

BEYOND THE TEACHER'S DESK: NEUROSCIENCE, THE BODY AND NARRATIVITY IN TEACHER TRAINING

OLTRE LA CATTEDRA: NEUROSCIENZE, CORPO E NARRAZIONE NELLA FORMAZIONE DOCENTE



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ABSTRACT

In the current educational scenario, the role of the teacher is configured as a complex dynamic interaction between technical competences, relational abilities and reflective attitudes. This contribution is based on the analysis of training workshops structured according to an Embodied Cognition Based approach, conducted in various contexts throughout Italy, and aims to promote substantial reflection, open to epistemic pluralism and the construction of new meanings referring to the personal and professional self-perception of teaching and educational staff.

Nell'attuale scenario educativo, il ruolo dell'insegnante si configura come complessa interazione dinamica tra competenze tecniche, abilità relazionali e attitudini riflessive. Il presente contributo è basato sull'analisi di laboratori formativi strutturati secondo un approccio Embodied Cognition Based, condotti in diversi contesti sul territorio italiano e mira a promuovere una riflessione sostanziale, aperta al pluralismo epistemico ed alla costruzione di nuovi significati rispetto all'auto-percezione personale e professionale del personale docente ed educativo.

KEYWORDS

Narrativity; teacher training; professional profile; self-perception; teaching style.

Narratività; formazione docente, auto-percezione; stile di insegnamento.

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Introduction: Teacher education between identity, corporeity and reflexivity: a qualitative investigation

In the current context of educational research, the *Embodied Cognitive Science* perspective (Clark, 1999; Lakoff, 2012; Foglia & Wilson, 2013; Shapiro, 2019; Macrine & Fugate, 2022) presents itself as an increasingly relevant interpretative lens for understanding the correlation between educational processes and teachers' elaboration of identity constructs (Damiani et al., 2021; Minghelli et al., 2021; Allodola et al. 2023). This paradigm, which departs from traditional mind-body and subject-object dichotomies, proposes a holistic approach to knowledge and learning, valuing lived experience, corporeality and the environment as inseparable elements of cognitive action (Varela, Thompson & Rosch, 1991). Gomez Paloma (2013; 2016) emphasises how corporeity is not merely a vehicle for the transmission of knowledge, but an epistemological and pedagogical device capable of activating meaningful and transformative learning (Gomez Paloma & Damiani, 2020). In this perspective, the teacher is not only the one who transmits content, but a subjectivity that expresses itself phenomenologically and enters a relationship with other subjects with whom it establishes a sensitive, empathic and situated dialogue (Gomez Paloma, 2019). Adopting an approach based on the *Embodied Cognitive Science* paradigm in teacher training necessarily implies an epistemological change as well as a practical, planning, programmatic one: from a transmissive and disembodied model of training and teaching to a reflexive, relational and situated in corporeity model, professionally sustainable (Damiani, 2021), capable of considering complex aspects, both explicit and implicit:

«Strengthening the capacity for confrontation with one's own humanity and deep, unacknowledged dimensions (implicit mental, emotional, reflexive, perceptual and bodily) is a fundamental formative step for the capacity to confront the students' humanity that defines the complexity of didactic interaction and the humanisation process in general» (Damiani, 2021, p.659).

Training courses can therefore be configured as spaces in which the body, emotions and experiential practices become the object and instrument of knowledge:

«In the light of the reflections coming from the Embodied Cognition Science approach, corporeality plays an important support function, in cognitive processes, favouring the construction of knowledge, understanding and representation of

contents, involving the subject globally within the formative process» (Minghelli et al., 2022, p.3).

In the present contribution, this theoretical perspective has been taken as an epistemological framework useful to analyse a collection of autobiographical writings and narrative textual productions elaborated by participants in two seminars on *Embodied Education* related to inclusive processes on the one hand and to the construction of pedagogical and educational professionalism on the other (held during the Academic Year 2024-25 at the University of Modena and Reggio Emilia and at the University of Macerata, as part of a series of seminars on Embodied Education and the educating community promoted by the University of Cassino and Lazio Meridionale), emphasising the corporeal, reflexive and relational dimensions of education.

1. Methodology of intervention: the habilitative drama workshop

The two training interventions to detect participants' perceptions regarding the importance of constructing professional identity based on personal identity, teaching and training as an intentional, relational and reflexive action (Fabbri, 2007; Crotti, 2017; Pignalberi, 2019) with characteristics of care and pedagogical responsibility (Riva, 2020) were structured starting from an Embodied Cognition based methodological approach, i.e. the Habilitative Drama Workshop (HDW). Starting from the use of artistic languages, to activate a wide range of personal, intrapersonal and interpersonal dynamics (Gallese, 2013), this activity promotes the mobilisation of individual and collective resources, making them explicit, enabling their elaboration and sharing (Cuccaro et al., 2024). Through the use of tools and techniques derived from different artistic-expressive areas (Cuccaro, Gentilozzi & Gomez Paloma, 2021), designed and adapted specifically to the target group, with the aim of fostering the activation of the individual within the group, with and thanks to the working group (Di Dago, 2008), the activity allows one to act and reflect on one's actions in a reflexive and recursive form. The workshop intervention is designed by making explicit the definition of the general aims, the number of participants, the duration and time setting of the meetings, the prerequisites in terms of skills and knowledge, the contents, the objectives subdivided into areas of functioning, the expected skills, the structure of the meetings and the evaluation of the intervention. The clear explication of purposes and methodologies is necessary to defuse possible misunderstandings linked to prejudices inherent to the performative act. In fact, the design centrality of the

habilitative drama workshop is essentially held by the subject who takes part in the experience, freed from the need to produce performative actions or artefacts responding to latent or explicit aesthetic canons. As far as the number of participants, prerequisites, duration and time setting are concerned, it is possible to set up the design with extreme flexibility: the number of participants can vary according to the needs of the context, although a number of between eight and twenty is desirable, to facilitate the stabilisation of group dynamics (Picone & Ruvolo, 2010; Bertani & Manetti, 2007). The duration of the intervention is extremely variable: it may consist of episodic moments (as in the case of seminar interventions) or last one year, depending on training needs. Since performance is not the main objective of the workshop activation, no prerequisites or special skills are required. The pedagogical focus is on individual well-being, through a path of self-discovery and self-skills (Oliva, 2015). The themes and objectives are agreed upon during the planning phase on the basis of the particular needs and the theoretical, design, and organisational framework expressed by the client (Centonze, 2009), while the activation of personal resources can take place through metacognitive and narrative approaches (Miato & Miato, 2003), seeking and soliciting a functional response with respect to the axes of autonomy, physical, cognitive, motor, emotional and relational skills. The activities are selected based on the operator's observation of the group of participants and mainly concern cooperative learning, metacognition, brainstorming, role playing, circle time and experiential art workshops. Further focal points of the experience are self-reflection, the emergence of self- and other-perception, creative and divergent thinking, collaboration and social responsibility. To monitor group dynamics, the presence of a participant observer is envisaged (Semi, 2010), while several feedback channels are envisaged: ethnographic observations, questionnaires, cognitive autobiographies (Capobianco, 2021) and observation grids. The meetings follow a circular and hermeneutic structure (Deiana, 2017), divided into five phases: introduction, core activity, sharing of work, feedback, discussion and final synthesis. The key aspects of workshop activation, from the participant's perspective, are essentially six: a) Participation and involvement. The proposed activities promote active and experiential participation, the confrontation with others in respect of one's own instances and those of others: "Placing the student in direct experiential confrontation with practical problems, social problems, ethical and philosophical problems, personal issues, and research problems, is one of the most effective modes of promoting learning" (Rogers, 1969, p. 162); b) Creativity and originality. The activities proposed tend to be profoundly suggestive, that is, they tend to create the conditions for something new and unprecedented to occur, starting from

the elements available and from the awareness of oneself and one's potential: "Each person has, potentially, all the psychic energy needed to lead a creative life. But there are many obstacles that prevent many from expressing his potential" (Csikszentmihalyi, 1996, p.11); c) Emotional expression. Emotionality is a central element of workshop experiences. The proposed experiences impact the personal and interpersonal emotional sphere. The life of the mind that takes shape in the Other activates emotional responses that are fundamental to the search for meaning: "the opposite pole of active inhibition is confrontation" (Pennebaker, 1997, p. 10). d) Ability to synthesise and associate. The activities aim to reveal one's humanity in fieri, in the making and unmaking of the usual meaning and signifiers, in the unveiling of the self in every properly human action: "The illustrative, spontaneous and uncoded gestures [...] say a lot about us: how we think, how we feel, and how we organise and represent thought" (Bartolini 2023, pp. 100-101); e) Empathy and representation of the other. Relational dynamics are at the heart of experiential activities. Since one's own humanity, that is, one's perception of the human, is at stake, it is necessary to create the conditions for empathic, sincere, meaningful relationships to be established in order to be able to reflect serenely and be able to access new dimensions of signification: "A high degree of empathy in a relationship is possibly the most potent and certainly one of the most potent factors in bringing about change and learning. (Rogers, 1975 p.2); f) Discussion and reflection. The ability to dialogue with rather than impose the emergence of one's own opinion is a determining factor in workshop practice. The Other is both a limit and a promoter of new awareness. Managing dialogue and confrontation according to shared rules is essential for a successful outcome of the practice (Isaacs, 1999; Bohm, 2004). "The encounter with otherness is, therefore, the practical result of the implementation of cognitive and interpretative skills aimed at the construction of a space of common change" (Paiano, 2022, pp.102-103). Laboratory activation, in the final analysis, allows one to experience a subjectivity that:

«[...] is essentially embodied: the body is not simply the content or object of consciousness but, as an experienced body, becomes the constitutive foundation of the subject itself. We experience feelings, thoughts, perceptions and actions as subjective bodily beings, and at the same time as physical beings» (Fuchs, 2021, p.108).

For the delivery of seminar activities, meetings lasting about 90 minutes were structured, in compliance with the guidelines described so far for the drama workshop, with the use of a short course of "non-creative writing" (Sbarbati, 2012) with the production of textual works produced on a stimulus guide by responding to five basic rules (write without thinking; write without rereading; write without

deleting; write in the given time; write for the whole given time), and then read and comment on some of the works. At the heart of the work is reflection from the self, since, as Berns (2022) argues in *The Self Delusion*, each of us has at least three versions of the self. The first, situated in the present, is the one we are most used to thinking of as 'we' but the present is an illusion. The present 'we' do not last long. Even when we think we are living in the present we are stuck in the past. This is the second version of us. Although the future is by nature blurred, its function is both concrete and aspirational. When we think we are in the present, our brain is not only processing events that have already happened but also forming predictions about the immediate future. As a rule, past, present and future 'us' combine seamlessly into a unified existence. Who, then, are we? The answer is: whoever we think we are. Our brains construct narratives of our lives, and this process builds our self-identity. The underlying question of exploration through writing is: how much does our narrative affect our perception of the dynamics of teaching and learning?

2. Methodology of investigation

The analysis followed a qualitative phenomenological-textual approach, supported by basic lexicometric tools (frequencies, co-occurrences, collocations) and thematic categorisation (Braun & Clarke, 2006; Smith et al., 2009). The *corpus* consists of texts written spontaneously by the participants of the two seminars and organised into macro-themes. The analysis was conducted through a phenomenological-hermeneutic approach (Van Manen, 1990), supplemented by qualitative *content analysis* techniques (Saldaña, 2021). The units of meaning were coded and grouped into categories and subcategories emerging inductively, following the logic of Grounded Theory. We report in the following paragraphs the data analyses of the two workshop experiences. The texts produced by 12 participants regarding the experience carried out at the University of Macerata and the texts produced by 17 participants regarding the experience carried out at the University of Modena and Reggio Emilia were analysed. The guiding questions the texts had to answer were the following: 1) *I*; 2) *I who teach*; 3) *I who teach the Other*, for the activity implemented at the University of Modena and Reggio Emilia. While for the University of Macerata, the guiding questions were slightly curved with respect to the theme of teacher training: 1) *I*; 2) *I who train myself*; 3) *What form do I take?*

2.1 Experience at the University of Modena and Reggio Emilia: Analysis of occurrences and emerging categories

The lexicometric analysis conducted on the *corpus* of autobiographical narratives of educators and teachers present (in training and in service) returned a linguistic profile strongly marked by identity, relational and value elements. From a quantitative point of view, the words with the highest frequency in the *corpus* are represented in the following table:

Keyword	Occurrences	Semantic category
teaching	19	Educational action
guys	11	Subjects of education
listening/hearing	10	Relationship / Communication
school	9	Educational context
other / other	9	Alterity / Relationship
lecturer / teacher	8	Professional role
values	6	Ethical dimension
reports	5	Interpersonal dynamics
importance	5	Attribution of meaning
students	4	Subjects of learning

Table 1. Analysis of occurrences and semantic categories

These data highlight the centrality of a lexicon that articulates the educational discourse around three main conceptual cores: the teaching function (Aiello et al., 2016), the relationship with learners (Iavarone, 2006) and the ethical and values dimension of education (Cuccaro et al., 2024). The co-occurrences detected, such as *teaching for the other*, *listening*, *children*, *values*, *transmitting* and *creating relationships*, reinforce a vision of teaching to be understood as a dialogical and caring process (Calabretta, 2018), rooted in the educational relationship and reciprocity (Cerrocchi, 2018). The most significant collocations, such as *authoritative figure*, *secure relationships*, *teaching for the other*, *children's growth*, tend to confirm a pedagogical conception of teaching centred on the presence of the adult as a guide and reference, capable of positively influencing students' personal and social development (Damiano, 2004). The emerging narratives are characterised by a strong professional reflexivity, in which the identity of the teacher is unravelled as a process of synergetic synthesis between competence, authenticity and relational availability. The educator is seen not as a mere transliterator of aseptic contents, but as a facilitator of meaningful experiences, a living metaphor of embodied experience, which predisposes and orients the

integral development of the person. Regarding the analysis of the categories, three thematic cores were identified, which in turn were subdivided into subcategories. Below is the analysis of the thematic cores and the categories detected:

a) Construction of personal and professional identity

Biographical continuity and complexity of the self. The narratives reflect a plural identity, in which the personal self is intertwined with the professional role with traits of profound complexity. Self-definitions such as "precise, fussy, organised" are accompanied by a reflexive awareness: "I would like others to do the same; all the good and bad points belong to me at the same time". Education is often a conscious choice: 'I am a teacher by choice after having been an educator'.

Emotions and corporeity: The body and emotions are an integral part of identity: 'I see myself as very tired', 'passion, listening, fullness, determination'. The expression of physical and emotional experiences shows a pedagogically embodied subjectivity.

b) Teaching as relationship and transformative process

Encounter and reciprocity. Teaching is described as a dialogical relationship: "in teaching I can only bring myself first", "teaching can only take place in the encounter with the other". The other is recognised as a co-agent in the construction of knowledge: "let us unite our ideas".

Listening and presence. Many teachers recount daily practices of listening and empathic attention: "I ask how the children are", "it makes me sad that they are all sad and I am happy if they are happy". What emerges is a vision of listening as a practice of caring and meaningful relationships.

Continuity and teaching creativity. "I like creating new activities", "teaching is difficult and extremely complicated", but also "teaching for six years in the same school has allowed me continuity". The teaching experience that transpires from the narratives appears as a poetic, creative, generative act, never passive or partial. The continuity of teaching allows the continuity of relationships, allows bodies not only to be present but to exist with continuity, in continuity.

c) Teaching for the other as an ethical and transformative practice

Care and projectuality. Teaching for the other is an intentional and responsible action (Sibilio, 2012): "I cultivate you, I tend your garden", "I project you". The teacher becomes a co-constructor of possibilities: "I take you with me for a while, grow, be yourself".

Model and value. The teacher becomes an ethical reference point: "I would like to become a model for my pupils", "I am striving to transmit the value of respect". Education is expressed in the shared construction of meaning: "teaching for the other is making a mark, it is responsibility and courage".

Inclusion and humanity. Teaching is understood as a profoundly human experience: "teaching not only didactically but simply humanely", "allow [the student] to be received in all his or her facets through listening".

2.2 Experience at the University of Macerata: analysis of occurrences and emerging categories

In the second case, the *focus* of the guiding questions was shifted to the training process, identifying three main themes: 1) I Forming Myself; 2) I Forming; 3) What Form Do I Have?

Section	Word / Expression	Occurrences	Semantic area
<i>I who I form</i>	Training/training me	17	Identity process
	Studio / study	5	Learning
	Being	7	Identity
	Myself	3	Personal reflection
	Observation / I observe	2	Reflective gaze
	Family / children / educators	6	Personal-professional intersections
<i>I who formo</i>	Forming/forming	19	Educational action
	Children / babies	6	Recipients
	Listening/hearing	4	Communicative relationship
	Relationship / contact / empathy	6	Care / presence
	Responsibility	3	Professional Ethics
<i>What shape I have</i>	Forming/forming	22	Identities in transformation
	I am/feel/think I	19	Self-reflection
	Body	6	Corporeality
	Change / transformation	7	Metamorphosis
	Circle / corner / flower / edge, etc.	10	Identity metaphors

Table 2: occurrence analysis and semantic areas

Again, three main categories emerged which can be summarised as follows:

a) Identity under construction. Education is understood as an existential process, characterised by tension towards unity and at the same time by fragmentation. The metaphors of the *jigsaw puzzle* or the *missing piece* reflect the dynamic dimension of the teacher's identity, which is constructed over time through reflexivity, the body, the everyday and never arrives at a crystallised definition. Corporeality is a central element: the subject learns by listening to himself, in an intimate relationship between sensation, thought and action. The learning processes effuse and spread osmotically, crossing the domestic and professional space, contaminating themselves with life experience.

b) Responsibility of the other. Representations of *educating* as ethical and relational acting emerge. The educator perceives himself as *responsible* not only for the transmission of knowledge, but for the care and development of the other. The transformative experience is, clearly, bi-directional: the trainer learns through the relationship with the trainee. The life of the body, the voice and the unfolding of creativity make the educational act an aesthetic, synaesthetic and intrinsically emotional event. However, one also perceives the fatigue of the didactic act, read above all as the impossibility of total control over the dynamics of knowledge transmission.

c) Identity and metamorphosis. Identity reflection also takes on a symbolic form: *colours, edges, corners, circles* become metaphors of the evolving self. Identity is perceived as a dynamic, complex, open and relational process, interacting with the inner world and the outer world, nourished by present and past relationships, with non-determinable implications. The educational identity is configured as a multiple, sensitive and impermanent construction, never really concluded.

3. Discussion

The analysis conducted on the narrative texts produced in the two workshop experiences, returns a complex and articulated picture regarding the perception of the teacher identity, explored through autobiographical, relational and transformative dimensions. The hermeneutic-phenomenological qualitative approach (Van Manen, 1990; Saldaña, 2021), enriched by lexicometric techniques and inductive coding according to Grounded Theory criteria (Charmaz, 2006), allows for a fruitful comparison to be drawn up, even if it is necessary to envisage a significant enlargement of the survey sample in future research. At the University of Modena and Reggio Emilia, identity reflection is strongly intertwined with the

teacher's professional role and ethical *agency* (Andreoli et al., 2023). The most frequent key words - *teaching* (19), *children* (11), *listening* (10) - allow us to place the educational experience within a transformative relationship, in which care for the other and responsibility take on a founding value, also in consideration of the asymmetrical nature inherent to the educational relationship (Mari, 2012). The categories that emerged tend to confirm the idea of teaching as an "embodied act" (Molander, 2015; Iobbi & Magnoler, 2015), deeply interconnected with emotions, bodily experiences and biographical continuity. The teacher-learner relationship thus appears as a space of reciprocity, a scenario of explication of the possible and the human, in which identity is constructed *through, with and for the other* (Buday, 2020), but also as a place of tension between knowledge and possibility of transmission, between mediation and metaphorisation (Castoldi, 2012; Damiano, 2013) between educational intention and everyday concreteness.

The experience conducted at the University of Macerata is characterised by a markedly introspective and symbolic narrative, centred on the subject in formation and the becoming of identity (Lisimberti, 2006). The most relevant occurrences - *formation* (17), *form* (22), *I am / I feel* (19) - reveal a self-reflexive orientation (Pilar Alcolea Pina & Formella, 2024) and a significant presence of spatial and bodily metaphors, which tend to describe identity as a dynamic process without a break. Whoever embodies the responsibility of teaching is not only read as the one or the one who transmits content in a pure and aseptic form, but rather the one or the one who *transforms in transmitting* (Formenti, 2017), in a dynamic that refers to pedagogy as an existential experience (Biesta, 2006; Iori, 2007). The thematic categories - "identity under construction", "responsibility for the other", "identity and metamorphosis" - highlight an extremely dynamic and fluid professional experience, in which the boundaries between personal and professional dissolve in favour of a holistic, narrative and reflexive vision of the educational experience (Clark & Rossiter, 2008; Compagno & Cappuccio, 2017). The narratives analysed reveal how the teacher perceives him/herself not only as a vehicle of formal knowledge, but as a subject actively involved in the construction of an ethical and relational horizon that opens the door to an authentic education (Molander, 2015) in which caring, listening and reciprocity do not turn out to be accessories, but structural foundations of pedagogical and didactic action. The foundation for orienting oneself in the search for love for what one is and for what one is while doing:

«The Italian school only produces an avalanche of judgments, educational objectives, evaluation schemes, programmes and children who, in theory, should be able to

answer any cultural question except this one: "but are you, are you happy with what you do?". Here, then, that every teacher, master and professor, even before beginning the lesson, should teach to love and feel with the heart what one does. Make it clear that a theorem of mathematics is either known or not known. What is the point of questioning about the Pythagorean Theorem and giving one boy a 4 and the other a 7! Either you know how to prove it or you don't! But must everything always be quantified? The true enlightened teacher is precisely the one who respects, not tolerates, mind you... who loves the diversity of his pupil and helps him to search within himself for his own dreams and desires» (Santoian, 2016, p.67).

The identity of the teacher is not only constructed through logical-argumentative narratives, but also through images that give shape to complex and sometimes ambivalent experiences, restoring the richness and plurality of the educational experience (Saldaña, 2021): this is testified by the recurring use by the teachers involved in the seminars, of symbolic metaphors and identity images (such as circles, edges, flowers, shadows), which suggest the need to enhance one's inner world as an epistemological device in the educational pathway. The comparison between the two experiences may suggest two complementary interpretative trajectories: on the one hand, the centrality of the educational relationship as an ethical and transformative space in the emergence of otherness (Zorzi & Gecchele, 2020), more evident in the Modena-Reggio context; on the other hand, the reflection on the self in training, as a necessary inner space of research, crisis and identity recomposition, well represented by the data collected in the experience conducted at the University of Macerata. In both experiences, however, education emerges as an embodied, everyday practice, never aseptic or neutral, but profoundly situated and relational (Tagliagambe, 2014). From this may derive a conception of teaching professionalism as a place of continuous negotiation of meaning (Milani & Nosari, 2022), in which knowledge is always affectively connoted, and the educational gesture represents an act of shared responsibility.

Conclusions

The narratives collected in the two contexts analysed can offer interesting food for thought with respect to a rethinking of the ways in which teacher training is designed and implemented. If on the one hand there is an increasing attention to the ethical, narrative, subjective dimension of teacher training (Tammaro et al., 2017; Baldacci et al., 2020; Bertagna, 2020), on the other hand, the system of teacher recruitment is based on competition modalities still linked to the predominance of content and form (Dordit, 2012; Carbone & Gargiulo, 2018;

Magni, 2020). From both experiences conducted and analysed, the centrality of the subjective, experiential and relational dimension in the construction of the professional teaching identity appears to emerge clearly. The Cartesian root of the opposition between subject and object is an idea that belongs to human history: the distinction between *res cogitans* and *res extensa* made by the French philosopher in the 17th century continues to produce effects today, both tacitly and explicitly. Yet it is no longer possible to distinguish thought from the body: it is the body that thinks, not the brain. It is the human being that feels, thinks and acts (Fuchs, 2018). In this sense, it is the teacher's body that reveals itself as the primary device of mediation and metaphorisation of the real, it is the teacher's body that embodies the experience of things lived and known, it is the teacher's body through which it is possible to construct places of possibility, confrontation and knowledge of oneself and the other from oneself, of the inner and outer world. The teacher's body assumes the dignity of an epistemic device situated in an era of *planetary education*:

«In order to think about their problems and the problems of their time, citizens need to understand not only the human condition in the world but also the human world which, in modern history, has become that of the planetary age» (Morin, p.66).

Understanding others requires awareness of human complexity, of our own complexity, of our identity construction, of the word with which we narrate and through which we are narrated (Lacan, 1974). Identity as a dynamic, plural and embodied process, which is defined through reflexive practices, lived corporeity and meaningful relationships (Van Manen, 1990; Braun & Clarke, 2006) emerging from the *corpus of* texts analysed, restores dignity, perspective and function to the *teaching person* before that to teaching professionalism. In this sense, training can no longer be conceived exclusively as the transmission of contents or the acquisition of skills but must be configured as a transformative pathway that involves the person in his or her entirety, in a profoundly existential perspective (Biesta, 2006; Clark & Rossiter, 2008). The pedagogical implications arising from these initial findings are manifold. There is an urgent need to recognise training as an experience that implies a continuous re-elaboration of the self and that finds in dialogue with others - students, colleagues, trainers - the privileged place to activate processes of awareness and personal and professional growth. In the light of these considerations, some research directions appear particularly relevant. First of all, it is necessary to investigate, through longitudinal studies, the identity transformation processes that take place along the training pathway, with particular attention to the moments of professional transition. Such a perspective

could make it possible to understand how lived experiences contribute to the sedimentation and redefinition of the teaching self over time. Secondly, it would be appropriate to broaden the spectrum of investigation to other educational contexts, national and international, to ascertain how local pedagogical cultures influence the ways in which teachers make sense of their experience. Systematically exploring the formative potential of the use of metaphor in pedagogical reflection, also by promoting research that can investigate its cognitive, symbolic and emotional functions in relation to the construction of professional identity (Smith et al., 2009; Charmaz, 2006) could open up new research horizons in the construction of training paths that can start from the person to arrive at the construction of teaching professionalism. The reflection made on the data acquired highlights, in the final instance, the need to promote training models that may not be limited to the acquisition of teaching methodologies and techniques to be carried out as rigid protocols of implementation in real contexts, but that may welcome and enhance the complexity of the training experience to be read as an indispensable opportunity for personal, relational and professional transformation. In this perspective, pedagogical research is called upon to become not only a tool for understanding, but also a device for accompanying and innovating teacher training processes, to finally cross the desk to meet humanity in its unfolding, in its forming, in its being in the world.

Author contributions

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