

Original Research

Learning with the Feldenkrais Method® of Somatic Education in the Dance Technique Class: A Case Study

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Abstract

As a dance artist, educator and Feldenkrais® practitioner I am committed to facilitating somatically oriented teaching and learning environments in professional dance education. This article illuminates action research conducted in the form of a case study with Bachelor of Arts students in a conservatory-modelled program in Germany. Embedded in a socio-constructivist epistemology the study sought to make the synergetic relationship between the Feldenkrais Method® and contemporary dance technique accessible for the students in ways to support the development of their physical competencies, personal agency, self-regulative and self-reflective processes. In addition, the study's methods investigated how a collective somatic sensibility might enable the dancers to navigate more effectively within the interplay of contextualization and shared responsibility in the learning environment. The inductive methodology of grounded theory was used for the collection, evaluation and interpretation of the data. Reviewing the data four categories emerged that bring different and interrelated perspectives to the complex processes of situational learning: Environment, Reflection; Personal Agency, and Transferability. This paper locates the research in the context of German vocational education, identifies its methodological and pedagogical underpinnings and outlines the setting, participant group, and the planning and operationalization of the study. Included is a description of the methods of data capture, its analysis and a critical reflection of the processes.

Keywords

dance pedagogy, somatic approaches, Feldenkrais Method, dance technique, conservatory model, action research

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Please cite: (First published in the) *Feldenkrais Research Journal*, volume 6; 2018-2019.

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terms referring to specific practices within the Method, and to the Method as a whole, capitalization of all the words in each term has been retained.

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Introduction

In the Anglosphere fusions of dance and somatics have entered the mainstream of tertiary education.¹ Germany has a rich cultural heritage of non-dualistic thought, and numerous somatic systems originated in this country. Yet somatically oriented pedagogical practices in conservatory programs² have been slow to be included in the German speaking countries as a

¹ In the 1940s, the pedagogue Margaret H'Doubler brought the study of dance into the university setting in the United States. She integrated Mabel Todd's somatic system of Ideokinesis and the constructivist pedagogies of John Dewey into the curriculum. The first conservatory-based dance department within higher education in the USA was established in 1951 by Martha Hill at the Juilliard School, and Ideokinesis was incorporated into the department's program. The American Dance Festival's director Martha Myers introduced somatic therapies into the festival's program, and her seminal articles advocating for the reciprocity of dance and somatic practices triggered the adoption of somatic methods in the curricula of the American university dance programs that followed (Coogan, 2016: 24-25). During the 1960s, the move into a postmodern era, where education and artistic practice were critically questioned, brought dance and somatics closer together (Reed, 2015: 192). These somatic-based approaches to movement research and processes of socialization include Judson Dance Theatre, contact improvisation, release techniques, and postmodern and contemporary dance. Their development extends from both the research of the early twentieth-century dance artists mentioned above (Eddy 2009; Coogan, 2016, Bales, Netti-Foil 2008), and the work of the somatic and educational pioneers Mabel Todd, LuLu Sweigard, Moshe Feldenkrais, Frederick M. Alexander, Gerda Alexander, and Margaret H'Doubler. For the past ten years the British Journal of Dance and Somatic Practices, and the American Journal of Dance Education have provided invaluable platforms for the dissemination of research within the field of somatic informed dance and movement. Martha Eddy's (2009) article, "A Brief History of Somatic Practices and Dance" in *Journal of Dance and Somatic Practices* (1) 1: 5-27 is a prime example. Other key publications include: Sheets-Johnstone, M. (1979) 'The work of Dr. Moshe Feldenkrais', *A New Applied Kinesiology and a Radical Questioning of Training and Technique*, in *Contact Quarterly* 5/1 (Fall 1979), 24-29; Batson, G., Schwartz, R. (2007) 'Revisiting the Value of Somatic Education in Dance Training Through an Inquiry into Practice Schedules', in *Journal of Dance Education*, 7(2), 47-56; Fortin, S., Girard, W., Lord, M. (2002) 'Three Voices: Researching How Somatic Education Informs Contemporary Dance Technique Classes', in *Research in Dance Education*, 3(4), 155-179; Myers, M., Pierpont, M. (1983) in 'Body Therapies: and the Modern Dancer', in *Dance Magazine*, 57 (August), 1 –24; and Kovich, Z.(2007) 'Promoting Dexterity in Technical Dance Training using the Feldenkrais Method' in *Feldenkrais Research Journal* (3), 1-6.

² Tertiary dance education/training in Germany (as well as in many other European countries) takes place in art and music conservatories called Kunst- and/or Musikhochschulen. With few exceptions, practice

valuable curricular addition for supporting students to develop the competencies necessary to meet the twenty-first century challenges of the profession. Therefore, this case study makes an original contribution to the emerging body of both empirical and published research in this context. It grew out of years of my own dance-somatic teaching practice with students at the Palucca University³ where I work as professor of contemporary dance. This research was made possible through a grant awarded for my own authored practice-led research proposal *InnoLernenTanz (ILT)*⁴, by the German Federal Ministry of Education and Research (BMBF).

The central focus of this study investigated the reframing of individual learning from the external direction of teachers to the students' own internal reflection in ways that might invite the participating students to experience their education from a first-person perspective of empowered and somatic authority. Its methods sought not only to encourage reflective thinking, self-regulation and personal agency but also explored ways in which a collective somatic sensibility might enable the students to navigate more effectively within the interplay of contextualization and shared responsibility in the learning environment.

A scaffold for somatic learning in dance, one rooted in the Feldenkrais Method®, offered the pedagogical frame for this research and guided the structure, content and pedagogical transmission of the research.

Traditional pedagogies in Western-based theatre dance have been inclined to locate authority with the teacher and thereby cultivate a student's desire to please an outside authority and to behave according to the environmental norms and regulations (Johnson 1994: 60). Teaching formats in this context tend to be primarily imitative and highly regimented. The body is often treated as an object to be formed through the dictates of the teacher. Typically, students learn a specific dance technique, understood as codified vocabulary of movement held together by a

and theory-based programs in dance continue to remain separate. The training/education of pre-professional performing dancers takes place in the conservatories. In the Anglosphere both practice-based (BFA and BA with Honors) and theory based (BA) programs are offered within the same university.

³ The Palucca University integrates a secondary school (grades 5-10) with BA and MA programs in Dance and Dance Pedagogy, a MA in Choreography, and a portfolio-organized Meisterklasse (masterclass). 200 students are currently enrolled in its various programs. The BA program in Dance transmits established canons and aesthetics of Western theatre dance as well as hybrid mixes of contemporary practice. Musicians accompany all studio practice. Courses in dance history and analysis, music theory, Laban movement analysis, and anatomy augment the studio practice. There are nine state subsidized institutions offering BA programs in dance, the profiles of most of these institutions are embedded in conservatory models of vocational training. These programs are all tuition free.

⁴ The *InnoLernenTanz* research platform afforded me the opportunity to investigate my research agenda in dance-somatics through the rigors of qualitative academic research. ILT ran from 2012-2016 under the auspices of, 'Quality Pact for Teaching' (Qualitätspakt Lehre), a joint program of the German Federal Government and States (Länder) to improve study conditions and the quality of teaching in higher education. Findings of the research in somatic learning can be found in the publication, 'Practicing Dance: A Somatic Orientation (Ed. Coogan), Logos Verlag Berlin 2016.

system of kinaesthetic motion and associated with a particular aesthetic form. Valuation lies on the correctness of the performance of the movement. Most of the pedagogical practices found at the Palucca University proceed in this culture of conservatory dance education.

As an alternative, somatic based pedagogies in dance offer a non-valuation of one's felt and embodied experience. The dancer pays attention to letting forms of movement emerge from within, whilst paying attention to the intimate relationships between sensory stimuli, perceptual interpretation, and motor processing (Steinmüller, Schaefer, and Fortwängler 2001: 108). Preferred formats for transmission are explorative, directive and task-based. These pedagogies have been validated for enabling students to develop a greater sense of autonomy and responsibility (Green 2001). In addition, they establish a foundation from which dancers can develop performance skills and awareness for the ethical and social communication in diverse settings. More fundamentally somatic-dance pedagogies support the learners to attune to the deep self-logic of the nervous system's balancing and self-regulating processes (Fortin 2003, Vieira and Tremblay; Johnson 1995). Somatic practices were at first acknowledged as adjuncts to, or particularly recuperative support for, dance technique (Brodie and Lobel 2012; Myers 1983). Now they are seen as fundamental strategies for organizing technique (Alexander 2015; Fortin 1993) and for understanding the interplay between action and perception.

As somatically orientated pedagogies are yet to be an integral part in Germany's state subsidized conservatory dance programs, it is not surprising that a cross-fertilization of somatic and more traditional teaching methodologies is still met with diverse and often contrasting forms of appraisal, or appreciation from both students and teachers alike. A familiar line of argumentation that I have often heard from educators in conversation contends that students', during their formative stages of professional training, have neither the patience nor the cognitive and affective maturity to understand and to work with somatic investigations. Rather, that a dance-somatic consciousness may become part of a dancer's repertoire when dealing with aging and/or injury rehabilitation. A somatically infused dance pedagogy was a part of my own formative conservatory education at the Juilliard School in New York City.⁵ I found this to be decisively helpful in developing a reflective physical practice. My experiences working with somatically informed dance technique classes at the Palucca University have led me to argue for this integration at the onset of conservatory education/training as processes of awareness, self-regulation and self-directed learning can be supported at any age or stage of maturity. The fact that many students complete the BA program at nineteen years of age, make it imperative that these emerging dance artists are encouraged and supported early in their studies to take responsibility for their actions so that their artistic, creative and self-regulatory potentials can begin to unfold before they are confronted with the realities of the professional world.

⁵ The BFA curricular program included somatic based improvisation with Hanya Holm; modern dance technique class informed by ideokinetic principles with Betty Jones and individual lesson in the Alexander Technique.

Professional Field of Dance Performance

The field of dance performance is characterized by inter- and transdisciplinary choreographic signatures and physical eclecticism. Dance artists must be equipped to engage with the materials of creation in manifold situations and settings, and to cultivate a profile that is emergently responsive to the hybrid and fluctuating work environments. Today's dance artists are often tasked not only with being performers, but also with being creative collaborators, educators, curators, entrepreneurs, and lobbyists (Coogan 2016:16). As the scope of the profession becomes ever more diversified, such challenges increasingly demand skills in the areas of critical thinking, problem-solving, collaboration, self-direction and -articulation, the aptitudes of adaptability and entrepreneurship, alongside artistry, curiosity, initiative, and the forming of a highly differentiated physical practice (DeLahunta and Hoerster 2007: 224; Sieben 2011: 145).

In response to the professional landscape, conservatory education now faces the challenge of becoming more flexible both in its regulatory structures and in curricular frameworks (Coogan 2016:17). This includes a re-evaluation of the idea of technique for the aspiring dance artists learning in these contexts. As artists increasingly create their own lineages, technique has become more personal and can be considered as a means for supporting individual decision-making processes (Parviainen 2003: 162) and understood as both embodied practice and research (Spatz 2015). This position aligns with somatic approaches to dance technique, which help artists harvest from an inner authority and trust their perceptions of the experienced and experiencing body, imbued with a consciousness that these processes unfold in ever-changing patterns of situated relationships (Coogan 2016: 17). Rephrased in the context of the Feldenkrais Method, technique is a way to navigate with relatively reliable pathways through specific situations.

Theoretical and methodological underpinnings

Qualitative, interpretative, transformative and constructivist

This research was conducted within post-positivist paradigms that understand experience as socially constructed realities and are therefore determined, in part, by the researcher's position in the world. This brings critical perspectives to the investigation and works toward change in the teaching, learning, and research processes. Therefore, teaching and research often overlap (Green and Stinson 1999). My role in the study was multi-functional; that of researcher, primary facilitator/teacher, faculty member and leader of a six-person team of experts in the fields of dance, sociology, pedagogical psychology and education.⁶

⁶ Research associate Nina Patricia Hänel shared teaching responsibilities with me and together with research assistants, Anja Balzer, Fanny Barz, and Karin Matko contributed to data capture and its analysis. Professor Jürgen van Buer and Professor Susanne Narciss offered invaluable support as expert

This study harvests from interdisciplinary thought evolved out of constructivist models, including enaction theory. Enaction theory posits that knowledge is constructed through the sensorimotor dynamics of interactions between living beings and their environment, meaning that the individual is 'the enactment of a world and a mind [resulting from the] history of the variety of actions that a being in the world performs' (Varela, Thompson, and Rosch 1992: 9).

Learning through the lens of the Feldenkrais Method is based on student-centred approaches that include problem-based and collaborative learning and teaching paradigms. Thus, the Feldenkrais Method aligns with the epistemological underpinnings of radical constructivism that preclude the notion of an objective, or singular reality. Knowledge is constructed from one's own individual reality and is an ongoing, self-organized creation based on the relation of an individual's past experiences to the present ones (Von Glasersfeld 1995). John Dewey's (1934) 20th century progressive philosophy of education underscores these aforementioned propositions and is helpful in understanding the relationship between experience, reflection and learning. He identifies reality with experience, and experience as an interaction between the individual and the environment. Learning is therefore a continuous and cyclical process, a spiral-like phenomenon that proceeds from the individual's engagement with and re-adaptation to the larger environmental factors in the world. Therefore, the new learning offers a more comprehensive understanding of patterns that might already be known. Feldenkrais (1972) posits that learning proceeds from the intermingling of heritage, education and foremost, self-education. Therefore, what is learned cannot be separated from how it is learned and how it is utilized (Feldenkrais 1985; see also Luhmann 1995).

Action research methodology provided the operational scheme for this study, and grounded theory provided the procedural frame for data capture and interpretation. Phenomenological in nature, action research seeks to understand and interpret the meanings of individual human experience as it is situated in culture and society (Robson 2011; Giguere 2015). Questions arise through rigorous processes of observation, participation, reflection, data gathering, analysis, and action planning that, in turn, lead to new cycles of thought informed by the learning that has taken place (Giguere 2015; Creswell 1998). Among the defining factors of this methodology are: ongoing self-monitoring and self-reflection; privileging the voice of the participants; active participation; and the desire to create change (Wilson 2009; Wisker 2001). The inductive processes of grounded theory are analogous with the iterative processes of action-research; as a result, they are often employed in tandem. Both methods of qualitative social research look to create procedures rather than to produce results. In grounded theory, an analytic appraisal of each piece of newly captured data is used to shape the development of subsequent data-gathering processes (Corbin and Strauss 2015). Throughout the study, there was a constant interplay between the gathering of data, its analysis, and the generation of new data. This process led to revision and (re)evaluation in both the conceptual planning and the sequencing of the teaching modes for the study's five phases. For example, as the skills of

academic advisors. All participated as unobtrusive observers and critical friends throughout the research period.

many incoming international students in the two teaching languages of this program, German and English, in the year of the study was so low the importance of language comprehension and its articulation had to be reduced. Consequently, revisions in the language of the early questionnaires were undertaken. Throughout the study students' responses to surveys and interviews led the research team to simplify language and to substitute language with symbols and graphics to make the modes of data capture more visually accessible for the students.

Research Setting

Students, faculty, and staff at the Palucca University interact in close physical proximity. The campus is composed of an intimate cluster of three buildings that include eleven dance studios, secondary school classrooms, a library and archive, physiotherapy and seminar rooms, a cafeteria, administrative offices, a dormitory, faculty offices, changing rooms, practice rooms for musicians, and separate reclining lounges for dance faculty, musicians and students. This is a closed campus surrounded by garden spaces.

The phrase, 'Palucca family' resonates in the institution and expresses the sense of shared identity and belonging of its members (Coogan 2016: 53). This is both a formative and a transformative environment for the individual subjects as it is one of a shared social collective life world and artistic practice that, in part, shape modalities of agency, habit and self-understanding (Röttger-Rössler and Slaby 2018:2). To prosper, all must accommodate to the institutional conventions and its interpersonal forms of communication.

The curricular program in BA Dance includes rigorous daily technique classes in classical and contemporary dance, supplemented with a range of other studio practices, choreographic projects, and seminars in subject related fields. Students train and learn together as intact class formations throughout the duration of their six semesters of study. Collective efficacy is immediately recognizable. The aspirations of most graduates are to work under full-time contract in dance companies;⁷ a few choose to pursue freelance careers.

Admittance to this program is highly selective and the common frame of reference is proficiency in classical dance. Familiarity with contemporary dance is not a criterion for acceptance and therefore students begin the program with varying degrees of experience in this dance idiom.

The case study was located in the students' daily contemporary dance class and in afternoon workshop sessions scheduled intermittently throughout the semesters. During the eighteen

⁷ University dance departments are networked with a variety of public funded institutions that support the production, performance, and appreciation of the performing arts. Dance artists can find work in resident dance companies within Germany's extensive system of federal and state theaters (*Stadt- und Staatstheater*), as well as state and local cultural institutions, and venues that offer alternative formats for the creation, production, and dissemination of dance. This climate enables dance artists to launch and sustain their professional careers. The prospects of employment in Germany, tuition-free education, and low enrollment levels have increased the internationalism and competitiveness of the BA programs in the nine state subsidized institutions.

weeks of the Winter semester, I was the primary teacher/facilitator for both the dance class and the afternoon workshop sessions. Team teaching and a guest artist residency during this semester brought diversity into the teaching continuum. During the fourteen weeks of the Summer semester, teaching responsibilities for this course were shared equally with a colleague who offered the students a more conventional contemporary dance technique class.

Though participation in the dance class was required, participation in the processes of data capture was based on consent. The regulatory ethical procedures for ensuring informed consent were fulfilled. All students agreed to participate in the study and contributed data in varying degrees throughout the academic year. Issues regarding grade coercion were irrelevant as the examination for this course took place in the class of my colleague.

Participant group

Twenty-one students participated in this study, fourteen female and seven male ranging in age from fifteen to nineteen.⁸ Nineteen students completed the study as two students ex-matriculated to pursue other career objectives. Ten nationalities were represented in the group and seven native languages were spoken.

The curriculum allows the teachers to decide on both the material and delivery for their classes. There is no required academic component in the dance technique courses. Typically, students are not asked to contextualize their practice through, for example, reading and writing assignments and/or in class group discussion or oral presentations. The methods of this study asked the students to recalibrate their physical practice through self-reflection and to participate in class dialogue, discussion and moments of spontaneous writing. Afternoon sessions offered a platform in which the students could contextualize their practice by sharing responses to texts and video material that they read and/or observed and engaging in experiential introductions to the field of somatics in relation to their dance practices.

Many of the international students began their study with only rudimentary facility in German and English making the effectivity of language at the onset of the study challenging. Verbal language had to be offered in combination with physical demonstration and tactile feedback. Simultaneous translation between students was an ever-present factor in the class. Midway through the study the English language competencies of the international students had improved to where it was possible to lead movement explorations through verbal cuing. This enabled the possibility to weave short lessons in Awareness Through Movement® into the dance training.

⁸ Candidates in dance performance programs like at the Palucca University can matriculate upon completion of secondary school at the tenth grade level (rather than the twelve years required as a prerequisite for academic study). Thus, candidates can begin a BA study in dance performance at the age of 15 or 16.

Feldenkrais Informed Contemporary Dance Practice

The practice of somatically informed contemporary dance and the Feldenkrais Method interface in a variety of manners. Both are movement based socially organized processes of shared and experiential learning. Individuals create their meaning in ongoing negotiation and accommodation with the environment; be it in a dance class, in a one-to-one session in Functional Integration® (FI®); or in a group lesson in Awareness Through Movement (ATM®). The role of the teacher is that of steward or facilitator, one who sets parameters that encourage students to be their own decision-making agents and to assume ownership of their own learning processes and questions. Thus, the facilitator must critically engage with ideas and perspectives beyond the realm of his/her own experience in accordance to the life worlds of the students. This allows the student-teacher relationship to move beyond the transmission of knowledge to a more collaborative learning environment that invites multiple channels of dialogue between all agents (Freire 1993). The act of stewarding necessitates the recognition of what 'is' in order to support the curiosity, ease, efficiency, uncertainty and eventual satisfaction of the movers.

Awareness Through Movement lessons are meticulously structured sequences of movement designed to address a biomechanical function. Awareness Through Movement lessons are built on permutations resulting from variation, repetition, the use of constraints, and changes in orientation in continual dialogue with gravity. These same strategies are used to compose a dance class. Both the Feldenkrais Method and my teaching strategies in contemporary dance rely on an explorative quality of repetition of prescriptive movement or teacher-led directives. These frames are playful and allow for individual interpretation but are not grounded in purely improvisational practice. For me facilitating contemporary dance through a Feldenkrais Method lens is as much about proceeding with a particular approach to the teaching/learning situation as about the actual inclusion of Awareness Through Movement lessons in the dance practice. The pedagogical approach put forward in this case study sought to offer the students a learning environment infused with the following fundamentals found in the Feldenkrais Method:

- Engaging in creative self-questioning to unveil curiosity for learning,
- Loosening the binds of control to allow space for 'not knowing,'
- Replacing 'right' and 'wrong' with informed choice,
- Imagining, both as a neuromuscular action and a metaphorical inspiration to unleash the possibilities of what movement can be,
- Encouraging pleasure and playfulness,
- Investigating the relationship of effort and ease,
- Regarding resilience not as a matter of strength, but one of learning and recovery, to find balance in the ever-present fluctuations of life,
- Inviting paradox to reduce the rigidity of belief and to welcome the multiplicity of perspectives and variations for learning,
- Focusing of attention to engage with the possibilities for repetition,

- Returning a question with a question in order to listen more intuitively to one's own felt experience.

The class structure combined directive, imitative, explorative and task-based modes of transmission. During the study's five phases the proportional distribution of these strategies varied. For example, in the first phase directive and imitative methods of transmission were paramount as these were the ones in which the students felt most comfortable. During the third phase, the emphasis focused on movement exploration with a focus on the strategies of the Feldenkrais Method, while in the fourth phase dominance was placed on a task-based, peer-assisted format. All strategies shared a focus on the direction of attention to sensory awareness and kinaesthetic feedback. Through self- and peer observation students were asked to notice:

- Gradations in effort and muscle tonus,
- Congruency between breath and movement,
- The interplay between weight and gravity, and
- The availability of the pelvis as a center of motor function.

Class themes running through the course of the study were:

- Slowing down to give time to assimilate the idea of the movement,
- Sensing difference to differentiate and to integrate,
- Using bodily constraints to inhibit movement along habitually organized routes,
- Noticing the coordinative and performative effects of variation and changes in orientation,
- Directing attention to the initiations and spread of kinetic chains through and beyond the body.

Classes explored developmental movement patterns to identify personal preferences and habits, and to reflect on how these might affect alignment, coordination and efficiency in executing complex dance material. Working within these parameters, a repertoire of floor, standing, and locomotive material was generated and developed in length and complexity over periods of two to three weeks. As the year progressed, students began to create, develop and vary their own material in solo, duet and group constellations.

The indirect pathways of learning in the Feldenkrais Method take the dancer off a direct path of goal achievement that is characteristic in pre-professional dance performance training. In this study students were asked to relax their expectations that training should always prioritize external modelling and a fast-paced assimilation of prescribed material. They were invited to slow down the execution of their movement in order to pay attention to the sensations and experiences that create space for body awareness and proprioceptive sensitivity. In the oscillation between the doing and the conscious reflection of action, one "learns to act while [one] thinks and to think while [one] acts" (Feldenkrais 1972: 60). Feldenkrais referred to this as

“reflection in action” (1981). A constant thread throughout the study for the research community was to engage with this experience of reflection-in action.

Research questions

The following questions were steering this study:

Wherein lies the potential for the co-existence of a pedagogical practice oriented in the Feldenkrais Method with more traditionally based training practices in a conservatory environment?

In contemporary studio practice, what strategies and methods might support young dancers in learning to locate themselves with self-efficacy in the inherently collectively organized structure of dance education?

Within a German conservatory environment, what conditions are necessary for dancers to find value in a somatically informed pedagogical practice, with particular emphasis on the Feldenkrais Method, as an integral component of contemporary dance ‘technique’?

The study spanned the course of the entire academic year 2014-15, comprising a total of thirty-four weeks of intervention. The table below provides a structural overview of the study’s five phases. Term breaks and examination weeks periods dictated the apportioning of time for each phase.

Phase Duration Facilitator	Data Capture	Feldenkrais Integration	Focus
1, 6 weeks Jenny Coogan, Nina Hänel Daily 90-minute contemporary dance class; 6, 120-minute afternoon workshop J.C and N.H	All: biographical interviews; focus-group interviews; mixed-modal online questionnaire; quantitative survey of aims and objectives; video recordings researcher field notes	Somatic Referencing Body scanning and the physicality of breath; peer and self-observation in class and workshops; reduction of tempo to support kinaesthetic feedback; floorwork built out of segments of ATM, particularly developmental movement patterns.	Orientation and Contextualization Creating common ground with a heterogeneous group of students with diverse backgrounds in contemporary dance; to provide a conceptual frame for understanding these dance styles through physical explorations, text and film analysis, movement explorations in workshop formats, and attendance of performance events; to introduce the field of somatics through physical practice in class and workshop formats.

2, 7 weeks Team teaching, Jenny Coogan, Nina Hänel Daily 90-minute contemporary dance class; 3 inter-disciplinary workshops Guest artists J. Jacobs, M. Buckland with J.Coogan M. Buckland	All: text responses to the weekly themes; video recordings Focus-Group: interviews; journal writing researcher field notes	Movement material devoted to the functional organization of the shoulder girdle: de-patterning and re-patterning of habitual ways of using the shoulder girdle; repetition, variation; self-reflection where introduced through a writing practice. The guest residency offered variations in movement material and strategies of their transmission.	Indirect leadership team teaching Creating classroom situations that reveal how different perspectives in learning/teaching can occur simultaneously; to offer anatomically based movement explorations; to present a variety of learning strategies, including sensory and proprioceptive discrimination, analytical properties of observing and reflecting, and movement composition; to engage with interdisciplinary projects. To create a lively climate and culture of interaction encouraging the development of symmetrical exchange among all participants in the learning situation through team teaching and interdisciplinary projects.
3, 5 weeks Daily 90-minute contemporary dance class; Jenny Coogan 2, 120-minute workshops with J.Coogan and N.Hänel	All: video recordings; biweekly questionnaire; Focus-Group: interviews; journal writing researcher field notes	ATM integration in the class: Differentiation and integration; movement initiation and kinetic chains through variation, permutations, shifts in orientation and perspectives.	“To make sense out of sensation” (S. Clarke) To improve self-organization and coordination; to use visualization to enrich understanding of anatomical principles; to find the endurance and concentration to persevere with the ‘same’ material to make more informed choices about one’s dancing; to understand that a change in movement function can change one’s awareness; to use movement sensation to track one’s own progress.
4, 4 weeks 2, 90-minute contemporary dance classes per week Jenny Coogan, Nina Hänel	All: mixed-modal questionnaire, video recordings shared through social media Focus-Group: interviews; journal writing researcher field notes	Refinement of proprioceptive distinctions, particularly in regard to muscle tonic to improve performance and physical skills practice	Peer-assisted learning, Performance qualities To support autonomy and self-reflection through a laboratory-like environment of peer-centered learning working on choreographic material; to take responsibility for individual composition and performance choices negotiated within the group; to collectively document the creative process in written and video formats; to improve performance and social skills.

5,12 weeks 2-3 90-minute contemporary dance classes per week; Jenny Coogan, Nina Hänel; 4 workshops with J.Coogan and N.Hänel	All: mixed-modal questionnaire; quantitative survey of aims and objectives met; digital recordings; final evaluation Focus-Group: interviews; journal writing researcher field notes	<i>Feldenkrais as a choreographic tool</i> Social competencies in creating a duet; Working with constraints for re-inventing the material offered.	<i>Integration and evaluation</i> To work with an individual combination of the tools, methods, and strategies investigated during the course of the study; to embody dance and dance training from a somatic sensibility; to transfer learning from one situation to another independent of the practice in contemporary dance class; to encourage self-reflective and self-directed practice.
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Phase One: Orientation and Contextualization

This phase combined the familiar mode of imitative practice, through teacher demonstration which, in fact, is necessary for students to learn new motor skills, with unfamiliar somatic referencing strategies as body scanning and the physical experience of breath. Much of the movement material was based on ‘floorwork’. Integration of the Feldenkrais Method proceeded in which the movement patterns were constructed, de-and re-constructed, repeated with variations in time, spatial orientation, sequence and energy expenditure. Awareness was directed to how each individual part contributes to the effective functioning of the whole and to the profound neuromuscular and performative effects of variation. Students reported that this phase challenged them to focus on the subtlety of movement. One student recalled:

to really focus on the details and not to focus on ‘OK, I want to do all that stuff:’ but to take one thing and then try to work on that and take the other thing and try to work on that. ... Then I actually feel improvement and feel that I can work more precisely with things (focus group interview October 2014).

As we all were in the process on getting to know each other, most students were open and curious to slow down and to explore the material through repetition. Two students commented as follows:

By working on this particular exercise so very slowly and really taking every section at a time – I remember we spent an hour and a half on one exercise – and at the end I really felt that I’m able to do this and I’m able to do that in a good and healthy and smooth way for my body. That was pretty impressive to me (focus group interview October 2014).

Another student reflected:

I felt like I was stepping on place in a way, but through these weeks and through the work and through the theory and through the understanding of what we're doing, in the end, I found that this is still very important work I need to do, and which is maybe a little bit neglected (focus group interview October 2014).

Frustration was voiced by international students who encountered difficulty in the reading and comprehension of textual material and in the amount of verbal exchange: 'especially for those of us who don't speak good English or even German, it's difficult to read and speak and try to understand these things' (focus group interview October 2014). The language difficulties were addressed by the research team through the simplification of verbal language in class and in questionnaires.

Phase 2: Multiplicity of Perspectives

This phase sought to make the non-fixity of mind and movement evident through team-teaching both in the dance class and in interdisciplinary workshops, and with a guest residency. The introduction of a writing/notating practice with students of the newly formed focus group encouraged processes of self-reflection. Journal writing proceeded in the students' own native tongue. Team-teaching identified shared objectives and made the continual processes of negotiation, immediacy, and spontaneity explicit.

The two weeks of team teaching with dance educator, Feldenkrais practitioner in training and member of the team, Nina Hänel was organized either as fluid leading and following, or through the division of roles in which one person attended to the group, while the other offered individual feedback. Musicologist, Monika Buckland and I worked with the students' compositionally combining music and dance improvisation-based scores. Variations and permutations were of central focus for these workshops. Students appreciated the horizontal pathways of communications, and one commented:

For me it was sometimes just helpful to hear ideas and images with different and new words. Every teacher teaches at least a little bit differently. Small differences can have a big effect on my understanding of an exercise or principle. In addition, I had the feeling that the teachers felt comfortable in their cooperation with us (written response to the weekly question November 2014).

During the two weeks of team teaching, students were confronted with a small amount of movement material that focused on the complex functional organization of the shoulder girdle, weight support and locomotion and its integration with the pelvis. This period of thematic specificity was followed by a two-week guest residency with dance artist, Jason Jacobs. The movement material and themes of Jason's lessons changed each day thereby breaking up the pattern of mindful repetition and variation that had been primary at the beginning of this phase. His lessons offered students the degree of variety and physicality with which they were familiar.

Students appreciated the variety of this phase and one student stated 'What we are aiming for in the class is to touch and try everything without any prejudices' (written response to the weekly question December 2014).

Phase 3: Visualization and Sensory Discrimination

This was the most challenging phase for all. Fifteen-minute Awareness Through Movement lessons were explored at the beginning of the class. The pacing of the class was slow and required the students to resist the tendency to focus on the movement's outward representation, and to draw their attention to proprioceptive cues and the subtle dynamic variations of its execution. At the beginning of this phase, one student remarked, 'I've done the movement so often, but now I have the feeling that I can feel every detail' (focus group interview January 2015). Attention was directed to coordination understood, as in the Feldenkrais Method, as the proportionally efficient relationship between gravity and energy expenditure.

As students' English language skills had improved, demonstration was not always essential, and classes were increasingly led through verbal cuing. Students were encouraged to move away from dependence on the teacher and toward self-directed learning. However, during this phase students struggled to concentrate on the small amount of athletic movement material. Midway through this phase one student articulated the general tenor of the group with this remark: 'I don't feel like I'm moving enough, that it's getting me to the place that I want, that I see myself in' (focus group interview February 2015). Another student questioned, 'It feels different, but I don't know if one can see the difference from the outside' (class discussion February 2015).

At this point during the study some students began attending the class with less regularity and a general atmosphere of boredom and restlessness arose. This mood persisted even when more athletic movement was introduced. This phase marked the end of the first semester and a welcomed two-week semester break followed.

For the duration of the second semester, daily teaching was shared with a colleague. The sharing of the teaching responsibilities brought greater diversity into the teaching and learning environment that helped to ease the sense of frustration. An atmosphere of openness and receptiveness returned. However, those students who had begun to attend this class sporadically continued to do so until the study's completion.

Phase 4: Peer-assisted Learning; Performance Qualities

Both Nina Hänel and I facilitated each session of this phase. We adopted the role of mentors. Each session began with a gentle warm-up of recurring material that prepared students to work in a laboratory-like environment with a complex sequence of choreographic material. In small groups, students explored this material with specific tasks that addressed:

- Differentiated use of energy expenditure,
- Phrasing and musicality as processes of exertion and recuperation, and
- Spatial orientation.

Students' compositions grew in complexity and proprioceptive differentiation throughout the phase. The studies were captured digitally each week and shared so that the students had the opportunity for feedback, self-evaluation, and discussion with other class members between sessions.

Students appreciated the artistic freedom offered to them and began to feel confident in this situation of self-directed learning. They experienced the physical fullness of dance that was absent in the third phase and could explore their own creative inclinations. This endowed their daily training with a sense of artistry which was both personally and socially satisfying. They were asked to position and to negotiate their artistic decisions within the group, respect the ideas of others and articulate appreciation. This created a triangulation between self and other, or self and the world that brought students together in a social somatic sense of shared learning. One student elaborated:

This was really great because we had the chance to learn from each other. The fact that we were in smaller groups, and that we had to show what we did with the others, gave me more confidence and really helped me to take more risks and to show what I have deep down in me (focus group interview March 2015).

The Feldenkrais intervention during this phase was not about movement functionality, but rather one that supported the unfolding of ownership and personal agency into a state of collective awareness. Another student commented:

The different focuses in each lesson were great because they showed that we could go even further—we have the skills to do it. It's just that we normally don't think of using them. And the teachers were really supportive during these classes, which was great. This made me feel more secure (focus group interview March 2015).

Phase 5: Self-Directed; Reflective Practice

Themes explored during earlier phases were revisited so that students could more clearly track their own progress in relation to the energetic and plastic qualities of movement, muscular efficiency, and affective commitment. The warm-up phase of the class was directed to having students make and take their own decisions. Later they paired up to create their own compositions initiated from modular units of teacher-given movement material, underscored with rhythmical ostinati and polyphonic uses of the body. The students' creations were modelled according to their own decisions. One dancer commented:

As soon as we put ourselves into a piece of work, it made a big difference to me because it kind of triggered my creativity or made me think: How can we make that work? We have this and we have that: How can we put it together? What possibilities do we have? (focus group interview May 2015)

A flexible atmosphere of dialogue helped students to work with the material following their own creative interests and trusting in their own artistic identity.

In review of the five phases of the study, I propose that the imitative practices employed during the first phase that concluded with a performance were a motivating factor for student engagement. During the second phase in which students encountered either a highly reflective or a highly physical practice, different appreciations of the work were articulated. The third and most challenging phase invited the students to practice 'reflection-in-action'. This phase was met, after the initial lessons, with resistance. The fourth and fifth phases proved to be satisfactory for those students who persevered through the stage of difficulty.

Data Analysis and Overview of the Results

The prolonged research period of thirty-four weeks and the density of contact hours allowed the research team to observe changes in the environment and to gather, review, and interpret a diverse pool of data. Throughout the study, student attitudes and reactions were collected and assessed by the team through questionnaires, semi-structured focus group and individual interviews, feedback sessions, in-class video recordings and researcher notes. Questionnaires (web based and in paper form) included rating scales, graphics and space for individual text commentary.⁹

'Life world' interviews were conducted with each student at the onset of the study and all students participated in group interviews and evaluations after the first and last phase of the study. As time and resources prohibited the possibility for individual interviews after each phase of the study, eight students representing a range of cultural and social backgrounds, dance experience, age and gender were selected to form a focus group. Focus group interviews were conducted at the end of the second, third and fourth phases of the study.

The research was conducted in one of the students' multiple daily dance technique classes thus making it impossible to uncouple the learning that took place in the research environment with the other experiences of the dancers' day. Drawing relationships between the research questions and the coding system of grounded theory four primary categories emerged that bring different and interrelated perspectives to the complex processes of situational learning: environment, reflection, agency, and transferability.

⁹ Refer to the appendix for examples of mixed modes methods of data capture.

Learning Environment

A somatic approach to teaching and learning heightens one's sensitivity to personal and collective agency and affect. This makes the quality of the class climate a factor for successful learning that cannot be ignored. A supportive, safe and communicative learning environment proved to be the fundamental condition necessary for the students' learning. Students' repeatedly identified the class atmosphere as primary in their ability to concentrate and to learn with comments as, 'There needs to be a certain atmosphere in class that allows for concentration without disturbance' (group interview at the completion of the study June 2015).

Classes proceeded with an attitude of shared responsibility and horizontal pathways of communication. This condition heightened the need for the whole group's positive motivation in class, which many students acknowledged and expressed as follows: 'It helps me so much if I have the feeling of we're all going there together' (group interview at the completion of the study June 2015). During the course of the study, students gained awareness of their responsibility as co-creators of the class climate and began to consider the consequences of their actions with greater sensitivity. A sense of awareness encapsulated their movement, their interaction with others, and the way in which they worked in the environment. One student expressed: 'I feel like appreciating everybody else and being aware of the group helps the awareness of each individual to grow' (group interview at the completion of the study June 2015).

Reciprocal methods of student-centered learning and peer tutoring were emphasized throughout the study and these created direct and intimate exchanges necessitating an environment of mutual trust and respect. Not all students were able to work within this learning paradigm. Some recognized divergent attitudes and offered comments such as the following: 'I did notice some discrepancies among my fellow students. I felt that some in particular were rude and judgmental when it came to the new approach to teaching' (group interview at the completion of the study June 2015).

For some students the teaching/facilitating modalities were not accessible, as they were incongruent with their expectations for dance technique training.¹⁰ As stated earlier, midway through the study four students began to participate with less frequency. Their absence transformed the class climate into one in which students could finally profit more effectively from the study's pedagogical offerings. One student expressed: 'Even within myself, letting go allows me to accept things more easily and faster, so for me atmosphere and energy in the group is pretty much everything' (group interview at the completion of the study June 2015).

¹⁰ No student learning disabilities as dyslexia, autism, ADS, or psychological disorders were evident to the research team nor were communicated from student to teacher. Disabilities of this nature were not evident and were not put forward by the students. The students' responses to the study's teaching formats and modes of transmission were based on their ability to find access to ways of engaging in their contemporary dance technique class that were, for most, unfamiliar to them.

The preceding statements and my observations of the group dynamics indicate the students' desire to have proceeded forward as an integral and intact group. However, the recognition of those who completed the study articulated that a constructive and supportive environment was essential for learning somatically. Therefore, the elimination of destructive and distracting factors, as in the absence of four students, was crucial for the rest of the student group to profit from this learning paradigm.

Reflection

Dewey (1997: 6-15) identifies three essential components in reflective thinking: openness or a freeing from prejudice; wholeheartedness, becoming absorbed in the material; and responsibility in facing the consequences of one's own action. He writes that: "Active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends, constitutes reflective thought (1997: 6). Throughout the study the students were asked to review their individual prejudices about the materials and procedures for engaging in a contemporary dance class and to be open, available and personally responsible for new learning.

In focus group interviews, group discussions, and questionnaires, students were asked about their ability to navigate the changing *modi operandi* found in the study. At the onset of the study, one student expressed that: 'For me, engaging in my contemporary class means trying everything, and even more so things that I am not used to, so that I can evolve more' (focus group interview October 2014).

Initial responses as the one above were compared with responses made at later points during the study, such as this student's statement:

For me, to stay fully engaged and tuned into myself within this contemporary dance class, I need to understand. I need to be able to give context to what I am doing to facilitate the full potential of the exercise or concept (focus group interview February 2015).

Yet critical self-reflection also led to some uncomfortable realizations, such as recognition of the high expectations for recognizing improvement that one places on oneself as expressed by the following: 'I expect from classes to do as much as I can. It's just—I always kind of pressure myself to come back, and I expect to see improvement' (focus group interview February 2015). This issue of self-expectation appeared to be challenging for many students, especially in an environment that aimed to reserve judgement. A student identified that: 'It is important for me not to judge myself, but just to observe, experiment, and try as much as possible, thereby tackling problems in a constructive way' (written response, mixed modal questionnaire March 2015).

Responses demonstrated that a student-centred learning atmosphere was an important condition for developing self-reflection. Those responses offered early in the study illustrate that reflection was channelled more toward improvement in physical skills. With time, students reported a growing recognition of the value of self-reflection in developing an ability for directing and evaluating one's own learning processes that facilitated their availability and openness for novel teaching and learning situations.

Personal Agency

Confronted with disruption to familiar ways of negotiating training situations, the group was brought into dialogue and discussion about both class content and the teaching methods. Students formed and articulated diverse opinions and positioned themselves with personal agency in this new context. A student recounted: 'I have discussed this class a lot with my colleagues, as this is a new situation for all of us, and everyone has a different opinion about it' (focus group interview February 2015).

Later in the study a student noted:

There was a more cooperative vibe between the students, which to be honest was much more enjoyable! Also, there has been an increase in communication between my colleagues and me about the new concepts that we have learned in and out of the studio, which I personally find incredibly interesting (final full group interview June 2015).

Personal agency is crucial for artistic work. Particularly in the fourth phase the research team noticed a direct correlation between personal agency and performance aptitude. One student reflected:

Within that directness there was quite a lot of freedom, which was really good. Because I feel that gave you so much choice and opened up so many options, and it's interesting to see how different groups interpreted different things. It really shows what an artist is (written response, mixed modal questionnaire March 2015).

These comments demonstrate that higher-order thinking processes had become more firmly rooted in students' practice. One student noted:

I'm actually doing something. I'm improving. And that's it. And even if people don't see that I have improved, I don't care, because I did. That's it. And that's when you start to be more settled and to enjoy everything even more (final full group interview June 2015).

Transferability

The idea of yielding to the methods and materials of the class accompanied the students throughout the entire case study. Increasingly those who participated with a curious state of mind accepted that learning does not always follow a linear path and needs time to unfold as

reflected in the following statement: 'I give myself the time I need. I not only use my body but also my imagination to learn' (focus group interview February 2015). Another student reflected: 'When you learn things you either choose to take it on or you don't take it on, and sometimes things take longer' (final full group interview June 2015).

Another student observed the need to evaluate the material, rather than to accept it blindly:

Sometimes it's good if you don't really take everything on from the beginning, because then you think more about it, and it stays with you more because you had a process with it (final full group interview June 2015).

As described by the following comment some students began to recognize the impacts of the somatic work in their dance practice:

If I think about applying somatics, it's just moving. If I want to do an exercise, I really think about myself and how my body moves through space and how I do something. I just feel like all the bumps in my phrases have smoothed out. That's a really cool feeling. Like when we do floor phrases. I mean one of the first ones we did lasted two weeks. It was long, but I feel like when you're applying somatics, then things come fluidly, and you don't necessarily understand why it's fluid, but it just happens (final full group interview June 2015).

Another commented:

I had some really strong sensations about it. It feels normal and integrated as well, so I am happy that I can feel it in my body. I can feel it even more actually when I do really physical things, for example in different classes. And then I try to find a different way to do it, and then I think "How would I do it if I were in Jenny's class or in Nina's class?" And then I kind of find a different impulse or different way, and then it sometimes actually works faster as well, as I try to think how I would approach it in a somatic kind of way (final full group interview June 2015).

During the year students became less dependent on personal feedback or corrections. The hesitation at the beginning of the year to work in pairs or small groups was replaced with an eagerness to engage in cooperative learning and peer-tutoring frameworks, as they could work from a place of personal agency, knowledge transfer, self-reflection, and self-confidence. This all required time.

Critical Reflection and Summary

Dancers aiming for careers as performers often have explicit expectations and assumptions about dance training and technique, summed up by learning fast, pushing hard, sweating and being corrected. Competition in the dance industry is intense and for many a performing career

is one of limited duration. Accordingly, dancers typically identify their goals at an early age and strive to achieve them in the most direct way possible (Buckroyd 2000).

Learning with the Feldenkrais Method proceeds along indirect pathways and makes evident that disruption of known patterns and acceptance of states of uncertainty spawn creativity. Improvement is measured through pleasure and ease. These criteria stand in contrast to a prevalent position in conservatory-based dance practice that posits if the movement is pleasurable and easy, the dancer is either under challenged or his/her delivery of the movement is lacking in the necessary push and will power.

Clearly the focus of the study did not always align with the dancers' expectations for technique class or with the skill set they already possessed. Many encountered destabilizations and/or discomfort as their familiar modes of practice were disrupted. For some this produced motivational and/or cognitive dissonances, others faced periods of boredom. Frustration and experiences of loss arose when known measures for weighing and balancing the physical sensations of effort and movement were recalibrated. The U-shaped trajectory of change (Gershkoff-Stowe and Thelen 2004; Stavy 2012) as described in the graph below aptly represents the developmental curve that many students experienced during this study. Learners were asked for patience, open-mindedness and the facility to dwell in liminal moments of uncertainty. The persistence to move through states of disorganization in which known strategies and sometimes automatized patterns of behavior were questioned before new competencies formed was needed (Stavy 2012). The study required stamina on the part of the entire research group to work through discomfort and to allow time for new skills to take hold. Dewey reminds us that certain subprocesses are involved in reflective thought: "These are: a state of perplexity, hesitation and doubt; and an act of search or investigation directed toward bringing to light further facts which serve to corroborate or to nullify the suggested belief" (1997: 9). I believe that educators and educational institutions should be cognizant of the findings regarding U-shaped trajectories of change to encourage patience when coping with the difficult phases of reorganization, during which students might experience stagnation and frustration (Krasnow and Wilmerding 2015). Without this understanding there is a risk that student engagement with unfamiliar opportunities for learning might be reduced or even halted before they have the chance to experience their possible benefits (Narciss, S. and Matko, K. 2016: 89). In this sense the research team would have appreciated a more genuine welcoming of the study's teaching and learning methods as a constructive curricular contribution from the faculty and institution's direction.

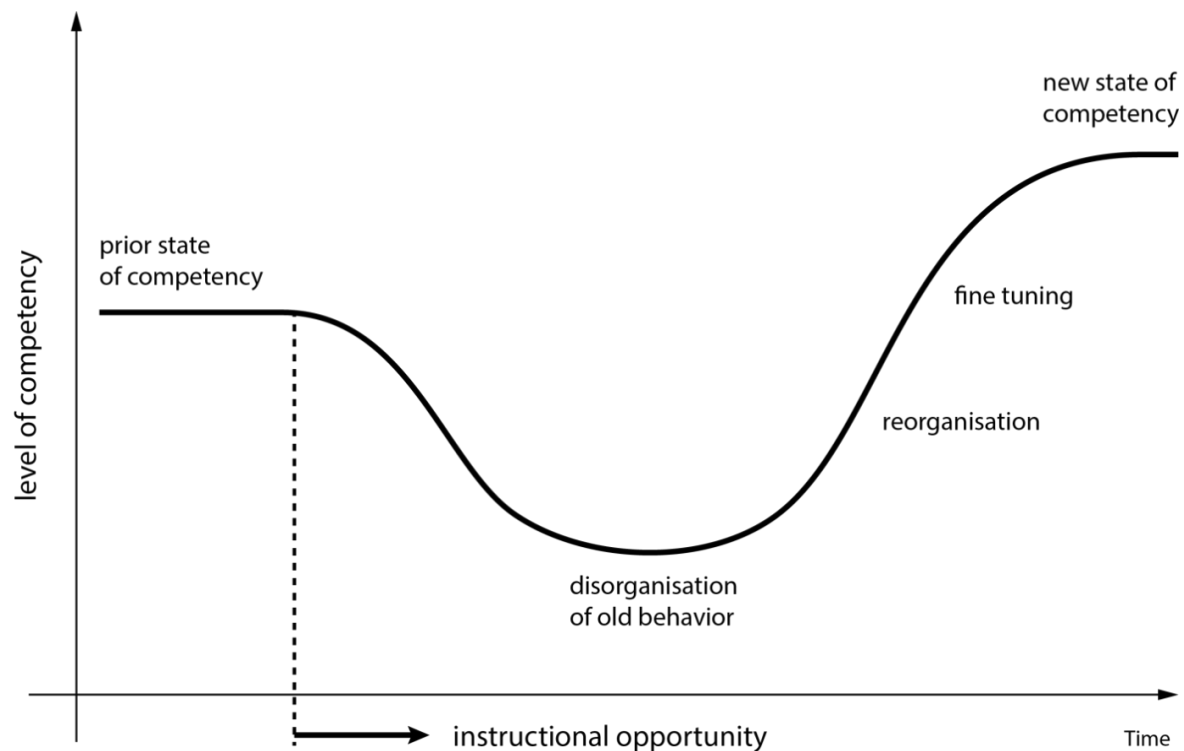


Figure 1: U-shaped curve of changes in competencies within training and instruction, adapted from Slavy 2012: Narciss, S., Matko, K. (2016) in (ed) Coogan, J. *Practicing Dance: A Somatic Orientation*, p. 85.

The students who exited the study could not find value in the work and expressed that the physical material was not challenging enough, the class pacing too slow, and the amount of repetition and discussion tedious. These comments reveal that their expectations were not those put forward in the study. The affective responses of these students led to disrespectful behavior, communicated verbally and through aggressive body attitude and disengaged participation. However, the students were empowered with a voice and I had to accept the reality of how the voices of these young dancers between sixteen and eighteen years of age were expressed. I was challenged to be aware and in control of my own affective responses to the resistance I encountered. Those who engaged with openness were aware of the change in the environment once the disruptive element disappeared, and one expressed: 'For me it was really prominent to actually see ... how certain concepts will click because a negative energy is brought out; it's just gone' (final full group interview June 2015).

Every year there are students who participate in their contemporary dance technique classes with varying degrees of frequency. Often students principally interested in the classical dance idiom do not endow the same attention, motivation, presence or interest to their contemporary dance course. Throughout the six semesters of study, this course that meets daily is mandatory; however, there is no attendance requirement. Therefore, faculty members must tolerate student

absence. The only requirement is to pass the practical examination at the end of the academic year. As the examination for the course in which the case study was located took place in the class of my colleague, these students experienced no consequence for their absence in my class.

Throughout the study I questioned to what extent I could accommodate the students' desire for a fast paced purely physical studio practice without compromising my own teaching ethos. During the study's early phases, students expressed a desire to "dance more" and to learn a greater range of movement material. This desire was met during the first phase in preparation for a performance of class material as part of an open-house event, and during the second phase through a period of a guest residency.

The third phase was the most challenging and was met with the most amount of resistance. The dancers felt they were not moving forward quickly enough, and this was the phase in which the degree of power-driven physicality was most reduced. I had timed this phase to correspond with a month of daily rehearsals with a guest choreographer. I reasoned that the hours of daily rehearsal would balance the students' desire for high powered physicality in their contemporary technique class. Unfortunately, the choreographic project was deemed disappointing as only a few of the nineteen students were fully integrated into the creation. Encountering frustration, I encouraged the participating students to recognize the cumulative progression and structure of the study's five phases, and as the study continued, emphasis was directed to the assimilation and performance of virtuosic choreographic material. Those students who persevered with the process reflected on uncomfortable or dissatisfactory moments during the study, but by its end acknowledged these situations as beneficial. One student said:

It felt like especially for me when we were doing a lot of Feldenkrais at that period of time that I didn't find it very beneficial at all. But now coming back and distancing myself from it, now I can actually see how it helps me and why certain things are easier now. But unfortunately, in that period of time I was just not so into it, but now I appreciate it a lot more. So I think that it is a good experimental phase, and I think that other people might feel the same (final full group interview June 2015).

Students recognized the integration of the Feldenkrais Method most clearly during the third phase when Fifteen-minute Awareness Through Movement lessons were often offered at the beginning of the class. However, they needed more direction in understanding how fundamentals of this method guided the entire study and were woven into all its parts. A period of orientation at the beginning of the study year in somatic-dance methodologies and experiential practice with the Feldenkrais Method, independent of the dance technique class, would have been useful for clarifying the conceptual underpinnings of the study and its pedagogical strategies. The supplementary afternoon workshops scheduled intermittently throughout the year were beneficial but too irregular. The dancers' dense amount of coursework

and rehearsals (often from 8 am to 7pm) prohibited the scheduling of additional workshop sessions.¹¹

The Feldenkrais Method relies on the innate intelligence of the individual's nervous system to learn. The teaching in this method helps the learners to 'find out' themselves, rather than being told exactly what to do or to imitate the movement form through the demonstration of the teacher or other fellow students. In this way the method refrains from explicitly determining what the learning might be and how it might be physically expressed. I aimed to create an atmosphere of allowing rather than declaring; one that conveyed authority without being authoritarian. My use of language was directive, conditional, and imaginative. Questions were posed. Situations in which I asked the students to make their own contextually informed choices or returned their questions with another, often proved difficult. The students wanted to be told exactly what to do and how to do it. At times, they responded to my questioning with phrases such as "Tell me what you want" or, "Don't ask me what I want, or how I think I should do it".

These comments reveal that some students perceived the invitation to make their own choices as cognitively tiresome, time consuming and an indication that I was unclear about my intentions and aims. As the case study was embedded in a pre-professional dance performance program in which virtuosic motor skills are schooled, it is essential for the teacher, at times, to be explicit both through language and physical demonstration. In retrospect, the methods and materials of the study might have been more accessible for the students had I used more imitative and declarative formats throughout the study.

At the beginning of the study the dancers' processes of Moshe Feldenkrais' reflection-in-action and those theorized by educationalist Donald Schön's (2016) reflection-on-action,¹² were yet to be anchored in their practice. However, the link between agency and self-reflection grew throughout the year. A student acknowledged the nature of the learning process as follows:

The movement themes of previous phases led up to the big movement pattern we dealt with over the last few weeks. That's why, even if the material might have been a little difficult to handle in the first place, it didn't totally overwhelm me. Principles like the starfish, ideas about how to work and roll on the floor, or even whole steps were familiar to me and therefore made it easier for me to deal with the complexity of the phrase (focus group interview March 2015).

¹¹ Both Nina Hänel and I offered students individual lessons in Functional Integration upon request and free of charge. Ten students took advantage of this opportunity that enabled them to better understand how to bring in strategies of the method into their own practice.

¹² For each, learning from experience requires shuttling back and forth from observations, to examination and reflection on those observations, and then acting on those conclusions. The more people reflect on action, the better they get at reflecting and the more they can learn about themselves.

Another reported that what had become important were issues such as 'Taking things and processing them. Not only taking them in, but maybe questioning them, and answering them again' (final full group interview June 2015).

Positive effects were often registered, acknowledged, and experienced with time – a summer break – or with new experiences in further years. At the end of the study a student exclaimed:

I feel like somatics is kind of a thing... you have to understand. It can't be 'OK, I get an explanation, and now I understand it.' ... You have to go through it; you have to do it and experience it (student and alumni interview October 2015).

Another student commented:

What I experienced in Feldenkrais was to focus totally on understanding what we were doing. And I would feel this sensation in Feldenkrais, especially the ease, and try to keep this feeling. But that was hard and the feeling would disappear, so it took a while to apply this in my dancing. As the sensations became clearer and I noticed when the sensations changed and what is good for me, I could start to apply this approach in my ballet and contemporary classes (student and alumni interview October 2015).

All participants in the study were invited to reconsider individual biases and presuppositions, and to encounter a juxtaposition of viewpoints and epistemologies in working processes with acceptance and empathy. The research team sought to respect the decisions of all, including those students who struggled to find value in the study. In retrospect I believe that the sharing of teaching responsibilities for this daily course should have begun at the onset of the study. Greater variety in teaching methods for the course might have made this unfamiliar modus for studio practice more palatable and less threatening. The simultaneity of teaching and research was a first-time experience for both the students and me as teacher-researcher. Therefore, it was essential for the research team to keep the students as the center of attention. In hindsight, the quantity of data collected during all parts of the study might have been overwhelming, leading students to experience competition with the research. However, the benefits for locating this qualitative action research in a mandatory curricular course class drew the entire community together in reflective, practice-led research.

The comments of the participating students did not identify their age or relative immaturity as factors inhibiting them from finding access to the study's offerings. This supports my persuasion that somatic approaches can begin at the onset of the dancer's conservatory education. Students' comments identify that a somatically informed pedagogy informed by the Feldenkrais Method can support the development of these students' personal and collective agency, and self-reflective skills and that this learning can be transferred to other areas of their lives. One student conjectured: 'clearly that it is you who needs to figure it out, otherwise it is not going to be of any help' (focus group interview October 2015).

Another commented:

I had some really strong sensations about it. It feels normal and integrated as well, so I am happy that I can feel it in my body. I can feel it even more actually when I do really physical things, for example in different classes. And then I try to find a different way to do it, and then I think “How would I do it if I were in Jenny's class or in Nina's class?” And then I kind of find a different impulse or different way, and then it sometimes actually works faster as well, as I try to think how I would approach it in a somatic kind of way (student and alumni interview October 2015).

In addition, the data revealed that this manner of learning does not speak to everyone. Clearly it was not accessible for those expecting and demanding a teacher driven highly physical practice. Therefore, it is essential to offer students a range of teaching and learning methods and strategies so that all can move forward through direct and indirect pathways of learning. A student remarked:

Well the beginning of the year was difficult. I had never done something like this before, and you really have to be open, ready, and willing—otherwise it is not a good experience. It changed into a good experience for me. And I noticed that even at the end of the year some people in our class were still not open to accepting what was offered. You have to be open in order to accept it (final full group interview June 2015).

The study's methods did not seek to replace or to question existing ones in the Palucca University, but rather sought to bring greater methodological diversity into the institution in a spirit of co-existence. A coherent curriculum, fluid communication and acceptance of difference among faculty members are of utmost importance for enabling the students to experience their vocational education from a multiplicity of perspectives in order to navigate with resilience through life's ever-changing terrains, one that includes the professional field of performing dance. Working somatically means to value difference, accept perspectives other than one's own, and invite a space for everyone in the community to discover and to pursue their own truth. This state of awareness can help one to realign and reorient in new relationships, and to welcome serendipity. I conclude with a reflection of a recent graduate:

I find it interesting that there is always a kind of rebellion against the introduction to somatics during the first year of the Bachelor's program. I remember hearing students pass on advice to the younger ones, telling them “Don't give up!”, “It will be worth it”, “Make it happen!” And I think that's kind of inherent in somatic practices, that there is a moment where you can decide to be open, which is not always so easy to take because you don't get immediate rewards. The somatic way takes you out of normalcy, and you have to wait to get results (alumni comment at the student and alumni interview October 2015).

References

- Alexander, K. (2003) 'Unravelling the dance: an exploration of dance's underdeveloped relationship with its kinesthetic nature, with particular reference to Skinner releasing Technique'. In Hargreaves, M. (ed.) *New Connectivity: Somatics and creative practices in dance education*. Papers from Laban Research Conference. London: Laban Centre, 19-22
- Brodie J., and Lobel, E. (2012) *Dance and Somatics. Mind-Body Principles of Teaching and Performance*. Jefferson, North Carolina and London: McFarland & Co Inc.
- Buckroyd, J. (2000) *The student dancer*. London: Dance Books
- Clarke, S., (2017) Keynote Address at the *Bodily Undoing Symposium* Bath Spa University (author's notes)
- Coogan, J. (2016) (ed.) *Practicing Dance: A Somatic Orientation*. Berlin: Logos Verlag Berlin
- Corbin, J., and Strauss, A. (2015) *Basics of Qualitative Research: Theory and Procedures of Developing Grounded Theory*. Thousand Oaks: Sage Publications
- Creswell, J. (1998) *Qualitative Inquiry and Research Design: Choosing among five traditions*. Thousand Oaks: Sage Publications
- Deese, J. (1966) *The structure of Association in Language and Thought*. Baltimore: The Johns Hopkins University Press
- Delahunta, S., and Hoerster, E.M. (2007) 'Rethinking Tools: based on interviews conducted during MODE05'. In *Reverse Engineering Education: dance, choreography and the performing arts*. ed. by Delahunta, S. and Hoerster, E. MODE05, Berlin: b-books verlag, 88-95
- Dewey, J. (1997) *Experience and Education*. New York: Touchstone
- Dewey, J. (1997) *How We Think*. Mineola: Dover Publications
- Dewey, J. ([1934] 2008) *Art as Experience*. New York: Perigree Books
- Feldenkrais, M. (1972) *Awareness Through Movement*. New York: Harper & Row Publishers
- Feldenkrais, M. (1981) *The Elusive Obvious*. Cupertino: Meta Publications
- Feldenkrais, M. (1985) *The Potent Self: A Study of Spontaneity and Compulsion*. San Francisco: Harper & Row Publishers

- Fortin, S. (1993) 'When Dance Science and Somatics Enter the Dance Technique Class'. *Kinesiology and Medicine for Dance* 15 (2), 88-108
- Fortin, S. (2003) 'Dancing on the Mobius Band'. In Hargreaves, M. (ed.) *New connectivity: Somatics and creative practices in dance education*. Papers from Laban Research Conference. London: Laban Centre, 3-10
- Fortin, S., Vieira, A., and Tremblay, M. (2002) 'Three Voices: Researching How Somatic Education Informs Contemporary Dance Technique Class'. *Research in Dance Education* 3 (4), 155-179
- Freire, P. (1993) *Pedagogy of the Oppressed*. London: Penguin
- Gershkoff-Stowe, L., and Thelen, E. (2004) 'U-Shaped changes in behavior: A dynamic systems perspective'. *Journal of Cognition and Development* 5 (1), 11-36
- Giguere, M. (2015) 'Dance education action research: a twin study'. *Research in Dance Education* 16 (1), 16-32
- Green, J. (2001) 'Socially Constructed Bodies in American Dance Classrooms'. *Research in Dance Education* 2 (2), 155-173
- Green, J., and Stinson, S. W (1999) 'Post-positivist Research in Dance'. In *Researching Dance: evolving modes of inquiry*. ed. by Fraleigh, S. and Hanstein, P. Pittsburgh: University of Pittsburgh Press, 91-123
- Johnson, D. H. (1994) *Body, Spirit and Democracy*. Berkeley: North Atlantic Books
- Johnson, D. H. (ed.) (1995) *Bone, Breath and Gesture: Practices of Embodiment*. Berkeley: North Atlantic Books
- Krasnow, D., and Wilmerding, M. (2015) *Motor Learning and Control for Dance: Principles and Practices for Performers and Teachers*. Champaign: Human Kinetics
- Luhmann, N. (1995) *Social Systems*. Stanford: Stanford University Press
- Myers, M. (1983) 'Body Therapies and the Modern Dancer'. *Dance Magazine* 57 (August), 1-24
- Narciss, S., and Matko, K. (2016) 'Students' Perceptions and Acceptance of Somatic Instructional Opportunities: An Analysis from a Psychological Perspective'. In *Practicing Dance: A Somatic Orientation*. ed. By Coogan, J. Berlin: Logos Verlag, 83-93
- Parviainen, J. (2003) 'Dance Techne: Kinetic bodily logos and thinking in Movement'. *The Nordic Journal of Aesthetics* 15, 159-175

- Raman, T. (2009) 'Collaborative Learning in the dance technique class'. *Research in Dance Education* 10 (1), 75-87
- Robson, C. (2011) *Real World Research*. Chichester: John Wiley & Son Ltd
- Röttger-Rössler, B., and Slaby, J. (eds.) (2018) *Affect in Relation – Families, Places, Technologies. Essays on Affectivity and Subject Formation in the 21st Century*. New York: Routledge
- Schön, D. (2016) *The Reflective Practitioner: How Professionals Think in Action*. New York: Routledge
- Shapiro, S. (ed.) (1998) *Dance Power and Difference: Critical and Feminist Perspectives on Dance Education*. Leeds: Human Kinetics
- Sieben, I. (2011) 'Working Somatically, Supporting Technique for Contemporary Dance'. In *Tanztechniken 2010*. ed. by Diehl, I. and Lampert, F. Leipzig: Henschel, 136-145
- Spatz, B. (2015) *What a body can do, Technique as knowledge, Practice as Research*. New York: Routledge
- Stavy, R. (ed.) (2012) *U-shaped Behavioral Growth*. New York: Elsevier
- Steinmüller, W., Schaefer, K., and Fortwängler, M. (2001) *Gesundheit-Lernen-Kreativität*. Bern: Hans Huber Verlag
- Varela, F.J., Thompson, E., and Rosch, E. (1992) *The Embodied Mind: Cognitive Science and Human Experience*. Cambridge, Mass.: MIT Press
- Von Glasersfeld, E. (1995) *Radical Constructivism. A Way of Knowing and Learning*. New York: Routledge
- Walach, H., Buchheld, N., Büttenmüller, V., Kleinknecht, N., and Schmidt, S. (2006) 'Measuring Mindfulness—the Freiburg Mindfulness Inventory (FMI)'. *Personality and Individual Difference* 40, 1543-1555
- Wilson, M. (2009) 'Dance pedagogy case studies: A grounded theory approach to analyzing qualitative data.' *Research in Dance Education* 10 (1), 3-16
- Wisker, G. (2001) *The Postgraduate Research Handbook*. New York: Palgrave Macmillan

Biography

Jenny Coogan

Born in the USA, Coogan is based in Germany where she is Professor for Contemporary Dance at the Palucca University of Dance Dresden. For nearly forty years she has worked internationally as a dance artist, educator and scholar, performing, choreographing, teaching, researching and publishing. She directed the repertory-touring ensemble, *Coogan Dancers*, whose productions appeared throughout Europe and in the USA. Since 2011, she directs *ArtRose*, an intergenerational community dance ensemble. Coogan received a Bachelor of Fine Arts Degree in Dance from the Juilliard School in NYC, pursued postgraduate studies at the State University of New York at Brockport and is currently a doctoral candidate at the Centre for Dance Research at Coventry University in the UK. Coogan graduated from the Berlin 1 Feldenkrais Training Program in 2001. Her research works with the Feldenkrais Method as a scoring practice and creative catalyst in both dance facilitating and dance making. Coogan is the editor and principal author of the publication, *Practicing Dance: A Somatic Orientation* (2016, Logos Verlag Berlin).

Appendices: Examples of instruments used for data collection during the case study

Phase 3: Feldenkrais in Dance Class

The following questionnaire was distributed to students on a biweekly basis during phase 3 of the case study. It was filled in at both the beginning and end of their contemporary dance class.

Dear Students,

January 5, 2015

During this 3rd phase of the case study in which you are participating, time will be offered at the beginning of selected ZT/MT classes for you to respond to the following questions listed below. Reflecting upon these questions, that ask about your momentary mood and state of physical well-being, might enable you to better “tune in” to today’s class. Please respond to the questions by marking the boxes.

1. At the moment how confident do you feel in your ability to direct your attention to yourself?
not at all ☐ slightly ☐ moderately ☐ very ☐ extremely ☐
2. At the moment how confident do you feel in your ability to distribute your attention between yourself and your environment?
not at all ☐ slightly ☐ moderately ☐ very ☐ extremely ☐
3. How confident are you that you can maintain goal -directedness even when encountering difficulties in today’s class?
not confident ☐ slightly confident ☐ moderately confident ☐ confident ☐ very confident ☐
4. How curious are you to explore unfamiliar movement patterns and possibilities in today’s class?
not at all ☐ slightly ☐ moderately ☐ very ☐ extremely ☐
5. To what degree are you experiencing fatigue or alertness at the moment?
very fatigued ☐ moderately fatigued ☐ neither-nor ☐ moderately alert ☐ very alert ☐
6. At the moment are you dealing with an injury? ☐ Yes ☐ No
7. If you are dealing with pain, how intense is it at the moment on a scale of 1 – 100?
1 _____ 100
8. To what extent do you feel confident in your ability to actively engage in today’s class?
not confident ☐ slightly confident ☐ moderately confident ☐ confident ☐ very confident ☐

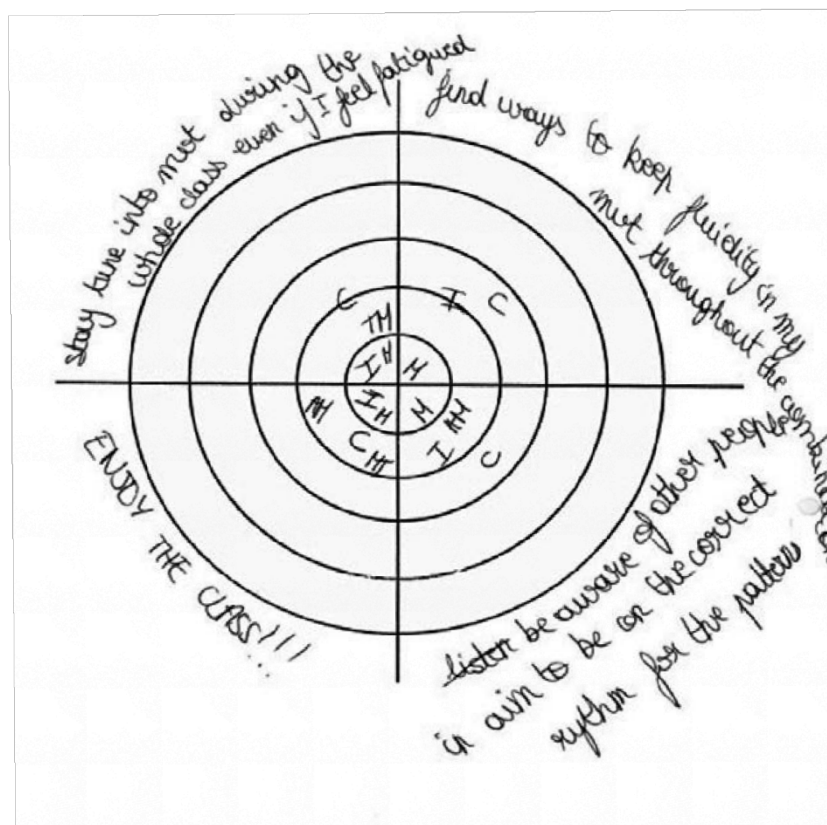
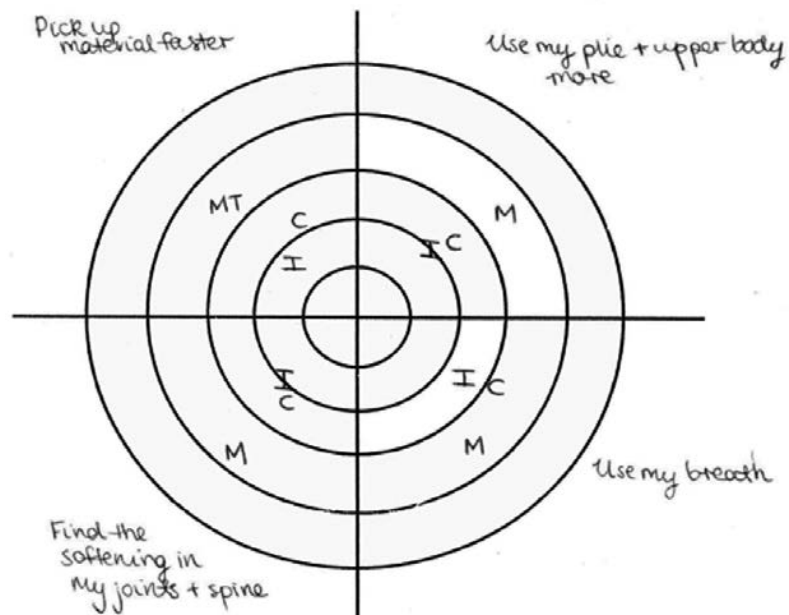
Disk Diagram

Dear students,

On the accompanying disk-shaped diagram, please identify four points of interest or goals that are important for you in today's class. Write these in the four corners of the disk. Use the symbol "I" in the four fields to correspond to the importance of these goals for you today, and use the symbol "C" to correspond to how confident you feel of your ability to achieve these goals. The closer you set your "I" and "C" to the center of the disk, the more relevant these goals are for you.

Next, using the symbols "M, A, T, MA, MT, TA", please mark in the appropriate fields how you feel these criteria will help you to achieve your goals. The closer you set your sign to the center of the disk, the more helpful you feel the criterion is for you.

	Please mark with
My own facility alone will help me to address these goals.	M
The atmosphere of the class alone will help me to address these goals.	A
The teacher's input in the class alone will help me to address these goals.	T
The combination of my own facility and the atmosphere of the class will help me to address these goals.	MA
The combination of my own facility and the teacher's input will help me to address these goals.	MT
The combination of the teacher's input and the atmosphere of the class will help me to address these goals.	TA



How to assemble your code:

First letter of the first name of your mother: (i.e. "M" for Michaela)
Second to last letter of the first name of you father: (i.e. "A" for Stefan)
Day of your birthday: (i.e. "07" for 7th of June)
First letter of your hometown: (i.e. "D" for Dresden)

In case an "Umlaut" (Ä, Ö, Ü) is asked in one of the following questions, please enter the appropriate vowel (A, O, U); example: Ä → A.

Phase 4: Student Centered, Self-Organized Learning

Dear Students,

March 24, 2015

Now at the end of the 4th phase of the case study in *somatically orientated teaching and learning in dance*, we kindly ask you to complete the following questionnaire by marking the appropriate SMILEYs and adding, if you wish, your own COMMENTARY in the boxes below.

CODE

First letter of the first name of your mother: _____ (i.e. "M" for Michaela)

Second to last letter of the first name of you father: _____ (i.e. "A" for Stefan)

I participated fully in _____ of the 10 sessions.

I participated partially in _____ of the 10 sessions.



I agree fully.....not at all.

1. SMALL GROUP WORK

Overall, working together in my small group with the material...

- helped me to learn the material more fully.	   
- offered me the possibility to express my own ideas.	   
- was enriching through the exchange with others.	   
- inspired me to try out the ideas of others.	   
- created a productive atmosphere.	   
- created an atmosphere of trust and acceptance.	   

The work in the small group supported my understanding of:

- Fluid coordination	   
- Phrasing	   

The work in the small group supported my ability to apply these qualities in practice:

- Fluid coordination	   
- Phrasing	   

- The work in the small group helped me improve performance skills dancing the material.	   
--	--

Commentary relating to the category of questions above:

2. DIGITAL FEEDBACK

I used the video material as a tool to give feedback to myself.	   
Using the video supported my self-reflective and physical processes.	   
Sharing the video with others invited discussion.	   

Commentary relating to the category of questions above:

3. TEACHING FORMAT

The non-changing format of the warm-up gave me the space to tune into myself.	   
The teachers' way of "mentoring" during the phase in small groups was helpful for me.	   

The sharing, dancing and observing, with the whole group at the end of the class was for me:

- satisfying	   
- irritating	   
- important	   
- helpful	   
- scary	   
- enjoyable	   
The format of these sessions encouraged me to explore different approaches in:	
- Learning given material,	   
- Interpreting and performing given material.	   

Commentary relating to the category of questions above:

4. SPACE AND TIME FACTORS

The division of time between warming-up, learning and reviewing the material, working in the small group and sharing with others was appropriate.	
I would have preferred to have more time for:	
- warming-up	
- working on the phrase material altogether	
- working on the phrase material in my small group	
- sharing the dance with everyone.	
The amount of space in the studio for working in my small group was sufficient.	

Commentary relating to the category of questions above:

5. LAST BUT NOT LEAST

Could you make connections between the movement themes in this phase with movement themes introduced to you during other phases of the case study?

Do you have any issues that you think should have been addressed more intensively during this phase?

Can you express which format(s) for the final phase of this study you think would best support your own artistic development? Hint: Consider the teaching/learning formats you experienced thus far this academic year.

We thank you for your participation!

Phase 5

Dear Students!

June 2015

The following questions aim at understanding how you perceive yourself, both in the context of your dance program, and in a more general way. We wish to learn how you feel about your dance practice, which learning strategies and tools you use to support your understanding, and how you deal with difficulties that arise.

Please provide an answer for every statement as best as you can. There are no “right” or “wrong” answers, nor “good” or “bad” responses. This is about your personal point of view. Thank you for your participation!

CODE

First letter of the first name of your mother: _____ (i.e. “M” for Michaela)

Second to last letter of the first name of you father: _____ (i.e. “A” for Stefan)

Day of your birthday: _____ (i.e. “07” for 7th of June)

The questions below address your general experience of **mindfulness**, awareness and being in the present moment.

	Rarely	Occasionally	Fairly often	Almost always
I am open to the experience of the present moment.	①	②	③	④
I sense my body, whether eating, cooking, cleaning or talking.	①	②	③	④
When I notice an absence of mind, I gently return to the experience of the here and now.	①	②	③	④
I am able to appreciate myself.	①	②	③	④
I pay attention to what's behind my actions.	①	②	③	④
I see my mistakes and difficulties without judging them.	①	②	③	④
I feel connected to my experience in the here-and-now.	①	②	③	④
I accept unpleasant experiences.	①	②	③	④

I am friendly to myself when things go wrong.	①	②	③	④
I watch my feelings without getting lost in them.	①	②	③	④
In difficult situations, I can pause without immediately reacting.	①	②	③	④
I experience moments of inner peace and ease, even when things get hectic and stressful.	①	②	③	④
I am impatient with myself and with others.	①	②	③	④
I am able to smile when I notice how I sometimes make life difficult.	①	②	③	④

In the following, you see statements about learning strategies you can use when you are studying dance, independent of specific styles. Please consider how often you use these strategies during your **general dance practice**.

	not at all true of me	a little bit true of me	moderately true of me	true of me	very true of me
When I study dance, I memorize what I need to learn by practicing the steps over and over again.	①	②	③	④	⑤
I study dance by thinking over the movement concepts.	①	②	③	④	⑤
When I encounter complex movement material, I make decisions about which parts of it I want work on first.	①	②	③	④	⑤
When I learn complex movement material, I translate the underlying movement concepts into my own words.	①	②	③	④	⑤
When practicing dance, I try to determine how well I have learned the topics that I need to know.	①	②	③	④	⑤
If the information given to me concerning my dance practice is difficult to learn, I slow down and take more time.	①	②	③	④	⑤
If I don't understand the given information concerning my dance practice I ask my teacher for help.	①	②	③	④	⑤
When I study dance, I memorize what I need to learn by thinking over the movement concepts.	①	②	③	④	⑤
By practicing the steps over and over again, I can memorize them.	①	②	③	④	⑤

When studying in dance class, I try to connect new input to what I already know.	①	②	③	④	⑤
I study complex movement material by giving myself mental cues in order to help me organize what I need to learn.	①	②	③	④	⑤
I study dance by practicing the steps in order to memorize them.	①	②	③	④	⑤
If I don't understand the given information concerning my dance practice I look for support through media like videos, Youtube and books.	①	②	③	④	⑤
I make connections between how I solve one challenge with the way I could solve other challenges.	①	②	③	④	⑤
When I'm learning new topics, I test myself to see whether I have understood the subject matter.	①	②	③	④	⑤
If the given information concerning my dance practice is confusing for me, I go back and try to figure it out.	①	②	③	④	⑤
If I don't understand the given information concerning my dance practice I ask other students for help.	①	②	③	④	⑤
When I encounter complex movement material, I use strategies to break it down into smaller components to understand it better.	①	②	③	④	⑤
I connect what I learn in one dance class to what I am learning in other classes.	①	②	③	④	⑤
When I study new topics in dance class, I ask myself questions to make sure I know what I have been learning.	①	②	③	④	⑤
If I think I don't know the given information concerning my dance practice well enough, I make sure I learn it before going onto the next step.	①	②	③	④	⑤
When I study complex movement material, I try to help myself by recognizing the underlying movement concepts behind the steps.	①	②	③	④	⑤
When I study dance, I mentally review the movement concepts in order to memorize them.	①	②	③	④	⑤
When practicing dance, I check whether I can deal with the topics that I'm learning.	①	②	③	④	⑤
If I'm having trouble solving difficulties in my dance practice, I try other ways to solve them.	①	②	③	④	⑤
If I don't understand the given information concerning my dance practice I ask for help to better understand the movement concepts.	①	②	③	④	⑤

The following statements concern your experiences in your **contemporary dance program**. Please estimate to what extent you agree with these statements.

	totally disagree	agree a little bit	moderately agree	strongly agree	very strongly agree
In my contemporary dance program, I feel very strongly that the way I dance fits perfectly the way I prefer to dance.	①	②	③	④	⑤
I feel that I execute very effectively the required exercises of my contemporary training program.	①	②	③	④	⑤
In contemporary dance class, I feel that I associate with my fellow students in a very friendly way.	①	②	③	④	⑤
In my contemporary dance program, I feel I have been making a huge progress with respect to the end result I am pursuing.	①	②	③	④	⑤
In my contemporary dance program, I feel that the way I dance is definitely an expression of myself.	①	②	③	④	⑤
In my contemporary dance program, I feel very much at ease with my fellow students.	①	②	③	④	⑤
Dancing in the style of contemporary dance I feel very competent.	①	②	③	④	⑤
In contemporary dance class, I feel there are open channels of communication with my fellow students.	①	②	③	④	⑤
In my contemporary dance program, I feel very strongly that I have the opportunity to make choices with respect to the way I dance.	①	②	③	④	⑤
In contemporary dance class, I feel extremely comfortable with my fellow students.	①	②	③	④	⑤
I feel that I can manage the requirements of the contemporary dance program in which I am involved.	①	②	③	④	⑤
The contemporary dance program I follow is highly compatible with my choices and interests.	①	②	③	④	⑤

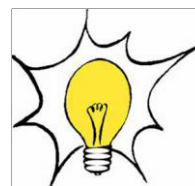
For the end evaluation, the students toured through a parcours of five posters representing the five phases of the case study. On each of the five posters were the symbols pictured below. They were asked to recall their reflections, remembrances, and reactions to the different phases of the study by notations on post-it slips. This was the only opportunity for students to reflect and write about the entirety of the study in one session. After the note posting was complete, a group discussion followed in which students expanded upon their written responses. This interview has been, like all others previously, transcribed.



This really caught me



This was difficult for me



This clicked for me



I'm glad to have learned this



This weighs on me



These instruments were constructed by Jenny Coogan with the support of InnoLernenTanz team members, Dr. Susanne Narciss, Karin Matko, Anja Balzar, and Nina Hänel. The phase 5 mindfulness questionnaire was adapted from the Freiburg Mindfulness Inventory Questionnaire (Walach et al. 2006).