In this vein, visual arts educator Judith Davidson suggests that “by virtue of the fact that the arts are placed within the disembodied framework of knowledge that dominates schools, the capacity of the arts to support an embodied framework of knowledge must be compromised to some extent” (Davidson, 2004, p. 197).

This concern is linked to a fundamental question, which is less evident in the literature on embodiment in arts education, but which is pertinently posed by Richard Siegesmund in his review of Eisner's aesthetic theory - “Is it possible to instruct somebody to feel?” (Siegesmund, 2004, p. 84). Both he and Eisner would seem to suggest that somatic knowledge can and indeed should be taught. With this in mind Eisner recommends the design of curriculum activities “that call attention to such matters, activities that refine perception in each of the fields we teach”, and furthermore that “this will require activities that slow down perception rather than speed it up” (Eisner, 2003, p. 378). The significance of a supportive democratic environment, a freedom from the dictates of others, and a fuller immersion in arts-based practices themselves are also highlighted as significant features of the development of somatic knowledge in his view. However, I would suggest that the overall assumption here, also echoed more widely, is that to a large extent the arts practices in and of themselves will draw out the embodied intelligence in question. While there is significant merit in this perspective, and indeed it is affirmed by this study, it may somewhat overlook the pervasive power of the Cartesian influence that has been recognised in all aspects of education.

Key elements of this study may thereby be understood to respond to particular recommendations coming from Stinson (2004, 2016) and Bresler (2004b, 2019, 2023), that a more intentional focus on the internal experience of the body is required from both an arts and broader educational perspective. Making reference to the somatic theory of Thomas Hanna, they concur that an increased focus on inner bodily experience and perception should thereby be incorporated across all of the arts. As Stinson articulates,

I would even go so far as to suggest that it is time to claim education of the lived body as appropriate terrain for not just dance education, but all of arts education. The arts begin in education of the senses: Seeing, hearing, and feeling from the inside are essential if one is to be an artist or appreciate the arts (Stinson, 2004, p. 165).

It is in light of the perspectives discussed in this section that I propose that the established somatic education tradition and its related processes of actively and subjectively getting to know one's body-mind more fully, its integrated nature, its habits, its limitations and its potential – merits deeper consideration within the field of teacher education. Furthermore,

I propose that the area of arts education within this context provides a suitable location for such an explicit focus, due to the clear complementarity of purpose between these fields.

4. Research context and participants

The fieldwork for this study took place in the Irish teacher education context that I have been working in for over twenty-six years. Situated on the grounds of the former St. Patrick's College in Dublin, The DCU Institute of Education brings together students of education across all sectors from early childhood, to primary and post-primary, and further and higher education. The two pathways into primary school teaching in this jurisdiction include the relatively recently extended four-year Bachelor of Education degree (B.Ed.) and the two-year professional master's in education (PMEP). Notably the arts education strand of both degrees is considered to represent an important component of the student teacher's preparation within the DCU context. In addition to their curricular focus, the arts education modules are considered to facilitate a key dialogue between the personal and professional dimensions of the student teacher's trajectory. All students thereby take courses in the arts during the first half of their programme, and are subsequently given the option to specialise in these areas. It should be noted that the students who specialise in the arts within this context would tend to differ considerably from the professional dance students typically referred to in the somatic literature. This difference would pertain to issues of motivation and movement background due to the more general educational orientation in question.

One of the most significant characteristics of my approach to this research included my prolonged engagement with the fieldwork. Over the first two years of the implementation and ongoing design of the module to which the research pertains, I worked with three different pre-service cohorts. As illustrated in Table 1, these included two consecutive cohorts from a newly designed specialism in drama education within the Bachelor of Education (B.Ed.) programme, and one elective group from the Professional master's in education (PMEP).

4.1. Module description

The module that was at the centre of this research, and which continues to evolve to this day, is entitled 'Embodiment, Education and the Arts'. While there were continued evolutions of the module content over the three cycles in question, it was broadly organised around four interrelated phases as follows:

- *Stage One - Somatic Education; Principles and Practice*
- *Stage Two - Somatic Education and Creativity*
- *Stage Three - Somatic Education and the Outdoor Environment*

Table 1
Student participants.

Academic Year	Cohort	Year	Number of students	Age group	Contact time	Gender
2018-2019	1. B. Ed3 Specialism module (First iteration)	3	19	19-20	One semester 9 × 2hr sessions	3 males 16 females
2019-2020	2. B. Ed3 Specialism module (Second iteration)	3	21	19-20	One semester 10 × 2hr sessions	1 male 20 females
	3. PMEP elective module	1	7	21-30	One semester 8 × 2hr sessions	1 male 6 females

● Stage Four: Somatic Education and Presentation

The first stage of the module involved an introduction to some of the basic principles of somatic education (see Fig. 1). Learning to witness and track the body-mind experience was a key feature of this phase, which was influenced by principles and practices from a range of somatic traditions. In particular, the practice of being present to subtle body sensation and to impulses for spontaneous movement was influenced by the field of authentic movement (Adler, 2002). Also, an engagement with and awareness of specific body systems such as the skeletal, fluid and muscle body was supported by principles and practices from the field of body mind centering (Cohen et al., 2012). These approaches were also significantly combined with the somewhat familiar traditions of mindfulness, yoga, and drama/theatre-based exercises.

As the module progressed, a dialogue between the somatic and aesthetic dimensions of the learning trajectory represented an important feature of the approach which I was developing within this particular context. The second phase thereby offered a deeper exploration of the somatic-aesthetic relationship within a range of art forms, namely drama, dance, visual art, music, and creative writing (see Fig. 2). During this phase, the students worked with paint, mask, image and percussion instruments to support and extend their somatic-aesthetic engagement.

The third phase sought to extend the students' experience of the module content to include an eco-somatic dimension (Bauer, 2008; Enghauser, 2007; Fortin, 2017; Fraleigh & Riley, 2024; Hartley, 2024). Eco-somatics constitutes "the awareness of both our internal milieu, our external milieu, and the reciprocal action between the two, including the belief that our body and planet share the same living process" (Fortin, 2017, p. 148). The final stage of the module thereby involved the devising of a series of site-specific performances in the local Botanic Gardens, with an individual adaptation in their own localities in the second year due to covid pandemic restrictions (see Fig. 3).

5. Methodology

As a phenomenological lens offers a particular acknowledgement of the wide-ranging nature of lived experience, and more particularly the complex relationship between body, mind, and environment, it was considered to provide a particularly rich and appropriate foundation for contemplating the approaches to and outcomes of a study of this nature. Indeed the relatively recent evolution of systematic research within the somatic field has seen many practitioners and theorists draw on the field of phenomenology to frame, articulate and explore the nature their work (Batson et al., 2012; Fraleigh, 2015; Johnson, 2004; Sheets-Johnstone, 2019; Williamson, 2016). In light of the particular context for this study, and the significance of my own role in the process, the phenomenological frame also drew on the complementary lenses of autoethnography, aesthetic-based research and somatic education itself. Auto-ethnography refers to a qualitative orientation which has evolved to value the nuance and texture gleaned from the positionality and first-person experience of the researcher in relation to their particular context (Antelitz et al., 2022; Jones, 2005; Wall, 2016; Ellis et al., 2011).

5.1. Data collection

The data for analysis included material generated from a range of sources, which offered the potential for significant triangulation in the subsequent analysis process. These included post-module questionnaires completed by all forty-seven participants from the three cycles in question, fourteen 50-minute post-module interviews with a subset of these students and the respective journals of this subset. It also included the content of my own extensive journals throughout the three cycles of the field work and analysis phases of the study. Overall, the data sources were considered to reflect a continuum from immediate reflection on specific somatic and aesthetic experience to a broader evaluation of the



Fig. 1. Stage one – somatic education; principles and practice.



Fig. 2. Stage two – somatic education and creativity.

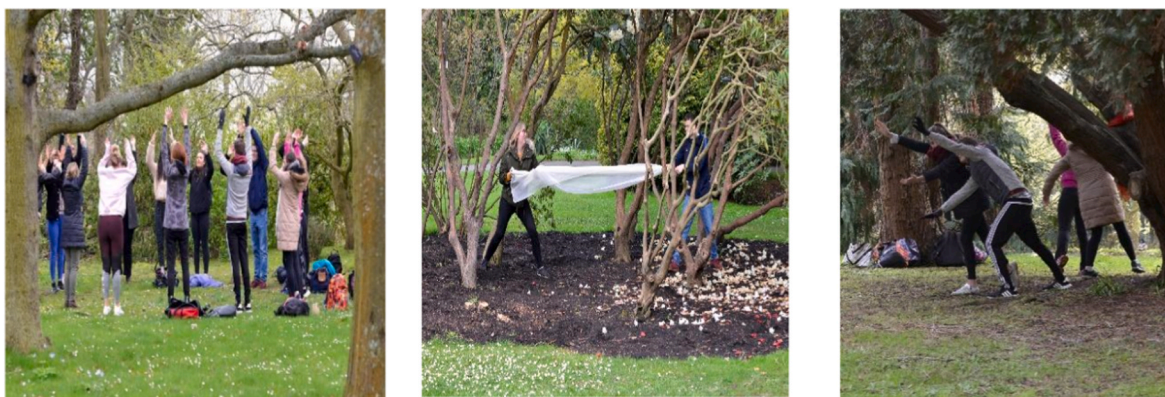


Fig. 3. Stage three - somatic education and the outdoor environment.

overall process and its impacts. The student journal guidelines, for example, encouraged a particularly sensory and mindful engagement with present moment experience in the first instance (see [Appendix A](#)). This journal content represented naturally occurring data within the teaching and learning process itself. The post-module questionnaires on the other hand were completed at the end of the process and encouraged students to distil their insights into more comprehensive statements, which were more summative in nature. The content of these

questionnaires also served to offer an indication of the breadth of experience encountered across the entire participant cohort (see [Appendix B](#)).

One of my core priorities within the overall research process was to emulate and extend Bresler's notion of aesthetic-based research, which seeks to bring aesthetic 'habits of mind' to various phases of the research process ([Bresler, 2006, 2019](#)). With this in mind, I designed an extended post-module interview which drew on somatic modalities to attempt to

more deeply acknowledge and access the embodied knowledge of the participants in question. It included an embodied interaction with aesthetic artefacts from the module to support participants' elucidation of and reflection upon qualitative experience. It was thereby designed as a space through which specific experience might be drawn upon to inform broader reflections, and through which broader reflections could be checked against specific experiences. In this regard, stimuli from both categories were brought into relationship with each other, as a range of previously collected data was unpacked in creative and somatic ways within the live relational encounter.

For this more in-depth phase of the research, fourteen interviews were conducted with students from the three cohort groups. Due to the qualitative nature of this study, and a preference for information-rich cases over representation or generalizability, a non-probabilistic approach was taken to the choice of student for these interviews (Merriam, 1998). In year one, I began with a purposive approach based on a number of criteria. These included a preference for a variety of perspectives, based on the evolving teaching and learning data from the module (Creswell, 2007). In year two, influenced by the unexpected Covid 19 lock-down towards the end of the module, it felt most pragmatic to gather a convenience sample, and to thereby offer an open invitation to all students who may have an interest in participating in the interview process. As alluded to, this more embodied and illustrative interpretation of the module experience was triangulated with the post-module questionnaires, which were completed by all forty-seven research participants.

5.2. Data analysis

Due to the exploratory nature of the study, a thematic analysis was considered to offer a comprehensive indication of the potential scope of somatic practices within the initial teacher education context, and thereby to assist in future pedagogical practice and research in this area. The specific approach used attempted to reflect Braun & Clarke's more recent concerns in relation to positivistic misinterpretations of their method, by bringing a greater emphasis to the reflexivity of the researcher (Braun & Clarke, 2019, 2020). During the first stage of the analysis I engaged in a detailed transcription of the student interviews, a thorough familiarisation with the overall data set, and initial notetaking in relation to related observations and areas of interest. The data set was then coded using an open-coding approach to reflect an initial inductive orientation. During the second stage I focused on the latent elements which were being detected within the data. This thereby included a more interpretive and reflexive orientation in on my part, which was informed by the research questions, the literature review, the theoretical underpinnings of the project and my professional experience as a teacher educator and developing somatic practitioner. It also included a reflexive process of moving between the initial open codes and my own substantial constructive writing process as researcher in relation to four interviews and one lecturer journal extract. This served to generate a more systematic and reliable coding structure for the wider data set which continued to evolve over four iterations as I engaged in a dialogue between the particularity of individual data items and the breath of perspective available through the post-questionnaires. The final stage involved the identification of eight overarching themes, which were derived from a combination of recognising the integrity of some previously created codes as themes, and collapsing other coded content into clearer categories of meaning (Braun & Clarke, 2012), 2019, 2020). During this phase I began to write about each of the themes in a more narrative form, which included the identification of specific illustrative and insightful data excerpts for each theme.

5.3. Ethical considerations

As the findings discussed in this article contributed to a wider doctoral study (Murphy, 2024), the ethical approach was approved by

both the social research ethics committee (SCREC) at University College Cork where my doctoral supervision was conducted, and the research ethics committee (REC) at Dublin City University where the fieldwork took place. In light of the potential power dynamic that can be at play when a researcher takes on the dual role of researcher and teacher, one of the key concerns which I addressed in these applications pertained to the process of initiation into the research project. This was thereby facilitated by a colleague who was external to the teaching and research process, and included engagement with a plain language statement and consent forms which outlined the intentions and parameters of the project. The clear demarcation between the assessment and research processes was also explained. In all reporting the issue of anonymity was addressed through the use of numbers for all participants and additional pseudonyms for the fourteen interviewees. The approach to the labelling of data is outlined in Table 2.

5.4. Limitations of the study

It should be acknowledged at this juncture that the potential consequence of this study was inevitably limited to some extent by issues pertaining to scale, generalizability, and the exploratory nature of my own developing expertise in applying such principles within this context. That said, it is proposed that its theoretical discussion and qualitative findings offer a strong argument for the design and analysis of a range of complimentary or more extended future studies. Recommendations in this regard would pertain to the inclusion of a somatic emphasis in other undergraduate teacher education contexts for comparative purposes. A longitudinal study would also be beneficial to explore the longer-term impacts of such a process, as would the extension of Emund's (2022) efforts explore the relevance of somatic education for practicing or more experienced teachers.

6. Findings and discussion

Overall, the data analysis process for the wider doctoral study identified a significant shift in orientation within participants arising from the deepened somatic pedagogical focus of the module and its particular application within aesthetic process (Murphy, 2024). This shift tended to relate to issues of both disposition and understanding at a personal and professional level. In this article I focus on the data pertaining to the theme of 'Somatic awareness and aesthetic engagement' as outlined in Table 3, particularly as it is relevant to issues of identity and teacher disposition. Reflecting the reflexive style of the analysis process, the findings and theoretical discussion are integrated under each subtitle to support meaning.

Table 2
Labelling of data excerpts.

Source	Reference explanation	Reference in text
Student journal (SJ)	Person. Data source. Session number	ST4.SJ.S3 (Student 4. Student journal. Session 3)
Individual interview (II)	Person. Data source. Page no.	ST4.II.p3 (Student4. Individual Interview. Page 3)
Post-module questionnaire (PQ)	Person. Data source. Question number.	ST4.PQ.Q3 (Student 4. Post Questionnaire. Question 3)
Assignment (AS)	Person. Data source. Page no.	ST4.AS.p3 (Student 4. Assignment. Page 3)
Lecturer journal (LJ)	Source. Cycle number. Session number	LJ.C2.S3 (Lecturer journal. Cycle 2. Session 3)

Note. While the student assignments were not included in the targeted analysis, I did consult the assignments of the fourteen interviewees as part of my preparation for their interviews. As related excerpts became part of the research to this extent, some references to interviewee assignments have been included in the next section.

Table 3
Somatic awareness and aesthetic engagement.

Theme	Sub-title
Somatic awareness and aesthetic engagement	• Shifting experiences and understandings of aesthetic process: Possibilities of artistry • Somatics, artistry and teacher disposition

6.1. *Shifting experiences & understandings of aesthetic process: possibilities of artistry*

In this section I examine the experience and impact of the distinct somatic emphasis within the aesthetic process itself. Many students observed a shift in the quality of their aesthetic experience in this regard. As Linda concluded, it “was like looking at it from a new angle” (ST44.II.p2). In the first instance, many observed an enhanced experience of “fluidity” or “flow” within their creative process, and some offered particular nuance relation to the nature of such experience. For example, Keela observed that the body and senses seemed to have been taking a more central role, which seemed significant to the more fluid and process-oriented nature of her aesthetic experience:

A very significant moment for me was as I closed my eyes to paint my picture, not knowing what the process would entail or what the product was to be. Instead I allowed the senses of my body to take over and I trusted my own body to create it's own piece of art. (ST12.PQ.1b)

A freedom from restriction in the body, and a very gradual tendency to allow the impulses of the body to lead in the process, was also reflected in another student's conclusion that “It's really about giving the body what it wants. In terms of stretching, in terms of art or even in terms of drama. It allows the body to become much more free and self-aware” (ST34.PQ.Q4). Significantly, such experience was often described by students in the context of a process of ‘letting go’. For example, Rachel explained:

we were partners in that seaweed dance activity, and I really let myself go in that, and that wasI think maybe that could have been the first time that I really let myself go ... I loved that so much ... because all I was thinking about was kind of the seaweed or whatever, I don't know, but I wasn't thinking about my body or how I looked or I wasn't paranoid, I didn't care if anyone was looking at me. (ST25.II.p11)

It is worth pointing out that the somatic approach also presented challenges for some students in this regard. Some referred to the unfamiliarity with the form, and to the vulnerability and self-consciousness that some of the more improvised and sensory movement processes generated, particularly in the initial phase. One student for example described the challenge of “letting myself move beyond the discomfort and self-doubt” (ST1.PQ.Q3), while another explained that “at times I found it hard to give up the control of how my body was moving during the movement sessions. (ST33.PQ.Q3). Such issues are indeed reflected in the relatively new literature on working with younger and less experienced participants in relation to the self-led pedagogical orientation of somatics (Bauer, 2018; Burnidge, 2012; Green, 2002; Gustafson, 1998).

At the level of understanding, it was interesting to note that a number of students demonstrated not only an awareness of the embodied dimension of artistry and flow as illustrated in previous statements, but a conscious awareness of how to *intentionally* access such experiences through explicit engagement with somatic principles and practices. Such a conscious shift in approach is reflected in Mary's observation that “I can be quite fussy and particular so I tried to leave that part go and just tried to feel what to do instead of what I should do” (ST39.SJ.S8). Linda offered a more specific elucidation of her understanding of the role of preparatory somatic explorations in supporting the heightened quality

of her aesthetic experiences:

I found when I connected with myself and made that space, that it was a lot easier to create something as opposed to what I was doing before which was effectively waiting for a burst of inspiration. This experience led me to a better flow in terms of my writing. I really felt like I was writing from my whole self. (ST44.AS.p3)

Some students went into more depth than others in terms of attempting to unpack the particular source of the qualities that the distinctive embodied emphasis seemed to offer their creative process. Making specific reference to his exploration with water prior to working with paint, Edward observed that:

It brought me to different *physical* state. I suppose you could say the mental state, but physical as well, because it was *from* the physical body that the mental state *came* ... So that's what *I* think it is, I think it comes from the body *initially*. (ST2.II.p27)

Brian also acknowledged related discoveries in terms of access to his own creative process, particularly in terms of the impact of freshness and originality that he discovered when he initiated the process from a place of feeling rather than effort:

I think there's something very ... unique about something that's just what you ... like what you feel in the moment ... and like whether it's drawing or whatever it is, music even I think some people can sometimes come up with something sort of more on the spot, and not so over-worked, and it can have a certain quality to it, which is quite different. (ST48.II.p17)

The content of my own journals also resonates with the students' observations that the creative process was significantly influenced by the somatic dimension, particularly in generating a gradual capacity to listen to the body to support flow and responsivity. In the early stages of the second and third cycle, when incidentally I feel my own knowledge and facilitation of somatic practices was deepening and expanding, I noted that:

it was very gratifying to see them stretching and pushing against the floor to respond to their own personal need for specific stretches and different relationships with gravity. I sensed a listening in the room as opposed to a controlling or making it happen. (LJ.C3.S2)

It is also interesting to note my own echoing of Edward's observation that somatic engagement encourages a particularly conducive ‘state’ for creative endeavour. After an unexpected environmental disruption to a session in the Botanic gardens for example, I observed that:

I am becoming more conscious of how delicate and layered the somatic process is in terms of moving into a ‘state’ that I have found to be particularly conducive to creativity. Interruptions of the ‘flow’, or significant gaps in the scaffolding process seem to effect things significantly. (LJ.C2.S4)

The allusion here to the significance of my own continuing learning journey with this form, and the additional qualities it seemed to be adding to my teaching style, is also echoed elsewhere in my journals. For example after the first session of the third cycle, I noted that “I think on many previous occasions, there wasn't enough ‘scaffolding’ in this regard, and I just assumed the capacity for free individual movement too quickly” (LJ.C3.S2). Such statements exemplify a recurring interest in the nature of the somatic scaffolding which might support students in this context, and were of particular interest in light of the broader question coming from the arts education tradition around whether it is possible to ‘instruct somebody to feel’ (Siegesmund, 2004).

Reflecting on such teaching and learning experiences from a theoretical perspective, the reported shifts in the quality of aesthetic experience merits particular attention in the context of the increased concern within the arts education literature to distinguish aesthetic discipline from a fundamental quality of ‘artistry’. Artistry, which is by no means a

given within aesthetic practice, is defined by a distinctive capacity to be responsive to the emergent, exploratory, and sensory nature of aesthetic process in the absence of 'rule' (Batson et al., 2012; Dunn, 2016; Eisner, 2002a; Lutzker, 2012). It contrasts with the more restricted orientation that tends to derive from the traditional 'demonstrate and do' approach to the arts that is critiqued within the somatic dance tradition (Dragon, 2015). As the students do not explicitly use the term 'artistry' in their references, but were more likely to refer to being in a state of fluidity or flow, I draw attention to what I consider to be the overlap between the nature of flow and artistry as it is described within such literature. In this regard, the student statements tend to chime with what Csikszentmihalyi (2014) refers to as 'optimal experience', which includes absorption in present moment experience, the merging of action and awareness, deep concentration, and the absence of self-consciousness.

Furthermore, the way in which the somatic emphasis seemed to draw the students into a more conscious understanding of and engagement with some of the core continua at the heart of the concept of artistry is also worth unpacking further. The distinctions that they make between a process and product orientation, and indeed their allusions to the role of the body in this regard, are noteworthy. As discussed previously, a lack of acknowledgement of the role of the body in one's capacity for artistry is a significant concern for a number of authors from the arts education tradition, as are the adverse effects of dualistic theoretical frameworks for understanding and implementation within these contexts (Bowman, 2004; Bowman & Powell, 2007; Bresler, 2004b; Davidson, 2004; Osmond, 2007; Powell, 2007; Stinson, 2004). Such student observations, derived as they were from personal experience, affirm the conviction at the heart of Shusterman's somaesthetics, that a dedicated somatic emphasis is likely to significantly enhance one's quality and understanding of aesthetic experience (Doddington, 2014; Shusterman, 2004, 2020). Furthermore, engagement with such questions and understandings at an experiential level is central to the related importance that the arts education field attaches to one's ability to take an improvisatory approach to aesthetic process in the first instance, and indeed to one's subsequent facilitation of it (Powell & Lajevic, 2011; Sawyer, 2000, 2008).

6.2. Somatics, artistry and teacher disposition

The additional proposal coming out of my analysis of the data is that somatic principles and practices, not only augment the student experience and understanding of artistry within aesthetic practice as discussed, but that they may also influence their capacity to achieve artistry at the level of personal and professional disposition.

In the first instance, the data suggests that the dynamic between aesthetic frame and somatic education, particularly within the site-specific performance project, offered a rich context for engaging with issues of teacher disposition. The multifaceted value of a student teacher's engagement with theatrical form is one that I have long considered essential, particularly in light of its inherent parallels with the teaching and learning context. However, its relevance seemed to be even more persuasive in light of the somatic lens which was brought to this process. In this regard, as a facilitator I became significantly more conscious of the inherent sensory requirements of theatrical form, and its implicit pedagogical objective of generating sensory and holistic engagement in others. As recorded in my own journal:

The need for attunement and somatic awareness is inherent in the task. They are given a practical situation within which to try out these approaches independent of me. This, and their necessary consideration of the audience's deeper engagement with the environment, also moves them gently into the role of facilitators of this workfacilitators of greater presence and sensory engagement of others, and it allows them to experience the outcome of that. (LJ.C1. S7)

My subsequent observations of the students' engagement on the final presentation days suggests an affirmation of the impact of the somatic education focus on the aesthetic, pedagogical and relational quality of their work with others. After the site-specific presentations in cycle one for example, I was particularly struck by "the way in which the students experimented with the meaning and facilitation of the notion of 'audience'" (LJ.C1.S9). As an illustration, I noted the particular way in which one group facilitated the audience into a more embodied relationship with place, using distinct sensory and somatic guidance:

They brought us into awareness of our breath, weight, and sound. After a period where they asked us to close our eyes and raise our chins upward, they invited us to open our eyes, providing the vista of cherry blossom branches against the blue sky. I was struck by the aesthetic and sensory sensitivity which such work demonstrated, in addition to the obvious care for the experience of the audience. It excites me to consider how such a sensibility may translate in their facilitation of children in the classroom? (LJ.C1.S9)

While such dispositions were referred to in the context of my own observations as lecturer, they were also evident in the students' reflections and intentions for future practice. Firstly, a number of students focused on the way the module experience was likely to influence their dispositional orientation in the teaching of the arts. For example, one student named "the importance of being flexible in our approach to the arts" (ST45.PQ.5 b), and reflected the conclusions of many students by further observing that "I have found that somatic education has allowed me to become more aware of my fluid body and allowing children to engage in art or drama that is not rigid but improvised by nature" (ST45. PQ.5a).

Mary similarly made a link between the development of her own quality of openness and flexibility, and her capacity to allow children to engage in the same:

From this module I have learnt to allow children to explore, and the openness you as an educator need to allow the children to do that. I have found this module has lead me to have more of a sense of letting go which I would like to bring into the classroom. (ST30.PQ.5a)

Many students felt that the experience was also likely to impact their practice as teachers more generally. The student references to presence, adaptability and flexibility were especially striking in this regard. As one student commented:

It is relevant to teaching in many ways. First, I have an appreciation for the importance of movement and the senses in learning, and will therefore aim to incorporate that into my planning and teaching. It also helps me as a teacher be more present in the class, allowing me to engage fully with the children, think on the spot and be flexible. (ST47.PQ.5a)

Returning to the literature, it is worth noting that the qualities observed in these excerpts exemplify many of those that are aspired to within the concept of 'teacher artistry' (Dunn, 2016; Eisner, 2002a; Hadjipanteli, 2020; Lutzker, 2012). These include a qualitative sensitivity to the sensory dimensions that are likely to impact the experience of others, and a felt responsiveness to the emergent needs of an aesthetic & pedagogical exploration as it unfolds. With this in mind, it is worth drawing attention the continuum between control, letting go and the capacity for responsivity that is consistently referenced across all of the findings pertaining to both aesthetic and pedagogical practice. The potential for one's dispositional advancements within one's aesthetic practice to inform one's general teaching orientation is certainly affirmed in this regard.

This aspect of the data clearly resonates with Eisner's contention that the preparation of a teacher would be significantly enhanced by considering it in relation to the preparation of an artist, particularly in light of the significant qualitative intelligence that he considers essential to both professions (Eisner, 2002a). However, the more nuanced

elements of the participant observations reflect the proposal from him and others that such qualitative intelligence requires a distinctively embodied sensibility in order to nurture the relational, and improvisatory dimensions of a teacher's craft (Andrews, 2018; Eisner, 2002a; Van Manen, 2016). In summary, I propose that not only did the arts provide a conducive frame for engagement with such issues at an embodied level, but that the somatic education principles and practices served to foreground the role of the body more intentionally within the aesthetic process. They also supported an understanding and augmentation of the value of the somatic-aesthetic relationship within the teacher formation process more generally.

As I reflect on this study from a methodological perspective it is worth briefly commenting on the relationship that I perceived between the methodological approach taken and the quality of data that was gleaned for analysis. Complemented by traditional research methods, I suggest that the situated, relational, and embodied elements of this phenomenological design, served to address growing concerns within the phenomenological field pertaining to the challenge of authentically capturing the nuance of lived experience. I propose that the complementary principles and values which were adopted from the fields of autoethnography, aesthetic-based research and somatic education played a significant role in this regard. Their influence was especially valuable in the attempt to capture the multi-dimensional features of this study, namely the lived experience of both teacher and student, and the dynamic relationship between situated and summative reflection.

7. Conclusion

This timely exploratory study serves to contribute to and extend a relatively new dialogue between three complementary fields of enquiry at both a theoretical and empirical level – somatic education, arts education, and teacher education. The research questions thereby probe the relationship between the lived experience and proposed theoretical relevance of an enhanced somatic emphasis within this domain. In the first instance teacher educators are offered an introduction to the principles and practices of the somatic field. The potential relevance of this modality within the teacher education context is then addressed by revisiting the significance of the relationship that has been previously identified between the arts and teacher education, and situating the value of somatic education within this trajectory. This discussion is then supported by findings from the phenomenological component of the study, which suggest that the arts represent a particularly conducive site for engagement with somatic education processes in the teacher education context. Not only were they shown to provide an immediate relevance and motivation for somatic engagement due to their inherent sensorial requirement, but the confluence of these disciplines was considered to be critical to a series of wider dispositional and perceptual shifts of particular relevance to the identity formation of a student teacher.

Notwithstanding the limitations of this study in terms of scale and generalizability, the lived experience of participants, as evidenced in a variety of nuanced expressions, suggests that there is much scope for more extended praxis in relation to into the dialogue in question. From an arts education perspective, one of the most critical consequences of the dedicated somatic emphasis was the qualitative shift it elicited in students' aesthetic experience, and in their subsequent orientation towards the same. Most significant in this regard was an overall enhanced state of flow and responsivity within such experience. Albeit containing some inevitable initial challenges for the age group in question, this was generally associated with an enhanced feeling of freedom within the body, and with a related expansiveness of expression. For some students, this coincided with a deepened engagement with and understanding of the nature of body-mind interactivity within aesthetic processes, and an agentic understanding of the impact of initiation from the body within this domain. Such qualitative shifts in experience and pedagogical understanding were considered to be particularly significant in light of the

oftentimes under-acknowledged and neglected role of the body within the arts education tradition, and inadequate theorising in relation to the same.

From a wider teacher education perspective, the study also serves to contribute to a growing literature which is concerned, with the dispositional and embodied aspects of identity formation, and which seeks the means to meaningfully address such issues in practice. Observations of participants in an interactive performative context towards the end of the fieldwork for this study, as well as their subsequent reflections and intentions as future educators, would suggest that the aforementioned aesthetic shifts in orientation were already being integrated at both an ideational and dispositional level. Such observations are especially pertinent in light of the role that the arts are considered to play in generating a distinctive quality of 'artistry' in a teacher's craft and orientation. Moreover, given Eisner's (2002a) contention that it is the quality of one's somatic intelligence that is the key determining factor in facilitating this capacity, this research demonstrates that a dedicated somatic focus within the arts education strand of their education, may more effectively orientate student teachers towards this end.

In conclusion, I draw on Eisner's assertion that the conditions used to enhance artistry in other fields must become relevant resources for thinking about the improvement of teaching (Eisner, 2002a, p. 383). In light of the somatic emphasis of this study, I propose that his more vehement provocation on the need to address the fundamentally improvisational and relational subtleties of teaching through aesthetic means, is even more compelling,

No conception of teaching can be adequate without attention to the ways in which such processes function and no teacher education program will be optimally effective that neglects their cultivation. (Eisner, 2002a, p. 383)

Declaration of competing interest

I declare that I have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.tate.2026.105732>.

Data availability

The author does not have permission to share data.

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