

THEATRE AS A PERFORMATIVE DEVICE AND VIDEO SELF-TAPE: A TECHNOLOGICAL-PEDAGOGICAL TOOL FOR OUTDOOR LEARNING

IL TEATRO COME DISPOSITIVO PERFORMATIVO E VIDEO-SELF TAPE: UNO STRUMENTO TECNOLOGICO-DIDATTICO PER L'APPRENDIMENTO ALL'APERTO



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ABSTRACT

The pilot study explores the pedagogical and transformative potential of theatre in its performative practices, and of video *self-taping* as a tool for professional self-reflection. In the outdoor spaces of the Università Suor Orsola Benincasa, 100 students produced video self-tapes that, through non-linear languages and synesthetic approaches combining music and theatre, generated multisensory learning according to the synecological perspective, understood as an emergent process between the individual, the environment, and technologies.

Lo studio pilota esplora il potenziale pedagogico e trasformativo del teatro nelle sue pratiche performative e del video *self-tape* come strumento di riflessione sul sé professionale. In spazi esterni dell'Università Suor Orsola Benincasa, 100 studenti hanno realizzato video *self-tape* che, attraverso linguaggi non lineari e approcci sinestetici tra musica e teatro, hanno generato un apprendimento multisensoriale secondo la prospettiva sinecologica, come processo emergente tra persona, ambiente e tecnologie.

KEYWORDS

Theatre; Multisensory outdoor learning;
Performative practices; Video *self-tape*

Teatro; Apprendimento multisensoriale all'aperto;
Pratiche performative; Video *self-tape*

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Introduction

The connection between theatre and education, while rooted in a well-established tradition of practices and theoretical reflections (Massa, 2001; Oliva, 2013), today requires reconsideration in light of contemporary global challenges, marked by processes of social acceleration (Rosa, 2015), digital transformations (Pancioli & Rivoltella, 2023), increasing inequalities, and environmental urgencies (Louv, 2016; Hughes et al., 2021). Within this scenario, theatre represents a space of reflective and transformative experience in which the individual engages corporeally, emotionally, and relationally (Carlomagno, 2020), since there exists an implicit educational intention, latent in all theatrical experiences (Massa, 2001).

This contribution aims to investigate, within a natural context, the pedagogical and transformative value of theatrical practices, with particular attention to the educational role of the video *self-tape* as a performative, reflective, and ecological tool. Such a tool can foster bodily and emotional awareness while also developing verbal, non-verbal, and paraverbal communication skills in the initial training of future teachers.

The article presents the results of an exploratory pilot study conducted in the gardens of Suor Orsola Benincasa University of Naples, where students directly and concretely engaged with outdoor spaces through sensory and physical involvement, supported by expressive freedom (Farnè, 2018). The study was carried out within the framework of the *Laboratorio di Drammaturgia Didattica Performativa*, involving one hundred students enrolled in the Primary Education degree program.

This experience is grounded in a theoretical framework that integrates the enactive approach (Varela, Thompson, & Rosch, 2017), Embodied Cognition (Maturana & Varela, 2012), outdoor education, and pedagogical reflection on theatrical practices (Carlomagno, 2022), understood as spaces for metacognition (Schön, 1993), care and self-exploration (Mortari, 2006; De Marinis, 2020), and transformative learning (Boal, 2009; Mezirow, 2003; Fabbri, 2021). In line with Augusto Boal's assertion that *we are theatre* (Boal, 2009), the workshop carried out in the university's outdoor spaces sought to promote students' awareness of their corporeal and expressive actions through the use of the *self-tape* as a performative *mirror* (Del Villano, 2012), capable of audiovisually reflecting the lived experience of body, space, and time.

The process of creating the video *self-tape* does not, therefore, constitute a mere technical activity, but rather an opportunity for decentering, thematization, and re-

elaboration of the educational experience, within a framework that can be interpreted from a synechological perspective (Paparella, 2023), attentive to the dynamic and co-evolutionary relationships among subject, context, and environment (Frauenfelder, 2018).

Accordingly, this contribution seeks to analyze the use of video *self-tape* in natural environments as a technological tool for reflecting on the professional self. The aim is to document its effectiveness in the training of future teachers and to offer a pedagogical reflection on the role of theatre as an educational language and device capable of fostering personal growth, self-awareness, and strengthening the sense of ecological connection and environmental responsibility. Such an approach contributes to the construction of inclusive and sustainable learning environments, in line with the principles of the United Nations' 2030 Agenda.

1. Theoretical Framework: The Role of Theatre in Teacher Education Between Nature and Technology

Theatre, understood as a performative and pedagogical device, represents an art form capable of integrating non-linear (Sibilio, 2012; Carlomagno, 2023), narrative (Bruner, 1990), corporeal (Sibilio, 2011), relational (Gallese & Morelli, 2024), expressive and emotional languages (Matteucci, 2019), thus generating meaningful learning contexts (Ausubel, 2004).

In recent decades, pedagogical research has highlighted the value of theatrical practices in the holistic formation of the individual, particularly in teacher education and inclusive pedagogy (Costantino, 2019; Oliva, 2013; Carlomagno, 2023). Theatre, as a symbolic and corporeal space that enables individuals to experience themselves, can be conceived as a reflective and transformative dimension in which the implicitly educational nature of every theatrical practice emerges (Massa, 2001). In this sense, theatre does not merely transmit content, but configures a field of experience in which one can encounter and recognize one's lived experience and construct meanings from it (Ausubel, 2004). Theatre is *the art of seeing ourselves, of seeing, while seeing ourselves* (Santos, 2018), within one's natural environment, positioning itself as a dynamic mirror (Del Villano, 2012) in which subjectivities are recognized and rewritten.

The human being is theatre (Boal, 2009), every social relationship, every communicative act involves staging, a choice of posture, tone, and gesture. From

this perspective, educating through theatre also means educating towards greater awareness of everyday actions and the possibility of transforming them through creativity, reflection, and empathy.

This view resonates with the most recent theories of embodied cognition (Maturana & Varela, 1991; Damasio, 1999; Gallese, 2014), which interpret learning as an embodied, situated, and multisensory process in which body and emotions play a constitutive role in meaning-making. Within this framework, the enactive paradigm (Varela, Thompson & Rosch, 2017) emphasizes that knowledge is not the representation of a pre-given world but emerges from the dynamic and situated interaction between organism and environment. Learning, therefore, means *en-acting* worlds, co-constructing meanings through body, emotions, and context.

Theatrical education applies enactivist principles through the vision of theatre as, by its very nature, embodied action, relation, and co-creation of meaning in the present, recognizing that the construction of a performative act is rooted in the bodily, sensory, and relational experience among actors, spectators, and the scenic context (Carlomagno, 2020).

Educational experiences drawing on theatrical practices, particularly performative practices (Carlomagno, 2013), can thus be understood as interactive, multisensory, and synesthetic modes of learning, capable of activating a plurality of communicative and expressive languages (Carlomagno, 2023) in continuous dialogue with the environment and with others, in which the relational dimension remains central. Knowledge, from this perspective, is neither deposited nor transmitted but takes form through systemic and processual dynamics, as a web of vital interconnections in constant becoming, where each being lives in relation and exchange with its ecological system (Bateson, 2000). Placing performative action at the center of the educational experience thus becomes fundamental for achieving the co-construction of meaning, which is essential for translating experience into knowledge (Chevallard, 1985; Boud & Falchikov, 2007).

The integration of verbal and non-verbal languages, of sound, rhythm, gesture, and space, further allows individuals to explore their perceptual and emotional modalities in relation to themselves, others, and the environment, thereby contributing to the construction of both a personal and professional expressive identity. In this scenario, outdoor education finds its natural function, since it enables openness and distancing from the perceptual and relational constraints typical of indoor settings, fostering greater expressive freedom and reducing forms of inhibition.

Through the act of *crossing boundaries*, that is, rethinking space as a category of mind, emotions, sensations, perceptions, abstractions and simulations, the relationship between self and others, between the inside and outside of the body, between the monumental spaces of education and the theatrical spaces of representation, between the present and simultaneously future of action, is reorganized. Places such as theatres, museums, universities, or schools, when they tell a story, are not passive spaces we occupy; rather, they become embodied in our emotions, materialize our thoughts, provoke questions and sensations, and generate a rich perception, like the image of a story we know we are living, interwoven with stories that we ourselves construct with others through creative and profound narration (Carlomagno, 2023, p.22).

In support of such educational scenarios, an important ecological and enactive practice of learning may be represented by the use of *self-taping*, aimed at promoting metacognitive reflection, insofar as this tool enables individuals to review their actions and develop critical reflection on themselves and their practices. By recording and observing their performative actions, individuals are given the opportunity to distance themselves, to objectify the experience they have lived, and to identify their actions in relation to their personal and professional development.

The use of video *self-taping*, integrated into outdoor learning contexts as a pedagogical tool, acquires particular significance also from a reflective standpoint (Schön, 1993), contributing to a new epistemology of professional and synechological practice (Paparella, 2023), where the interaction between body, environment, and technology becomes an integral part of the educational process. From this perspective, *self-taping* emerges as a reflective and ecological learning practice, capable of combining technological innovation with action in nature. The use of video as a dynamic mirror (Del Villano, 2012) activates forms of embodied reflection that extend into the environmental and natural context in which the action unfolds, reinforcing the connection between technology and outdoor education. This yields an approach in which technology does not replace the teacher's direct experience with the environment but amplifies it, supporting the development of awareness and transversal skills within an ecological and sustainable perspective.

Self-taping, in fact, allows students to reflect on their corporeal and communicative actions and, by making use of open spaces, to activate authentic expressive dynamics. The effectiveness of this tool lies in the possibility for students to

document and subsequently observe their didactic performance, making the learning process tangible and stimulating reflection on their professional self (Boud & Falchikov, 2007).

From an educational perspective, *self-taping*, by fostering reflection on the professional self, makes it possible to explore the pedagogical and transformative potential of performative practices in relation to bodily and emotional awareness and to verbal, non-verbal, and paraverbal communicative aspects. When pedagogically oriented, this tool can therefore be configured as an authentic task (Wiggins, 1990), capable of activating situated and multisensory learning.

2. Methodology

The pilot study was conducted within the *Laboratorio di Drammaturgia Didattica Performativa* at Suor Orsola Benincasa University in Naples, as part of the Primary Education degree program, employing an Art-Based Research methodology.

Qualitative data were collected through multiple sources: responses provided by students to introductory questionnaires administered at the beginning and at the end of the *Laboratorio di Drammaturgia Didattica Performativa*, analysis of reflective journals written by students after each activity, and the content analysis of over 300 video *self-tapes* produced by the students.

The data analysis therefore focused on different communicative aspects, verbal, non-verbal, and paraverbal, which were particularly salient in the creation of the video *self-tapes*.

The methodology adopted for this pilot study emphasized bodily intelligence (Gardner, 1993), restoring a pedagogical centrality to the body that is often marginalized in university teacher education. The *self-tape* was conceived as a performative mirror: a protected space in which students could observe themselves, express themselves spontaneously, recognize their actions, and reflect on their practice, while experimenting with new forms of communication.

3. Research Design

This contribution analyzes an exploratory study conducted in the outdoor spaces of Suor Orsola Benincasa University in Naples with students enrolled in the

Laboratorio di Drammaturgia Didattica Performativa, a training path included in the Primary Education degree program. The laboratory is part of a curricular framework aimed at promoting the development of transversal and metacognitive skills in future teachers through active methodologies and interdisciplinary approaches.

The laboratory, with a total duration of six hours (divided into two sessions of three hours each), involved a total of 100 students, divided into small groups to foster a participatory and reflective workshop environment.

The primary objective was to explore, in the university's outdoor spaces, the pedagogical and transformative potential of performative practices in relation to bodily and emotional awareness and verbal, non-verbal, and paraverbal communicative aspects, through the use of video *self-taping* as a technological tool for reflection on the professional self.

Specifically, the study aimed to promote students' bodily and communicative awareness through theatrical practices carried out in the university gardens and through self-recording video tools, allowing students to observe their own teaching performance and engage in metacognitive reflection on their educational practice. The theatrical practices also facilitated the emergence of transversal skills such as creativity, non-verbal communication, and empathic and relational dynamics, creating an experiential space founded on the suspension of judgment and the possibility of experimenting with non-linear languages (Carlomagno, 2023) and various expressive modalities.

Prior to actively participating in the laboratory experience, students were asked to complete a questionnaire designed to assess the perceived importance of bodily language in their training.

The laboratory activities were conducted in the university's outdoor spaces and divided into three phases, each introduced by a brief theoretical framework on the pedagogical functions of theatre and the embodied approach (Maturana & Varela, 2012), which recognizes the performative role of the body in teaching-learning processes.

In the first phase, students were asked to listen, in the university gardens, to two musical pieces selected based on different parameters of rhythm and emotional intensity, the first slow and relaxing, the second faster and more rhythmic. During listening, participants were invited to move freely in space, following the suggestions of the music and observing which part of the body was most activated in spontaneous expressivity.

Subsequently, each student reflected on which of the two pieces had elicited greater emotional resonance and bodily engagement, selecting the one most representative for the creation of their video self-tape. The task involved self-recording a short expressive performance focused on the most engaged part of the body, integrating elements of non-verbal communication.

The video *self-tape* was conceived as an authentic task (Wiggins, 1990), a complex, situated, and meaningful activity that requires students to activate knowledge and skills in a real or plausible situation. In this sense, the *self-tape* represented not only an artistic performance but, above all, a formative moment of reflection on the professional self.

After producing the video, each student participated in a guided viewing and self-analysis session, during which the main communicative and expressive elements were discussed, including posture, rhythm, spatial use, vocal expression, paraverbal parameters, and the connection between experienced emotion and produced gesture. Interaction with the class group and the instructor enriched individual reflection through collective feedback and shared narratives.

During the laboratory experience, attention focused on the interaction (Sibilio, 2020) between verbal, non-verbal, and paraverbal expressivity, central aspects for effective educational communication. The *self-tape* performance required students to reflect on how the body communicates emotions and intentions, how the voice modulates meaning, and how the scenic space (including the academic outdoor space used for individual recordings) becomes an integral part of the message.

Specifically, five parameters were analyzed:

- Volume:** determined by voice intensity, affecting the perception of confidence and authority;
- Tone:** linked to vocal frequency, expressing emotional states and intentionality;
- Rhythm:** the cadence of the voice influences comprehension and listener engagement;
- Speed:** contributes to message clarity and emotional regulation;
- Voice color:** the timbral quality that suggests empathy or distance.

Awareness of these parameters, which are not always emphasized in training programs, emerged through the guided viewing of students' videos and collective discussion. Students were thus able to become aware of their communicative style,

the importance of paraverbal aspects in identifying areas for improvement, and strategies to enhance their stage and teaching presence (Carlomagno, 2023).

A particularly innovative aspect of the experience was the intentional use of non-linear languages (Carlomagno, 2023) and synesthetic modalities, capable of activating bodily and multisensory understanding of the experience. Synesthesia represents a neuroperceptive phenomenon in which the senses interact, generating profound emotional responses (Ramachandran & Hubbard, 2001).

The three phases of the educational activity were as follows:

-Listening and bodily exploration: students moved freely in the university's outdoor spaces, following the musical suggestions and instructor guidance;

-Selection of the most representative stimulus: each student identified which piece had elicited the most significant bodily expressivity in relation to the music listened to;

-Self-tape production: students recorded, in the university garden, a performance focused on the most engaged part of the body, translating emotion into gesture.

4. Results

The analysis of the data collected during the *Laboratorio di Drammaturgia Didattica Performativa* highlighted significant elements in students' learning processes and perceptual transformations regarding the role of the body in teaching. A total of 327 video *self-tapes* produced by approximately 100 students were analyzed, with an average of three recordings per participant.

In the initial phase, focused on musical listening and the activation of spontaneous bodily movement, a widespread sense of disorientation and performance anxiety emerged. Students reported in their reflective journals a feeling of discomfort associated with self-recording, particularly regarding the exposure of their own body and the management of self-image.

However, during the second session, students showed a progressive increase in confidence in their expressive abilities and a growing internalization of the performative experience.

The selection of musical pieces revealed an almost equal preference between slow rhythms (53%) and faster, rhythmic music (47%), suggesting a variety of individual approaches to bodily and emotional experience. Analysis of the video *self-tapes* showed a predominance of movements concentrated in the upper body, particularly the torso and arms, indicating greater awareness and channeling of emotions in these areas.

From a communicative perspective, qualitative analysis of verbal and paraverbal expressions highlighted a progressive mastery of vocal modulation, clarity of exposition, and intentional use of tone. Seventy-one percent of participants demonstrated significant improvement in critical self-observation and metacognitive re-elaboration of their performative actions.

A particularly notable change emerged when comparing students' responses before and after the laboratory experience. In response to the introductory questionnaire item *How aware are you of your use of body language when you want to communicate something?*, initially 52% indicated never, 17% rarely, 20% often, and only 11% always. At the end of the laboratory, 90% of students reported increased awareness of body language as a communicative tool, recognizing the importance of expressive intentionality even in teaching contexts.

Regarding the question, *What do you think students notice most during a lesson?*, before the laboratory, 61% indicated tone of voice, while only 26% attributed importance to the teacher's body language. After the experience, qualitative data and reflective journal entries showed that students recognized body language as a key element in the educational relationship.

Similarly, for the question, *Do you think teachers, through teaching alone, can become more aware of their use of body language?*, initial responses were distributed with 66% in favor and 34% against. By the end of the laboratory, students stated that bodily awareness requires an intentional process of reflection and self-observation, which is difficult to activate through routine teaching alone.

Regarding voice modulation, before the experience, 65% of students believed that mere teaching practice could develop awareness. Afterward, a more critical and articulated perspective emerged: 85% emphasized that viewing *self-tapes* and peer discussion allowed for greater attention to their vocal modulation.

Finally, the conclusive data analysis revealed a high level of overall satisfaction: 89% of students described the experience as highly significant for their personal and professional growth. In particular, students highlighted that the laboratory activities allowed them to rediscover the body not only as an expressive tool but

also as an educational vehicle capable of mediating teaching content, emotions, and intentions.

5. Discussion

The data emerging from the laboratory experience provide significant insights into the formative value of the body and performative language (Carlomagno, 2022) in the construction of students' professional identity. The laboratory aimed to highlight the importance of the body (Lakoff & Johnson, 1999; Maturana & Varela, 2012), often underestimated in academic contexts, as a powerful pedagogical tool capable of mediating the educational relationship and activating meaningful processes of individual awareness and transformation (Mezirow, 2003; Fabbri, 2021).

Within this framework, Outdoor Education emerges as a pedagogical perspective that enhances direct and embodied experiences of individuals in the natural environment. The opportunity to move freely in outdoor spaces, unbounded by the structural limitations typical of indoor environments, allows for educational processes that integrate motor, cognitive, and socio-emotional dimensions. Interaction with the natural context further stimulates the sensory sphere, directing attention toward environmental stimuli such as natural sounds, scents, and tactile experiences, thereby amplifying perception (Barra & Todino, 2023).

Outdoor education, combined with theatrical practices, constitutes a privileged space in which body and environment enter into a co-constructed relationship within a holistic and situated learning process. The initial phase of the laboratory, focused on musical listening and spontaneous bodily movement, revealed a widespread sense of inadequacy and discomfort, eliciting initial reactions of disorientation, performance anxiety, and self-consciousness. This finding is particularly relevant as it may indicate a lack of bodily education in formal teacher training. However, by the end of the laboratory, a significant change was observed: 90% of students reported increased confidence in their expressive abilities, suggesting that reflective practice and self-observation facilitated progressive internalization of the performative experience.

The selection of musical pieces also had pedagogical significance, revealing two interpretative trends: preference for slow rhythms (53%) indicated a need for slowing down, inner listening, and deep emotional connection, whereas faster,

rhythmic pieces (47%) suggested a desire for expressive liberation and gestural affirmation. Moreover, movements in the produced videos were predominantly concentrated in the torso and arms, indicating that emotionality and communicative intentionality were primarily expressed through the upper body. From a communicative perspective, the experience resulted in concrete improvement in expressive skills: 71% of students showed enhanced vocal modulation, clarity of expression, and management of vocal tone, achieved through critical viewing of *self-tapes* and subsequent metacognitive reflection. This finding underscores the value of theatre not only as a performative tool but also as a reflective medium capable of fostering meaningful and transformative learning.

A particularly relevant aspect emerged from comparing students' responses at the beginning and end of the laboratory. Initially, to the question *How aware are you of your use of body language when you want to communicate something?*, 52% responded *never* and only 11% *always*, revealing a limited perception of the body's impact in educational communication. By the end of the experience, over 90% reported increased awareness of their body language, recognizing its communicative and pedagogical value. This demonstrates how self-observation mediated by *self-taping*, combined with theatrical practice, can significantly transform students' perception of the body in education.

Similarly, prior to the experience, 61% of participants considered tone of voice the main element perceived, versus 26% for body language. At the end of the laboratory, greater attention to non-verbal communication emerged: students recognized the teacher's body as a central vehicle for conveying security, openness, and emotional and relational closeness.

The belief that teaching alone could make a teacher aware of their body language was also challenged. Initially, 66% agreed with this statement; however, data analysis, supported by reflections in students' journals, highlighted that bodily awareness requires specific training paths and guided practices of reflection and observation. Similarly, regarding vocal awareness, 85% of students recognized that viewing *self-tapes* combined with peer discussion enhanced attention to vocal modulation and quality, valuing them as important teaching tools.

Finally, overall satisfaction with the laboratory was high: 89% of students deemed the experience highly significant for their training, highlighting the effectiveness of a pedagogy integrating body, reflection, emotion, relationship, and context.

The laboratory thus activated a complex metacognitive process in participants, strengthening their ability to reflect on performative action and developing

professional identity. This process aligns with Dewey's pedagogy of experience and with the concept of self-care (Mortari, 2006) and self-exploration (Brockmeier & Carbaugh, 2001), where theatre constitutes an educational opportunity engaging the subject in all dimensions: bodily, emotional, relational, and symbolic (Massa, 2001).

The use of music as a synesthetic activator and stimulation of non-linear languages proved effective in accessing implicit knowledge often neglected in academic training (Damasio, 1999; Proverbio, 2019). The preference for specific body areas in expressing emotions further underscores the body's centrality as a site for the emergence and re-elaboration of emotional and cognitive experiences (Sibilio, 2011).

For students, conducting activities within an outdoor education context was particularly relevant. Connection with nature fostered openness and distancing from the perceptual and relational constraints typical of indoor environments, generating conditions for greater expressive freedom and reducing inhibition. Direct contact with the natural environment contributed to psychophysical well-being, stimulated imagination, and supported socio-emotional skill development (Louv, 2016; Hughes et al., 2021). In this perspective, outdoor theatrical work allowed students not only to experience performance more authentically and embodiedly but also to strengthen ecological awareness, understood as consciousness of one's interdependence with the environment.

The evidence suggests that theatre can be a privileged form of organizing human action in space and time (Boal, 2009), affirming itself as an art of action and self-observation (Santos, 2018). In this sense, the *self-tape* functions not merely as a documentation tool but as a reflective and formative device, capable of triggering transformative dynamics at both individual and collective levels.

Conclusions and Future Perspectives

The presented experience aimed to highlight the role of performative practices in the initial training of future teachers, emphasizing the educational value of theatre as an experiential space where body, voice, emotion, and cognition intersect to generate embodied, multisensory, and participatory learning. The study particularly focused on the university's outdoor spaces to explore the pedagogical and transformative potential of performative practices in relation to bodily and emotional awareness, as well as verbal, non-verbal, and paraverbal communication

skills, through the use of video *self-taping* as a technological device for professional self-reflection.

In this perspective, the use of *self-tape* in outdoor education contexts proved to be an effective pedagogical tool, capable of activating metacognitive reflection, bodily awareness, and critical self-observation. Through this device, students were able to observe, analyze, and transform their presence, gestures, and communicative choices, developing a greater awareness of themselves as educators.

From a methodological standpoint, the experience highlighted the importance of integrating verbal, bodily, and audiovisual languages in the design of inclusive and transformative learning environments. The combined use of music, movement, and video fostered participants' new attention to non-verbal communication and the body's role as an educational medium, consistent with pedagogical perspectives that consider aesthetic experience a privileged site for meaning-making (Dewey, 1938; Damasio, 1999; Boal, 2009).

Looking forward, the results open up interesting avenues for development, including the introduction of *self-taping* as a tool for self-analysis and formative assessment in other school and university contexts; the integration of theatrical practices, particularly in early childhood education, to promote multimodal communication, imagination, and creativity; and the creation of audiovisual documentation models to support teacher professionalization. These perspectives are particularly relevant in a historical moment in which education risks being reduced to mere technical execution, losing its human and relational dimension. In this context, outdoor education offers the opportunity to recover authentic learning experiences immersed in the natural environment, promoting bodily awareness, autonomy, collaboration, and deeper emotional engagement.

Furthermore, the synecological perspective (Paparella, 2023) provides an additional interpretative lens, conceiving education as an ecological and relational process in which the individual, the community, and the natural environment interact dynamically and interdependently. This vision emphasizes the importance of learning that considers interactions among various elements of the educational context, fostering integrated and sustainable training.

In an era marked by the hyper-rationalization of knowledge, outdoor theatre and *self-taping* remind us that education also means *bringing out*, that is, staging and giving form to possibilities that have not yet emerged but can unfold, since education is never merely what appears, but always something that develops in depth, in the folds of the visible (Massa, 2001), where the educational gesture takes

shape. In this perspective, theatre becomes one of the spaces where such depth can emerge, transforming into words, movement, imagery, and ultimately, transformation.

Author contributions

Nadia Carlomagno is the author of the paper. She is the main researcher of the project; she wrote the Sect. "Introduction" and the Sect. 1 "Theoretical framework: The Role of Theatre in Teacher Education Between Nature and Technology".

Valeria Vadalá is the co-author of the paper, she wrote the Sect. 3 "Research Design", the Sect. 4 "Results" and the Sect. 5 "Discussion".

Francesco Maria Cordella is the co-author of the paper, he wrote the Sect. 2 "Methodology" and the Sect. "Conclusions and Future Perspectives".

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