

High-Global-Involvement Experiences for Inclusive Learning: Embodied Education, Functional Psychomotricity, and Universal Design for Learning in Primary School

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Abstract: This article explores the pedagogical and didactic value of High-Global-Involvement Experiences (HGIE), focusing on the integration of functional psychomotricity, embodied cognition, and Universal Design for Learning to support inclusive, active and meaningful learning. This analysis examines an educational pathway created by Interdisciplinary Project-Based Approach (Bini & Di Giulio, 1997) structured around an initial “strong experience” (first HGIE) with sensory exploration of the environment followed by multimodal reprocessing and shared reflection. In accordance with embodied cognition, where the body is considered a constitutive dimension of integral development, emphasizing the role of emotion, relation, and bodily engagement in the construction of knowledge. The process begins with a “call” from the teacher (*Hey, you!*) in which the pupil recognizes himself as a subject, just as the teacher and others recognize him as a person. This “invitation” leads to a lived, participatory experience in the here and now, toward the reprocessing of sensory and emotional stimuli, enabling pupils to organize experience through “assimilation” and “accommodation” processes (Piaget, 1952). The analysis suggests that global, bodily, sensory, emotional, relational, and social engagement can foster learning processes and promote inclusive participation for all pupils, supporting the needs of each individual within a shared educational environment.



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1. Introduction

This article describes an experience arises from the need to design educational environments capable of responding to the diversity of pupils and of promoting authentic inclusion, in order to offer meaningful and effective learning opportunities. The pathway was carried out in a primary school adopting an *Interdisciplinary Project-Based Approach* (IPBA) (Bini & Di Giulio, 1997), which began with *High-Global-Involvement Experiences*, followed by multimodal reprocessing that guided pupils towards higher levels of symbolization and abstraction.

The article aims to show how this type of experience can contribute to active learning and educational inclusion, since each person lives them through their own body and mind. Attention is directed to the theoretical contributions of Embodied Education, to the principles of Universal Design for Learning, and to the pedagogical potential of Functional Psychomotricity. Assuming the paradigm of "being in the body", pupils were "called" to take part in the High-Global-Involvement Experiences. This notion is most closely related to Riccardo Massa's concept of *esperienza forte* (strong experience), characterized by an intense and transformative engagement with physicality, embodiment, and materiality, capable of disrupting the continuity of everyday life and profoundly influencing pupil's lived experience and processes of personal change (Massa, 1989, p. 13, authors' translation).

This type of deep interaction and relationship with others and with the world make possible the subjectivation (*Here I am*), the socialization (*Here I am, with others*), and the qualification (*Here I am, with others, in the world, and I learn*) (Biesta, 2021/2023).

The learning opportunities can be read in the perspective of Embodied Education, which emphasises the interplay between bodily experience, consciousness, cognition, and learning (Francesconi & Tarozzi, 2012), a paradigm that overcomes traditional mind-body dualistic conceptions and interprets learning as a situated, relational process deeply rooted in bodily experience by integrating contributions from neuroscience, psychology, pedagogy, and cognitive science.

Like educational research recognizes, learning cannot be interpreted as an exclusively cognitive activity, as it emerges from the dynamic interaction among body, mind, emotions and environment (Biesta, 2021/2023). From a holistic educational perspective, (Miller, 2019; Palmer, 2007) learning also would involve the spiritual or existential dimension of the pupils, not in a religious sense, but as the human capacity to construct meaning, develop values and purpose, cultivate self-awareness, and connect authentically with others and the world. Thus, educational experiences assume particular relevance when they imply active participation, direct exploration and personal global involvement of pupils.

In the activities described, the body is not a mere instrument of learning but an integral part of the cognitive process. The body is not an object among objects, but the very subject of perception: through the body the world is given to experience and becomes knowable (Merleau-Ponty, 1945/1962). "The mind is inherently embodied" (Lakoff & Johnson, 1999, p. 4) so thought takes shape through the body, movement, and situated action.

In HGIE the knowledge seems to emerge from the active interaction between the pupils - in their globality of body and mind - and the environment, through perception, action, emotion, and social relation (Varela et al., 1991). These assumptions are also linked with Functional Psychomotricity, which recognizes the role of the self in relation to the others, the objects (Vayer, 1989) and the spatio-temporal coordinates in the development of body scheme (Le Boulch, 1993).

According to functional psychomotor theory, the body contributes to the holistic development of the individual, because it is involved in motor, cognitive, social, and relational skills. For this reason, it becomes a place where knowledge is constructed and, also, a mediator of inclusive educational processes (Gomez Paloma, 2013).

From a neurophenomenological perspective, learning can be understood as an embodied and relational process in which perception, action, emotion, and interaction contribute to the construction of meaning (Gallese, 2006). In this sense, the

experiences characterised by high global involvement, engage pupils with knowledge through their bodies, senses, emotions, and relationships with others, making learning a lived and participatory experience.

The holistic nature of the person in the processes of knowledge construction and integral human development is further substantiated by advances in neuroscience, particularly by the discovery of mirror neurons, which provide evidences that perception, action, emotion, and cognition (Damasio, 1995) are intrinsically intertwined within a shared neural architecture. Evidences show how the understanding of others' actions and the construction of shared meanings involve motor and relational systems (Rizzolatti & Sinigaglia, 2016). Within this framework, experience assumes a central function, since authentic learning arises from meaningful activities capable of promoting reflection, continuity, and transformation in the relationship between the individual and the world (Dewey, 1938/2014).

Education cannot be reduced to the transmission of content or to a constructivist approach focused exclusively on the pupil; rather, it takes the form of responsible participation and a response to a “call” to existence and to relationship. Pupils may respond in their own way or decide not to participate, in which case the teacher will give them the necessary space to put forward new proposals.

In this sense, educational practice contributes to the processes of subjectivation (being free to be and to act, agency), socialization (choosing the culture, traditions and the practices of the community), and qualification (acquiring the tools to exercise agency in the world) which contribute to overall development (Biesta, 2021/2023).

Functional Psychomotricity – which guided the IPBA - is considered effective in supporting bodily awareness, emotional regulation, spatio-temporal orientation, communication, cooperation, and multimodal accessible learning pathways (Le Boulch, 1993). This approach is integrated with the principles of Universal Design for Learning (UDL), which recognizes pupil variability as constitutive of educational contexts and proposes flexible environments through multiple modes of engagement, representation, action, and expression. (CAST, 2024).

The integration of movement, sensory exploration, artistic languages, visual representations, discussion, and collaborative activities seems to contribute to the creation of an inclusive and multimodal learning environment, reducing barriers to participation, recognizing individual differences, and supporting shared knowledge construction. This means designing the educational environment by considering embodied education, that is, the ways of empathizing with others. Gallese and Morelli (2024) argue that we are bodies moving within a relational context, which may be the family, the school, the classroom, the spaces of preschool, the group of pupils playing with others, living a process of recognition through the simulation of what the other does and resonating with her or with him (Gallese & Morelli, 2024).

2. Materials and Methods

Context

The study was conducted at an experimental full-time primary school, located in the countryside in Tuscany (Italy). The pilot program was implemented in all classes for three years, but this report will focus on an experience involving three parallel third-grade classes in a two weeks' micro-project. Each class was composed by twenty-five pupils - including three with special educational needs (SEN) - aged between 7 and 9 years old. Nine teachers were involved: two for each class and three

support teachers. The curricular teachers were responsible for the interdisciplinary integration of the core subjects (Italian, Math, Science, Geography, History, and English), while the three special education teachers focused on the integration of the arts, physical education and music.

Methods

This article explores innovative strategies for promoting educational inclusion through an Interdisciplinary Project-Based Approach (Bini & Di Giulio, 1997), structured as an annual macro-project comprising four to five interconnected two-week micro-projects. In particular, it describes the impact of one of these microprojects (2 weeks, 65 pupils and 9 teachers), on both the classroom climate and inclusion, as well as on learning objectives according with National Guidelines (Ministerial Decree 254/2012) and Individualized Education Program (IEP).

First High-Global-Involvement Experience

It began with an outdoor learning activity in a natural environment, in which every pupil were fully engaged in its globality: body and mind, movement and emotion, as a person among others in and with the world. Within this educational setting, pupils were “called into the world” through an embodied exploration of the soundscape and the landscape involving attentive listening, bodily perception, systematic observation, guided comparison, and active participation.

Observation and recording

Environmental noises and sounds (natural or artificial) became objects of investigation through sensory perception and cognition. Pupils “listened, looked, smelled, felt the environment”, then they recorded observations, discussed them, compared views, and reflected on perception. Through these activities, they developed selective attention, perceptual discrimination and verbalization.

Subsequently High-Global-Involvement Experiences

Subsequently, sensations, perceptions, emotions, cognition, and environmental information during the first experience were reconstructed through artistic, plastic, motor and narrative activities involving body and mind in multimodal reprocessing from the drawing, to the choreography, from the discussion to the writing.

Physical and motor reproduction

The process of the sound activities moved from bodily reprocessing. Pupils reproduced rain, wind, birdsong, dry leaves, and marsh frogs through voice by body percussion and with available objects and transformed them into non-conventional notation to reproduce sequences or canons. First individually and then collectively, pupils create an orchestral composition translating sensations, perceptions, and emotions into symbols supporting evocation, memory and cognition.

Music Symbolization: the development of a notation

Consequently, the iconographic notation shared by the pupils, representing sounds and noises, became both personal and social symbolism: a score for orchestrating and sharing sensory experience, in which body and mind have participated and continue to participate.

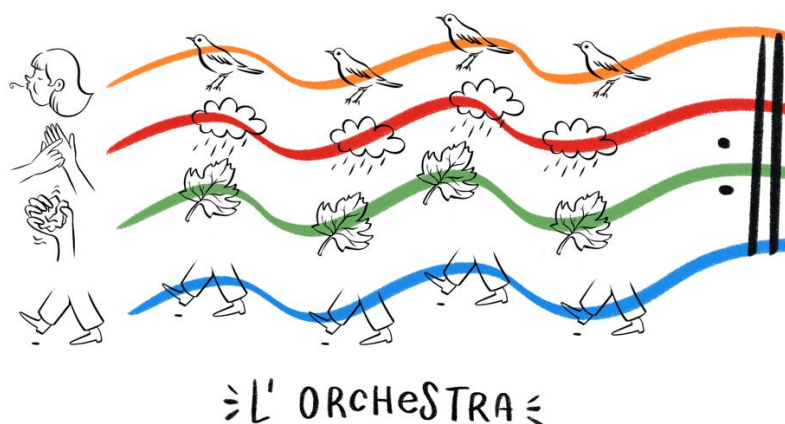


Figure 1 – Example of an iconographic musical score by Sara La Ruzza

Encounter with musical and artistic forms of expression

The pupils then explored artistic and cultural interpretations of natural soundscapes by listening to a selection of musical pieces chosen together, including Johann Strauss II's *The Blue Danube* (*An der schönen blauen Donau*, Op. 314) and Antonio Vivaldi's *Spring* (*La primavera*) from *The Four Seasons* (*Le quattro stagioni*, Op. 8, No. 1), to understand how, in the past, musicians sought to evoke the emotions felt when observing natural phenomena.

Furthermore, the listening of Bernie Krause's "*The Great Animal Orchestra*" with its modern and unconventional perspective, had been suggested as a way of encouraging pupils to choose their own personal way of thinking and expressing themselves.

This kind of music established a meaningful connection between pupil's lived sensory experiences, culturally mediated musical representations of nature, and their own expressive processes. Listening to the compositions elicited rich sensory, perceptual, and embodied responses, which were subsequently externalized through colours, graphic signs, and evocative visual forms, functioning as embodied traces of the pupils' holistic experience.

Artistic symbolization

This progressive process of abstraction - from the High-Global-Involvement Experience (HGIE), through embodied engagement with listening, to its graphic representation in the form of coloured lines and shapes - reflects the dynamic transformation of sensory and emotional experience into symbolic expression. This interpretative process resonates with Wassily Kandinsky's theory of art, according to which artistic creation should not merely reproduce visible reality but should give form to the individual's inner experience through the expressive qualities of colours, lines, and forms, thereby communicating a symbolic and spiritual dimension of human existence (Kandinsky, 1911/1977).

From this perspective, even a simple coloured line generated by a High-Global-Involvement Experience represents a multimodal transduction of embodied perception, affective resonance, and aesthetic meaning rather than a mere graphic reproduction of external reality.

Motor-bodily symbolization

Finally, pupils transformed sensory experiences into expressive movements representing the sound and global experience they had lived, in order to relive sensations, perceptions and emotions. In these actions, the body becomes central for recreating lived atmospheres through gestures, movements, and ensemble choreography to communicate and share, also through non-verbal language, the individually learning path of each pupil.

Shared reflection

The educational materials and pedagogical strategies were intentionally designed to support both pupils and teachers in freely selecting the modes of engagement, representation, action, and expression that best enabled each pupil to understand, participate, learn, and communicate their understanding, in accordance with the principles of Universal Design for Learning (CAST, 2024).

Further gradual symbolization

Subsequently, the activities became more structured, and teachers could set specific learning outcomes for each subject, but these activities arose from active participation. This means that both subject-specific and cross-curricular competencies were developed and assessed through activities often designed by pupils for pupils. This allowed teachers to determine whether the competencies had truly been internalized.

Finally, documentation took the form of wall posters, maps, and revisions in notebooks, as well as graphic and artistic works, models, and handmade objects.

3. Results

Interpretation of the results

The educational pathway revealed a progressive transformation of pupils' experiences from embodied perception to symbolic representation and shared meaning-making. Sensory exploration, bodily engagement, and multimodal expression enabled pupils to translate lived experience into visual, verbal, and artistic forms, demonstrating a gradual shift from direct perception to increasingly abstract forms of representation. This progression is based on the idea that knowledge emerged through the dynamic interaction between body, physical and social environment, “the self”, “the self and the others”, “the self and the objects”, (Vayer, 1989) and “the self in and with the world” (Biesta, 2021/2023), and is enriched by emotions (Lucangeli, 2019) rather than through abstract cognitive processing alone.

The observations made by teachers during the activities are consistent with neuroscientific evidence suggesting that meaningful learning is intrinsically linked to the integration of emotion, cognition, relation and bodily experience. Emotional engagement and personal relevance have been shown to facilitate learning processes by supporting attention, memory consolidation, and conceptual understanding (Immordino-Yang & Damasio, 2007). Likewise, theories of embodied simulation propose that perception, action, and social understanding rely on shared sensorimotor mechanisms that enable individuals to construct meaning through embodied interaction with others and the environment (Gallese, 2007; Rizzolatti et al., 2009). Likewise, theories of embodied simulation propose that perception, action, and social understanding are grounded in shared sensorimotor mechanisms that support the

understanding of others' actions, intentions, and emotions (Gallese, 2007; Rizzolatti et al., 2009) as well as sharing of meaning.

These observations are also consistent with Lucangeli's educational perspective, according to which emotionally meaningful and relationally rich learning experiences enhance pupils' readiness to learn by integrating affective, cognitive, and embodied processes (Lucangeli, 2021) talking about the *corpo senziente* as well as the embodied mind. The experiences that are described in this work were organized in the same way as a "call into the world" (Biesta, 2021/2023) helping pupils to improve their curiosity, wonder and motivation and to supporting attention, participation and memory, because they are free to choose their own way to approach the experiences and the knowledge.

The micro-project provides empirical evidence consistent with the scientific findings discussed above. Pupils' texts and drawings, together with teachers' observations, document these processes through everyday behaviours, including smiles, exchanges of ideas with peers, eagerness to participate and discover, determination to complete tasks, and the application of newly acquired knowledge. Further evidence is provided by pupils' requests for explanations in science, mathematics, and languages, the materials they bring to school, their regular attendance, and their families' active participation in school activities. Collectively, these observations suggest increased engagement, curiosity, and participation in the learning process.

The multimodal design of the pathway offered multiple opportunities for participation through sensory, motor, visual, verbal, and artistic modes of expression.

Pupils responded to these opportunities in different ways according to their individual characteristics, interests, and educational needs, suggesting that embodied and multimodal engagement promoted inclusive participation and supported diverse pathways of meaning-making and communication.

The impact of this teaching strategy was evident in observations of the school-community like a place where pupils, teachers and families said they felt valued and recognized others as members of the same group.

Analysis of the results

3.1 Subjectivation, socialization and qualification

The teachers' calls were not limited to verbal instructions, but were expressed through situations, materials, spaces, sounds, images, movements, questions and collective tasks, fostering embodied mediation (cf. Gomez Paloma & Damiani, 2015). Pupils were invited to take part in the experience through different forms of participation, according to their possibilities and personal learning profiles.

They were free to choose how to participate to the experiences, because they had many opportunities to create their own knowledge through interaction with others and the world in space and time, responding in multimodal modality, by drawing on their prior experiences and comparing them with the others and the learning opportunities lived.

3.2 Indicators used to observe "pupils' responses" to the "teacher's calls":

1. ability to ask questions;

2. ability to answer questions;
3. ability to produce traces;
4. ability to create new activities;
5. signs of happiness, wellbeing and emotional involvement;
6. participation in group activities;
7. interaction with peers;
8. progressive use of symbolic forms;
9. acquisition of disciplinary competences.

3.3 Results of observation in High-Global-Involvement Experiences

The first table compares the HGIE microproject with Biesta's concepts of subjectivation, socialization, and qualification, showing correspondence between observed teacher responses and the three categories. The second assesses IEP goals achieved by pupils with SEN through peer participation in multimodal HGIE, based on teacher observations and personalized assessments. The third examines how the four stages of the micro-project promote the development of subject-specific skills within an educational environment focused on well-being and pupils' preferences, according with National Guidelines (Ministerial Decree 254/2012).

Dimension	Meaning	Observable indicators	Tools of observation	Pupil behaviors showed that reflect the three domains of Biesta's educational framework
Subjectivation	"Here I am"	Responds to the teacher's call Shows curiosity Expresses sensations and emotions Leaves personal traces Asks/answer questions Create new activities	Observation of teachers Pupils HGIE Diary Graphic and writing reprocessing	Choose what to do Observed the environment and reproduced/described elements (drawings, writing descriptions, discussion) Recognized sounds and noises (listening registration) Expressed perceptions, and emotions (discussion) Expressed personal meanings (drawing, discussion, writing description)
Socialization	"Here I am, with others"	Interacts with peers, Shares materials Listens to others Participates in collective reprocessing Accepts different forms of expression	Observation of teachers Art reprocessing Writing reprocessing Organization of the Wall poster	Worked in pair, group without conflicts Discussed with the other about perceptions, emotions and chooses Created shared representations Participated in collective sound graphic, bodily and verbal activities reading score and play together Summarized all the experience in a final product

				composed with others
Qualification	“Here I am, with others, in the world, and I learn”	Uses disciplinary language Organizes information into a drawing ora a text Creates symbolic representations Describes and recognizes disciplinary, cognitive, social, social-emotional competences.	<i>Observation of teachers</i> <i>Pupils HGIE Diary</i> <i>Disciplinary reprocessing</i> <i>Evaluation of disciplinary activities</i>	Pupils moved from sensory experience to multimodal reprocessing, acquiring third-grade competences as required by the National Guidelines (Ministerial Decree 254/2012) For example: <i>Listen to, recognize, and distinguish sounds, noises, and silences in the surrounding environment and in musical pieces.</i>

Table 1. Indicators for the observation of subjectivation, socialization and qualification

Pupil profile*	Main barriers	Inclusive supports	Observation methods	Objective of IEP	Behaviors Related to the IEP
Child with intellectual disability	Difficulty in abstraction, need for concrete supports, slower processing.	Visual aids Simplified language Peer tutoring Repeated exposure to experiences Structured and unstructured concrete material	Structured paper-and-pencil observations Reflective field notes of the logbook Circle-time Conversations with pupils Educational assessments (IEP learning objectives)	Answer simple questions Produce traces Participate in group activities Connect experience to concrete meanings Complete paper about specific leaning objectives	Acquisition of basic disciplinary competences Participation in pairs and in group every day Ongoing participation in shared tasks

Girl with spastic tetra paresis	Motor limitations, need for accessible spaces and adapted materials	Physical accessibility Adapted positioning Shared materials Verbal participation Peer support Repeated exposure to experiences Structured and unstructured concrete material	Structured paper-and-pencil observations, Reflective field notes documented in a logbook Circle-time Conversations with pupils Educational assessments (IEP learning objectives)	Participate in observation and discussion Make choices Take on a role in group activities Participate in artistic and craft activities	Participation in activities every day Contribution to group work (making colored marks, smearing the paint, saying single words or simple sentences, using gestures) Acquisition of contents through accessible modalities (recognized face, pictures) Smile at schoolmates
Boy with autism spectrum disorder	Communication difficulties, need for predictability, possible sensory selectivity.	Structured routines, visual supports, sensory mediation, preferred materials, gradual participation.	Structured paper-and-pencil observations, Reflective field notes documented in a logbook, Circle-time Conversations with pupils, Educational assessments (IEP learning objectives)	Participate through gaze, gesture, sound, movement, Make choice Leave symbolic traces. Stop stereotypes and synkinetic movement	Looking school mates in the eyes when the talk Turning his gaze towards the sound Participation in activities every day Acquisition of contents through accessible modalities

Table 2. Observation of pupils with disabilities within the inclusive pathway

**The information included in the table regarding pupils with special educational needs is provided solely for illustrative purposes and does not pertain to specific individuals, although it refers to specific documents such as Functional Diagnoses, Dynamic Functional Profiles, and Individualized Education Plans.*

Phase of the pathway	Main indicators	Disciplinary areas Involved <i>National Guidelines (Ministerial Decree 254/2012))</i>	Competences acquired	Correspondences between observed outcomes and the Traguardi per lo sviluppo delle competenze <i>National Guidelines (Ministerial Decree 254/2012)</i>
First High-Global-Involvement Experience	Curiosity Attention Sensory explorations Emotional involvement	Science Geography Physical education	Observation of natural phenomena Orientation in space Bodily perception, Respect for the environment and others.	Science: the pupil develops an attitude of curiosity and exploration towards the world, observes phenomena and identifies significant aspects. Geography: the pupil uses spatial references and begins to orient himself/herself in the environment and demonstrate awareness of their own body and of environmental care Physical Education: the pupil recognises and communicates different bodily states and uses the body appropriately in relation to space.

Multimodal reprocessing	Production of traces Verbalization Movement Sound reproduction Drawing.	Italian Music Art Physical education	Description of experience, use of expressive languages, rhythm and sound exploration, graphic and bodily representation.	Italian: the pupil participates in communicative exchanges, listens and expresses experiences and ideas clearly. Music: the pupil explores different sound events and uses voice, body and simple instruments in expressive activities. Art: the pupil uses different techniques and materials to produce expressive representations. Physical Education: the pupil uses the body to communicate and express emotions and experiences.
Shared reflection	Answering questions, comparing points of view, listening to peers	Italian, History Physical Education	Oral communication Listening Turn taking Cooperation Shared construction of meaning	Italian: the pupil participates in conversations and discussions, listens to others, respects speaking turns and expresses experiences, ideas and opinions in an increasingly clear and coherent way. The pupil understands oral messages and formulates relevant questions and answers. History: the pupil recognizes elements of the past and present experience and organizes events and experiences according to temporal relationships (before/after, first/then/finally), using appropriate temporal language to reconstruct what happened. Physical Education: the pupil recognizes and communicates different bodily and emotional experiences, understands the value of rules and cooperation, and interacts positively with others during shared activities.
Progressive symbolization	Creation of signs Create maps, Sound score/notation Collective representations	Art Music Mathematics Italian.	Use of symbol Classification Sequencing Organization of information.	Mathematics: the pupil classifies, organizes and represents information using appropriate forms of representation. Art: the pupil produces graphic and visual representations using signs and symbols. Music: the pupil recognizes and represents simple rhythmic and sound sequences. Italian: the pupil organizes and communicates information through increasingly appropriate linguistic forms.

Table 3. Connection between pathway phases, indicators and disciplinary competence

3.4 Assessment in embodied learning environments

Assessment, in embodied learning environments, requires approaches able to recognize complex developmental processes that exceed conventional academic indicators. Growth can manifest itself through participation, relationships, collaboration, self-regulation, creativity, the ability to take the initiative and to construct shared meanings, drawing on both cognitive and socio-emotional skills.

From this perspective, evaluation assumes an interpretive and generative function: it documents trajectories of change, processes of engagement, emerging forms of learning, and also those aspects that may not appear immediately or visibly, but have been internalized and metabolized by the pupil. These empirical accounts are based on interviews conducted with the pupils whilst they were attending the next level of education or once they had reached adulthood.

In this approach teachers will be oriented toward personalization and enhancement of each pupil's potential with an inclusive pedagogical perspective, which aims not only to respond to their individual needs but also to recognize and enhance each pupil's talents, and distinctive ways of engaging with knowledge and experience. Inclusive education, requires the design of learning environments capable of valuing individual differences as a constitutive dimension of the educational context.

The HGIE places the focus on the pupil but also on the world, and goes beyond “learnification” (Biesta, 2021/2023) – which assesses performance in different subjects – and beyond constructivism, in which pupils create their own knowledge independently.

The approach proposed here, including in the context of assessment, recognizes the central role of pupils and the world, not only in the here and now, but also in the past, the present and the future. The subjects and their associated learning outcomes are the tools that pupils develop independently on their journey of discovery, responding to the teacher's guidance, feeling valued and, in turn, valuing others and the world.

The teacher, who give a “nudge” or a “support”, can therefore offer the “gift” of education through the HGIE to help pupils to create knowledge and to grow.

Within the Italian pedagogical tradition, inclusive teaching has emphasized the need to establish a dynamic connection among educational planning, systematic observation, and assessment, within a logic of educational co-responsibility involving teachers, learners, families, and the wider school community (Cottini, 2017; Ianes, 2006), as described in the micro-projects.

From this perspective, teaching becomes a collaborative and reflective process which sees teacher and pupil engaged in a common pathway of meaning-making and development of the *curriculum* (Miller, 2019). This pathway can be understood not merely as the horizontal curriculum of disciplinary and interdisciplinary knowledge, but as a broader *curriculum vitae*: a historical-vertical perspective and existential dimension of education that rediscovers the original Latin meaning of the term *curriculum* (*currere*), which indeed means a course, a journey, or a path. In this sense, education concerns not only the acquisition of knowledge and competences but also the construction of a personal trajectory of participation in the world, with and through others, within a biographical and existential sense (Orsi, 2021).

4. Discussion

The educational experience examined in this paper offers elements for reflection on the relationship among embodiment, inclusion, learning, cognition and subjectivation, socialization and qualification (Biesta 2021/2023).

First, this educational approach is supported by the assumption that bodily involvement contributes substantially to global development: cognitive, emotional, relational, social, and motor. It is grounded in a growing body of theoretical and empirical research highlighting the relevance of bodily engagement as a constitutive dimension of human development and learning. Contemporary perspectives in embodied cognition challenge the traditional separation between cognitive processes and bodily experience, suggesting that knowledge construction emerges through the continuous interaction among perception, action, emotion, social relationships, and the environment (Lakoff & Johnson, 1999; Varela et al., 1991).

Learning seems to emerge as a relational and pedagogical “call” from the teachers (Biesta, 2021/2023), which invites pupils to engage with the world, with the others, and with themselves. This approach fosters processes of meaning-making and subjectivation and develops through active participation, exploration, interaction, and reflection. This forms part of the journey undertaken together with and in the world, with the others, in space and time.

Second, this theoretical framework is particularly relevant for inclusive education because it's founded on the principles of Universal Design for Learning. It showed the importance of designing educational environments capable of welcoming pupils' diversity. The plurality of languages and expressive channels enabled each participant to find modes of access, action, and communication consistent with their own resources. Universal Design for Learning (UDL) provides a scientifically grounded framework for designing flexible learning contexts in which multiple means of engagement, representation, action, and expression enable pupils with different abilities, interests, and learning profiles to participate meaningfully (CAST, 2024; Meyer et al., 2014). Within this perspective, the plurality of languages and expressive modalities is not merely an accommodation for pupils with difficulties, but a pedagogical resource capable of enriching learning opportunities for all pupils.

Third, the proposed educational pathway is also supported by research emphasising the role of experiential and outdoor learning environments in promoting cognitive, emotional, social, and creative development. It highlighted the educational value of natural environments and sensory exploration.

Direct interaction with authentic contexts generates significant opportunities for inquiry, creativity, exploration, problem-solving and symbolic re-elaboration, as teachers observed in the multimodal reworking. The activities described were lived through the body and, therefore, as embodied experiences, with a view to constructing meaningful knowledge by direct interaction (Kolb, 1984; Waite, 2017).

Furthermore, sensory engagement with natural environments has been associated with increased attention, emotional regulation, curiosity, and motivation, supporting learning processes that involve both cognitive and affective dimensions (Dadvand et al., 2015; Kuo et al., 2019). In this sense, natural environments function not merely as physical settings but as relational and sensory spaces in which pupils can develop embodied forms of understanding and symbolic reprocessing.

Overall, this experience put emphasis on the relevance of educational approaches that recognize the interconnection among cognitive, emotional, social, and motor dimensions, with respect for the developmental stages of the childhood.

Such approaches are consistent with developmental perspectives that conceive the pupil as an active subject who constructs knowledge and identity through a dense network of bodily, relational, linguistic, and cultural experiences (Merleau-Ponty, 1945/1962; Rogoff, 2003). From this viewpoint, inclusive education does not simply aim to guarantee access to the *curriculum* (Orsi, 2016) but seeks to create conditions in which every learner can participate, express their potential, and construct their own trajectory of development and participation in and with the world. Subjectivation, socialization and qualification allow the pupil to reach the school *curriculum* aims as well as their *curriculum vitae*.

5. Conclusions

High-Global-Engaging Experiences (HGIE) and multimodal reprocessing can be usefully reinterpreted in the light of functional psychomotor theory (Le Boulch, 1993), which had already guided the *Interdisciplinary Project-Based Approach* (IPBA) (Bini & Di Giulio, 1997). Furthermore, they are underpinned by embodied cognition and universal design for learning. The integration of these three approaches provides a useful framework for supporting pupils' holistic growth and development of the best inclusive practices. Teachers' observations demonstrate that through the educational opportunities described, which involved bodily mediation and multimodal exploration, the pupils had shown more active participation. Indeed, the bodily dimension was not regarded as a secondary element, but as an organizing principle linking experience, knowledge and relationships.

The pathway described suggests that educational innovation should continue to overcome mind-body dichotomies by adopting holistic approaches that support the pupil's integral development, while acknowledging the relational dimensions of learning in space and time.

Future research should investigate the long-term effects of embodied educational practices and examine their potential in different school levels and educational contexts.

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