Performative Pedagogy and Choreography for the Classroom A Cognitive Perspective¹

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Dance and Performing Arts, do they really have something in common with Pedagogy?

Choreographers and teachers, are they two different species of story-tellers?

This article helps address these questions by drawing a link between disciplines and by finding a shared space in the learning process. The way we learn functions as a common dividend for these subjects that seem so far away from one another. Yet, ancient philosophers knew about the profound connection between choreography and teaching, between performance and learning, between body movement, learning and creativity. The word *choreography* itself is the result of the combination of the Greek words $\chi o \rho \epsilon i \alpha$ (dance) and $\gamma \rho \alpha \varphi \dot{\eta}$ (writing) to indicate the act of writing dance movements on paper to teach it to learners at a later moment. Ancient Greek teachers were also *performers*, enacting teaching through *choreographic strategies* that enabled the transmission and memorization of knowledge. This article proposes a discussion of choreographic strategies and performative techniques used nowadays in the contexts of Drama in Education² to foster learning.

1. FORMS OF CHOREOGRAPHY IN THE CLASSROOM

Teachers and instructors of all subjects, from Dance to Mathematics, from Theatre Studies to Foreign Languages, usually enter the classroom with a "mental" lesson plan in mind. This abstract lesson plan might take the form of a series of items to remember, visible only to the mind's eye, or it might become a physically concrete form by writing it down on pa-

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² *Drama in Education* refers to the field that studies the impact of drama and performing arts on education. It also refers to the body of techniques and teaching methodologies based on performative activities. Sometimes it is referred to as *Drama Teaching*, or *Educational Drama*.

per, on the board at the beginning or during the class. A lesson plan can be shared with students by use of sketches, drawings or written handouts, through a visual means like a power point presentation, or video material, thus exploiting contemporary technology. Sometimes teachers do not prepare an outline to follow, but simply have a general idea of the content that they will develop later in the classroom with the participation of their students, clearing space for improvisation. At other times, teachers will exploit choreographic strategies for their students to experience a performative perspective of learning.

Regardless if the lesson plan is visible to the class or only in the teacher's mind, as soon as a teacher enters the classroom space, her performance will begin. Involuntarily or voluntarily, her presence will be like a dancer's or actor's performance on stage.

The assumption that underlies the work in this article is that a teacher's lesson is a teacher's *performance*, and therefore, choreographic strategies can be applied in class for communication and teaching purposes, as in dance and theatre. In the following paragraphs we will explore three forms of choreographic strategies in the classroom: abstract, embodied and performative.

1.1 A COGNITIVE FORM OF CHOREOGRAPHY: THE ABSTRACT LESSON PLAN

By reflecting on the process that underlies the creation of a lesson in all disciplines, we recognize that the first form of planning occurs inside our head before entering the classroom, and that later it materializes between the coordinates of the time and space of a *lesson*, a word that is used in this context to refer to the teaching and learning activities that take place in a scholastic environment in a given period of time.

At this phase of the lesson creation, the process is abstract and happens in our mind under the form of thoughts, or chains of thoughts. Although an investigation on the nature of thought is not the topic of this article, we need to mention the fact that it is not limited to linguistic thinking (thinking in words), but it also involves the creation of vivid visual thoughts like images, and the imagination of movement. Our mind is also capable of thinking in terms of taste and sound, or by combining all the above mentioned multi-sensory features, which are somehow connected to memories and to perception without being memories or perceptions, but emerging as the new product of cognitive creative processes (Irish, 2017). What we are describing is an abstract act of imagination and creativity. We need a form of structure to be able to communicate meaning, and the structure that develops in our mind and that we are focusing on here, the lesson plan, acts like a choreography guiding the teacher along the path of her lesson, by setting boundaries about both the content and the methodology that will be used, and by providing the setting and timeframe for what we will call a *teacher's performance*.

1.2 AN EMBODIED (INVOLUNTARY) FORM OF CHOREOGRAPHY:

A TEACHER'S PRESENCE IN THE CLASSROOM

The act of teaching, or a teacher's performance, is the process through which we give form to thoughts that will pass from one person to another through channels like voice and sound, movement, tension, use of space and use of the body (Rivoltella, 2012): thoughts become embodied. With respect to this, teaching is not different from acting. Actually, teachers and students interact with each other both as spectators and actors; both use space and their bodies to communicate not only content, but also states of mind and emotions. These aspects of teaching and learning are often taken for granted if teachers have not been previously trained. Most teachers, for example in the humanities, are still instructed on how to prepare the content of their lesson, on how to use technology in the classroom, but seldom will they receive teacher training about how to deliver their message in a dramatic way, that is, by applying performative techniques. They lack awareness about their body language, about their movements, and forget that merely their presence in the classroom is already communicating—without words—and creating a form of text similar to texts created on the stage. Failing to acknowledge the space we are occupying, our body language and gesture or our facial expression, is missing the opportunity to communicate at a level that is immediate and does not require verbal explanation or thinking. Every human being has the potential for that direct experience, because our brain is wired to understand situations and to evaluate the environment to sort out potential dangerous situations and be able to quickly respond to them. We try to continuously make sense of the world around us (Eagleman, 2016): we

use vision, body language, movement and emotional states to do so, before we engage in cognitive activities (Kandel *et all*, 2013).

When a teacher enters a classroom and chooses to sit down behind her desk, opens her books, calls students to distribute educational materials, writes on the board and speaks for one hour, it might seem that she is just teaching, but in reality she is already performing in a shared space that becomes a stage, although she might not be aware of the process.

On the other hand, students are always very attentive to this part of the lesson: it is of vital importance to them to be able to read the teacher's intentions before she utters any word about it. Her actions do not go unnoticed, as the students, her audience, are already trying to interpret her presence. The teacher's sequence of movements in the classroom is a form of involuntary choreography: unconsciously, her presence reveals her emotions, her state of mind and her intentions. There is no need for linguistic communication, because our body is already expressing meaning. It might be unknown to the teacher, but students learn to recognize and understand these behaviors so well that it often becomes the object of discussion among them. Surely, every one remembers how we used to imitate a professor's typical behavior during our school years. That is the embodied message we all express involuntarily. The next question is what happens in the classroom when the teacher is aware of the impact of her presence, exploits this knowledge and when she uses choreographic strategies to teach.

1.3 PERFORMATIVE CHOREOGRAPHY FOR DIDACTICS:

A TEACHER'S ARTISTRY

Let's imagine we are the external observers of a lesson at a high school: for this example I will describe the typical classroom arrangement of Italian high schools, where students usually wait for their teachers in the classroom and normally do not move from one classroom to another to follow different lessons. So let's pretend to be a camera recording the activities that take place in our typical high school classroom before and during a class. We arrive in the classroom before it starts and notice the confusion of teenager students talking to each other, sitting on the benches, standing near the windows looking outside or checking their electronic devices. Others are leaning on the walls while some wait just outside the door. As soon as the teacher emerges from the hallway, the students waiting outside the classroom run inside to notify everyone that "she's coming!". When the teacher enters the room, some students will be in front of their desks, while others will still be busy carrying on their previous activities. After greetings, students usually sit down, get ready to take notes and open their books. All the background talking gradually fades out and silence allows the teacher to get started with her lesson.

These fortunate teaching conditions are rarely the norm: such a scene would be the dream of most teachers, who instead experience very complex group dynamics which are age related. In the case of the class we described, the use of space becomes a form of communication that a teacher must be able to read and to exploit in order to deliver messages. As most instructors learn in their teaching career, the act of teaching is indeed an act of *performance* where many communication levels are used and different texts available for interpretation are created. A teacher who is aware of her body language will use it to communicate meanings. For example, in the case of the class described before, when students are not willing to cooperate with the teacher to get the lesson started, when they refuse to use their space in a way that allow communication and interfere with the implementation of teaching activities, they are also performing their *Weltanschaung* (or how they see the world): in this case expressing a lack of engagement. Reproachful remarks or words do not have any effect.

Instead, when a teacher takes charge of her performative and artistic presence, all variables change. For example: sitting and looking at the action in the classroom; standing in silence with a calm attitude that expects cooperation usually attracts the students' attention. Her mere presence is communicating, using space in a meaningful way, acknowledging *her* presence and the *students' presence*. This act of *being present* reminds us of Marina Abramović's artistic performances,³ where the artist is being present for her audience without doing anything else. In this case *the teacher is present* and she is performing like an artist. It is interesting to notice how this artistic aspect of teaching is deeply embedded in the education community of some countries like Australia, among others, where teaching is often called *teacher's artistry* (Dunn and Stinson, 2011), thus convey-

³ Marina Abramović is known for her dramatic performances. *The Artist is Present* was a performance that took place at MoMA in New York in March 2010. The artist sat at a chair for a total of 736 hours opposite to more than 1500 people who came to sit in front of her.

ing the idea of a teacher's artistic competence in the classroom. In the example described before, the teacher's presence becomes performative and evokes an engagement reaction (Dunn and Stinson, 2011) from all parties involved, *spectatorship* and *actorship* alike. Piazzoli (2011, 447), quoting Kress (2009), describes *learning engagement* as semiotic and conceptual, but also defines it as communicative, intercultural, affective, dramatic and aesthetic. The same qualities can be applied to engagement in dance and theatrical performances. As in the performing arts, eliciting different levels of engagement is fundamental for effective teaching practices that foster learning. Hence, performative techniques can be utilized not only to improve group dynamic issues, but also to implement learning activities. Before providing specific examples of performative techniques that can be used in the classroom environment, we will address the question of why choreographic strategies play a major role in the learning process by exploring the key factors involved in performative learning.

2. TEACHING, LEARNING AND PERFORMING IS MEDIATED BY THE BODY

Although comparing dance to teaching might seem a conceptually difficult task at first, when we explore how learning occurs, it becomes clear why choreographic strategies improve learning engagement. Cognitive neuroscientists have recently expanded our understanding about creative learning, reconsidering the Aristotelian idea that human beings by nature are motivated to "stretch themselves out toward knowing" (Aristotel ed. and trans. in Ross, 1928) and that to do so we rely on all senses, although we generally tend to forget the key role that the body plays in how we make sense of our own bodies and of the world around us (Heath and Gilbert, 2015).

2.1 MULTI-SENSORY, EMBODIED LEARNING

In the Dana Consortium Report on Arts and Cognition, Gazzaniga (2008) points out how the body allows for the experience of action and movement, how mechanisms needed for action overlap with cognitive ones, and "how the performance and appreciation of the arts enlarge cognitive capacities." In particular, he illustrates the results of research conducted so far on dance and cognition: "Our research indicates that dance training can enable students to become highly successful observers.

We found that learning to dance by watching alone can be highly successful and that the success is sustained at the neural level by a strong overlap between brain areas that are used for observing actions and also for making actual movements. These shared neural substrates are critical for organizing complex actions into sequential structure" (Dana Foundation, 2008, vii).

This suggests that learning occurs in multimodal ways. Knowledge undergoes continuous restructuring and relies not only on linguistic and auditory channels as we would be prone to think when considering teaching in a traditional classroom environment, but also on observation of behaviors, gestures, and structured movements. The brain responds to the physical engagement of the body as it translates symbolic systems into actions or as it interprets symbolic, structured sequences of movements, like in dance or dramatic action.

2.2 ENGAGEMENT OF THE BODY SUSTAINS MOTIVATION AND ATTENTION

For a new memory to be formed, that is, for new learning to occur, attention and engagement levels must be sustained not only for the duration of a lesson, but also for extensive periods of time. Posner (2008) developed a theory about how arts training influences cognition. He reports that although there are specific brain circuitries for different art forms, there is a general factor of interest or openness to the arts and that children with great interest in the arts, and who also train in those arts, develop high motivation. Motivation is essential to sustain attention levels, which in turn allows for information to be retained, processed, constructed and restructured in the brain (Morosin, 2008). Sustained motivation, while engaging in conflict-related tasks, especially improves cognition (Posner, 2008). Dramatic re-enactment and dance choreography activities allow students to develop an increased sense of concentration and purpose. Heath and Gilbert (2015, 401) define the relationship between engagement of the body in learning through artistic training as a "practice vital to improving [the students'] visual and auditory acuity and discernment of multi-layered details even in the midst of chaos, noise, and confusion. Such acuity in young learners shows up as an ability to focus—to be attentive and alert."

2.3 AESTHETIC ENGAGEMENT TRIGGERS EMOTIONS THAT FOSTER

LEARNING AND CREATIVITY

Engaging the body in performative learning activities causes the brain to activate regions dedicated to movement which are linked both to language processing and to emotions.⁴ This happens because, when we engage in movement to express meaning and emotions, the sequence of actions becomes a new narrative and is no longer a mere sequence of separate units: it has additional meaning. For example, walking for the sole purpose of walking, activates the motor systems in the brain; but walking cautiously during a performance or dance to express fear of the unknown and unexpected, also triggers an emotional response. Affective neuroscience shows that emotions are fundamental for learning and for long-term memory (Immordino-Yang, 2011; Morosin, 2006). Another aspect of choreographic strategies that increases aesthetic engagement in learners is dramatic tension. Both in dance and in drama, dramatic tension acts like a switch, or, borrowing Rothfield and DeFrantz's (2016) imagery and words, it functions like a *relay in motion* that alternates between problem posing and problem solving, between conflicts and possible solutions. It is challenging for the students' communicative motivation because it integrates elements of theatrical action like interpersonal tension, mystery, dilemma, surprise, task and *metaxis⁵* (Piazzoli, 2011, 443). Aesthetic engagement also results from the awareness of being part of the artistic process. When students approach a topic of study or research through performative tasks, pleasurable emotions arise from the experience of perceiving and creating a new artistic form. The perception of inclusion in the teaching and learning process typical of performative lesson plans also boosts motivation to find more artistic and creative solutions.

3. CHOREOGRAPHY AND DIDACTICS

As illustrated in the previous paragraphs, introducing choreographic strategies in the lesson plan fosters the learning process by adding means of perception and representation of knowledge, by involving the aesthetics

⁴ These regions of the brain dedicated to motor skills are linked to the limbic area, which elaborates emotions, and to language areas in the frontal cortex.

⁵ *Metaxis* refers to dramatic tension in pedagogy that arises from the difference between a role that we play and our identity.

and appraisal system of emotions and by sustaining motivation, attention and, ultimately, learning engagement. At this point, what we initially called *a teacher's performance*, shifts from being the experience of one individual—the teacher—to including all participants—the students. For decades, studies on teaching methodology have focused on a student-centered idea of lesson, prioritizing the student's needs, considering all factors that contribute to the learner's success, with the teacher's part relegated to a minor role. Although this is still intrinsically fruitful and it has produced a great amount of research on student-centered didactics, a more constructive view of learning is needed that considers all the parties involved, namely, learners, teachers and the class as a group. A learning group working as a new entity with its own identity, its own consciousness that results from the interaction and communication in the class. This concept goes beyond the notion of *cooperative learning*, where the cooperation between students is task-based and has the ultimate goal to work together in constructive ways to create new learning. In what we will now define as the *class performance*, the ultimate goal is to *experience learning* based on the common creation of a new *narrative* which is transformative for the students at many levels. In this case the *narrative* is the performative art form that students create together with the teacher by applying forms of composition and of meaning-making which are not only based on traditional linguistic competences like writing, speaking, reading and understanding, but which also involve embodied, aesthetic and kinesthetic learning. For this purpose, dance and drama choreography become a valuable tool to structure new forms of narratives based on performance.

3.1 CHOREOGRAPHY AS THE STRUCTURE FOR NEW NARRATIVES

In dance for didactic purposes, methods of composition and choreography represent the embodied equivalent of text creation: we do not write compositions, we experience them with the body. Elements of communication become visible to learners and ingrained in their memory because they experience these concepts with the senses, which, instead, would remain mostly abstract if learnt only from a linguistic explanation. A dance choreography can teach about pace, rhythm, tension, suspense, and the syntax of meaning-making (Burrows, 2010; Lavender, 2009; Smith-Autard, 2010).

From this perspective, dance choreography becomes a visual narrative that every human being can interpret. In fact, everyone has the potential to experience and to understand it. In this regard, dance can become a relevant tool for inclusive education in contexts of special education needs. Furthermore, practical and theoretical work on choreography and composition encourage the learners to explore discussion and reflection on creative work, communication and semantics, thus promoting the development of metacognitive competence.

Educational drama teaching techniques also rely on choreographic strategies to allow students to construct experiential learning processes. For example, in *process dramav6* a lesson might start with the process of *acknowledging space and the body in space*: features of the classroom like light and shadow; places that students individually like or do not like; places that remind them of certain emotions, places that are neutral; sounds in the classrooms and sounds coming from outside; the space that the body occupies, how much it can extend. This helps with identifying aspects of learning, like *presence*, that are usually ignored, but that, by acknowledging the physical processes connected to it, can help direct focus and attention. The next paragraphs will survey specific examples of choreographic strategies for pedagogy.



Image 1: Acknowledging space. Students positioned the chairs in the space to represent the story they are working on. After that, in groups, they are representing it on paper. Photo: ©Maria Simona Morosin.

⁶ *Process drama* is an artistic form of theatrical techniques used in education, where students and teacher in role work together. As the name itself conveys, the aim of this performative teaching and learning methodology is not a performance, but the process itself, a participatory form of storytelling that includes moments of reflection on the story, on the action, on the subject being taught. It is based especially on the work of Dorothy Heathcote.

3.2 CHOREOGRAPHY FOR EXPRESSION OF COGNITIVE PROCESSES AND METACOGNITION

Discovering and exploring meaning through the senses entails that visual and kinesthetic information is added to auditory input resulting in improved linguistic ability: when we engage in non-verbal communication, we also become better at communication through language. Embodied learning triggers the development of reflection and metacognition, which also need language to be expressed. In this process of discovery, metacognition encourages the ability to ask questions and promotes novel curiosity to find answers, solutions and possibilities. With choreography, learners can enact and represent their thinking processes. They become able to transform content and meaning not only into language, but also in association with forms like musical, visual, dramatic and dance compositions. The following technique could be used in intermediateadvanced Italian language and culture classes: the Conscience Alley. In this choreographic strategy learners divide into two groups and form two lines facing each other and leaving enough space between them so that a student, who takes the role of a character in a story, can walk through. The character is living a conflict situation, is indecisive about what course of action to take, so she walks through this imaginary space where she can hear the voice of her conscience. Taking turns, all the other students, from one line or from the other, offer advice which is usually contrasting. When the character reaches the end of this tunnel that represents the cognitive process of reflection and decision making, she will have made up her mind and will decide on the course of action to take. This strategy allows all the students to actively participate in the analysis of a story, in the metacognitive process of thinking and making decisions. Not only are they expressing possibilities in words in a meaningful way, they are also enacting the process.



Image 2: The conscience alley: what will the character do? Photo: ©Maria Simona Morosin.

3.3 CHOREOGRAPHY FOR EXPRESSION OF LINGUISTIC

AND NUMERAL LITERACY

I have used choreography to teach linguistic literacy in foreign language classes of English, Italian and German. Impersonating particular aspects of the alphabet, or giving voice to the parts of speech is a performative technique to approach linguistic content through the senses without relying only on written and auditory input. Visualizing and enacting phonetic, morphological and syntactic aspects of a foreign language can help discriminate between different structures in the native and in the target language. The same principle applies to numeracy: Mathematical concepts can be visualized and performed adding clarity to procedural memory (how we do things). An example we want to describe is the *TeKaMoLo Dance* in the context of a lesson of German to Italian adolescents. Although the name is reminiscent of a possible tropical dance, the word *TeKaMoLo* is known to students of German as one of the rules of sentence composition: complements in the sentence must follow the order that the word suggests: temporal, causal, modal and local. Students, working in groups of four, have one week to meet and create a choreography to explain this rule and compare it to Italian sentence composition. They are free to use digital technology to present their work or they can perform in class. Creating music to support their project and adding visual material also fosters memorization. These projects usually turn out to be enjoyable by teenagers, who feel they are in charge of the creative process and who report understanding and memorizing the structure of the two languages better.

3.4 CHOREOGRAPHY FOR EXPRESSION OF EMOTIONS, EMPATHY AND COOPERATION

Emotions are processed in the brain in a very direct and fast way, that is, they develop without cognitive processing: it takes very little time to blush, to feel butterflies in the stomach, to frown or to jump from fear because something scared us suddenly. We do not engage in thinking whether we should blush or not. Non-verbal communication functions in almost the same way: Often, we use our body and actions to express ideas before we are able to express them with words, or in those instances when, even if we know what to say and what we are feeling, words are not enough to describe our experience. Especially with children, when trauma occurred, emotions can be overwhelming and almost impossible to communicate. Choreographic strategies help process and communicate those emotions by letting children experiment with possibilities.

Enactment also helps the learning process. As in the previous example of the teacher's standing silently in the classroom and being present, this form of non-verbal communication is direct and fundamental to human learning. By just seeing first, by observing the scene and then by acknowledging the teacher's presence, students are already learning because they are challenged and motivated to find out what the teacher is doing, what her intentions are. By reading her natural facial expressions or her enactment of emotions (for example when she is reading a poem), students become aware and develop ways to recognize and manage different emotional states, from anger to empathy. Performance does not entail using movement every time. Like sculptures, we can embody experiences and communicate their emotional power through silent, still performances, where the body freezes into a shape or ceases to move for a while: it might be for some minutes, or longer, like some performers do. In a pedagogical context, this technique is useful to reflect on the content of a story, as well as to tell a story through live images. A Freeze Frame is a choreographic strategy that illustrates how students also learn about cooperation and empathy by performing it. In groups, learners are performing a scene from a story, representing an event or a concept. When the teacher says "Freeze!", students stop and stay still as if they were in a picture frame. While they are in the freeze frame, the other students can reflect upon the thoughts and emotions that the image conveys. They take turns, so that all students enact the story and comment on it. It is interesting for them to see how meaning can be embodied in different ways, and how everybody is capable of expressing meaning. By organizing the space around them, by taking turns, by acknowledging their presence and the presence of the teacher among them, this choreography becomes symbolic for cooperative learning. It also presents the opportunity to experience aesthetic engagement.

3.5 CHOREOGRAPHY FOR EXPRESSION OF CULTURAL AND SOCIAL

AWARENESS

In *process drama*, choreography is used in several instances to facilitate cultural and social awareness. When students engage in performative activities with the purpose of discovering cultural value, new groups dynamics emerge, and, as seen for the previous choreographic strategies, new roles are assigned to the students and to the teacher. Freed from their traditional role of *student* and *teacher*, by taking on other characters' roles, both teachers and learners become part of a new created reality that brings them to reflect on social and cultural issues from different perspectives, to discover universality in human behavior and emotion, and to acknowledge the sense of community and contribution of its members. In the case of the *Mantle of the Expert* (Heathcote and Bolton, 1994), a dramatic convention in *process drama*, the students become a team of experts who, together with the teacher who also has a new role, help in analyzing the situation, finding

solutions to the conflictual issues they are presented with. As the story unfolds, many live choreographies are created by organizing the classroom space according to how the story progresses, by interpreting collective roles, by using different voices which are also physically represented with a combination of the techniques outlined in the previous paragraphs. It is important to emphasize how choreographic strategies alter the perception of traditional roles like that of the teacher, who is assumed to be the absolute leader in the classroom. The teacher in this type of performative pedagogy is still a guide and a facilitator, but, to say it with Foster's words, she becomes a choreographer who is "no longer the visionary originator of a dance, or even its maker or director, [but she becomes] a person who assembled and presided over a collaboration [...], the facilitator of the work being made" (Foster, 2011, 12). Foster's definition of the choreographer already renders the efficacy of the teacher's role in choreographic strategies applied to pedagogy, but Muto (2016) gives an even more in-depth description of the dynamics that emerge during the development of cultural and social awareness through performative choreography, placing the role of the choreographer, which we compare to the role of the teacher in performative contexts, in a new reality called a meshwork. Reporting Ingold (2013), Muto (2016, 36-37) describes choreography through the image of the *meshwork*, as a "living and durational entanglement of lives" and experiences, a "mobile and becoming world": "It is as though my body were formed through knotting together threads of life that run out through my many legs into the web and thence to the wider environment. The world, for me, is not an assemblage of bits and pieces but a tangle of threads and pathways. Let us call it a meshwork [...]".

In this newly created art form, cultural and social awareness emerges from the different perspective adopted, the multiple lines of lives that are crossed: "[...] it is not only the choreographer who lives a line, but multiple lines of lives weave a mesh in which the choreographer participates, bringing about events which have not been expected by anyone involved, not even by the choreographer. The choreographer no longer moulds her/his own work, but rather functions within a relational field. The choreographer is thus no longer transcendent but immanent within this world of relational becoming" (Muto, 2016, 39).

Exploring social and cultural issues by adopting these teaching methodologies opens up a shared learning environment because performative choreographies allow for the formation of this *meshwork* by activating the possibility of learning for all parties involved, including the teacher. Students who take part in performative education usually develop a better ability to deal with problem identification and problem solving (Anderson and Dunn, 2013); they show a greater capacity to assess the possible consequences of different courses of action. They also develop empathy (Kemp, 2012; Piazzoli, 2011; Bernhardt and Singer, 2012), which is fundamental not only in a diversified and inclusive classroom environment, but also a milestone in cultural communication.

4. CONCLUSIONS

In this article, we have tried to describe how training in the performing arts, especially in dance and drama, provides the possibility to discover and explore meaning through the senses. Visual and kinesthetic information is added to verbal and auditory input resulting in improved literacy. Especially the application of choreographic strategies to didactics not only encourages embodied learning, but also strengthens the student's capacity for artistic based learning, and sustains engagement. Through the concrete examples illustrated here, we have described how choreographic strategies can be applied to different didactic environments enriching the experience of learning as well as that of teaching.

By further developing practical and theoretical work on artistic methodologies, theatrical conventions and dance choreography in relation to didactic contexts, we hope to pave the way for an interdisciplinary collaboration that might be able to propose teaching models based on the actual needs of learners, and suited to the fast paced changing realities of our time, which are challenging our current pedagogy to be formative, innovative, creative and engaging.

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