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Double Blind Peer Review

Citazione

Belfiore P., Saraiello E., (2023) Environment and space: learning outdoors, *Giornale Italiano di Educazione alla Salute, Sport e Didattica Inclusiva - Italian Journal of Health Education, Sports and Inclusive Didactics*. Anno 7, V 3. Edizioni Universitarie Romane

Doi:

<https://doi.org/10.32043/gsd.v7i3.993>

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gsdjournal.it

ISSN: 2532-3296

ISBN: 978-88-6022-483-5

ABSTRACT

The aim of this paper is to underline the importance of *Outdoor Education (OE)* as a fundamental practice in learning processes, especially in the school context. The OE encourages the creation of knowledge circuits oriented towards exploration and experimentation, favoring the acquisition of autonomy. For outdoor experiences to be truly meaningful, it is necessary to reserve precise moments and spaces for reflection on the experience conducted to make it operational.

Obiettivo del presente contributo è sottolineare l'importanza dell'*Outdoor Education (OE)* quale pratica fondamentale nei processi di apprendimento, soprattutto nel contesto scolastico. L'OE incoraggia la creazione di circuiti di conoscenza orientati all'esplorazione e alla sperimentazione, favorendo l'acquisizione delle autonomie. Perché le esperienze all'aperto siano realmente significative, è necessario riservare momenti e spazi precisi alla riflessione sull'esperienza condotta per renderla operativa.

KEYWORDS

Education, Spaces, Learning
Educazione, Spazi, Apprendimento

Received 22/09/2023

Accepted 18/10/2023

Published 07/12/2023

Introduction

Space and environment are a fundamental component of learning activities. Secondo Cera (2009) and Antonietti & Bartolini (2019) represent training devices that contribute to defining the varied and multidimensional character of the most varied educational situations. The way of organizing the spaces dedicated to learning is fundamental to understand the didactic model put in place (Bortolotti, 2018). Space and environment communicate the margins of movement, the actions of the protagonists of the educational relationship, as well as the strategies and tools that will be used. In the school context, space is "the architecture of teaching [...] not only topology, but proxemics of didactic action" (Damiano 2013), so it should not be understood only as a physical space, but should be considered as a real place dedicated to enhancing the relationship between environment, education and learning. The spaces of the school are many, not only in the physical sense (Fiennes et al., 2015; Malinin, 2012). They are indoor, outdoor, personal, group, learning, common spaces. We can distinguish the space of teaching, understood as the *container* in which actions and paths are placed, from the environment, which becomes such only when the space conceived and designed by others begins to be acted with intentionality by the protagonists of shared knowledge through relationships. The spaces reserved for the educational process must be organized analytically, in order to assign them a meaning and not neglect the so-called *collateral learning* (Dewey, 1938), which are the core of entire training models. In fact, in compliance with Dewey's indications, it is necessary to transmit experiences and not teach a quantity of notions (Lucisano, 2013; Santoianni, 2014). In a constructivist perspective, complexity, multidimensionality and contextualization are constitutive elements of an educational process that invests the *container spaces* to make them become *environments* in which the teacher is required to configure models able to connect actors and activities in located contexts (Damiani, 2013; Hertzberge, 2008). To generate the sense of the didactic situation is the link between subjects, activities and contexts. In particular, the context in which the action is placed conditions the ways of understanding and implementing the actions, which are, therefore, inseparable from the circumstances (Di Gennaro, 2019). In this sense, it is the action that is a crucial element and to operate a continuous mediation between the model and the events, between subject, environment and objectives and to require a further step in reflection (Canevaro, 2013). Only through this moment of awareness that the space of action can become the space of knowledge. We are still in a school where the places dedicated to teaching reveal the centrality reserved for the teacher. Over time, there have been countless actions to adapt the places of formation to the needs of students. In the face of legislative measures, educational guidelines and the considerable work of innovation carried out by many educational realities, the

spaces in the physical sense that today's school reserves for students are not always adequate and sufficient (Miur, 2014). The transformations that affect the school can be understood as an expression of an educational emergency that calls into question the knowledge and consolidated experiences of education and / or education. These, together with the need to rebalance the lifestyle of the students towards a more human and natural reality, has led to the birth of numerous experiences of outdoor education, ranging from schools in the woods to outdoor schools.

1. Environment and learning

Since the early years of the twentieth century, from a pedagogical point of view, the importance of the relationship between the psycho-physical development of the child and the moral and material environment in which mind and body grow up has been underlined. Maria Montessori emphasized the complementarity between the physical and moral dimensions within the environment in which we take our first steps. The pedagogy of the '900 has always reiterated the importance of the space-body-mind-education nexus. The surrounding environment shapes our body and consciousness and conditions our journey throughout life (Goleman, 2006). In recent decades, cognitivism has argued about the direct derivation of our behaviors from the characteristics of the surrounding environment (Borgogni & Di Gennaro, 2016). Starting from these assumptions, thinkers and scholars from different fields of knowledge have emphasized the relationship between environment, education and behavior. Richard Serra, one of the greatest environmental artists of our time, describing the impact that built or, rather, anthropized space causes on our lives, spoke of the *opportunity we all have to become something different from what we are, building a space that contributes to giving us something to add to the experience of who we are* (Robinson, 2014; santoianni, 2014). With respect to educational actions, the environment has always been one of the constitutive categories of teaching, indeed, it is precisely the "cognitive field" that deals with the consolidation and evaluation of "learning environments", that is, of specific contexts, resulting from appropriate integrations of cultural, regulatory, technological artifacts and specific human actions, considered suitable to favor acquisitive processes "(Calvani, 2000). The conceptual distinction between spaces and environments inevitably leads to the question of when school spaces can be considered in terms of learning environments. According to INDIRE's School Architecture Research Group (2016), spaces should be flexible and polymorphous in nature to be considered learning environments. In particular, individual spaces must allow each student to activate their own knowledge construction processes; those of the group, must encourage exchanges and forms of collaboration through the use of suitable teaching techniques. Libraries, gardens, vegetable gardens,

woods, multimedia spaces, laboratories do not represent an innovation or a rethinking of the places of training per se, but can be considered *other spaces* (Bauman, 2001). In an almost osmotic process, the classroom, understood as a space of action and knowledge, should become a widespread *environment* and represent only one of the many places of learning. It is necessary, at this point, to try to understand how the configuration of a space *other* than the classroom can favor the realization of authentically significant experiences (Squarcina, 2022). In particular, the influence exerted by the configuration of spaces becomes an even more central issue in the context of educational-didactic practices placed in *natural* outdoor environments, since, in these cases, the change of perspective invests the entire setting and, with it, all aspects of the action and educational relationship. These considerations refer to the current issue of freedom in education, to the relationship between indoor and outdoor in school, actions more properly called Outdoor Education.

2. Outdoor Education and its characteristics

Educational experiences conducted *beyond the confines* of the classroom can become privileged opportunities, capable of initiating direct knowledge paths that pass from sensoriality and that involve the subject in a global way in all its languages: motor, symbolic and representative (Benetton, 2020; Casey, 2017). They encourage the creation of knowledge circuits oriented towards exploration and experimentation, favoring the acquisition of autonomy. From a cognitive point of view, outdoor activities increase concentration, *problem-solving* skills, attention, spontaneous observation and, last but not least, reflection (Szczepanski, 2006). Outdoor activity reduces stress, exposure to conflict, and stimulates the development of a sense of autonomy (Moore, 1996; Santos *et alii*, 2013). The contact with nature also favors the start of environmental education paths without mediation; That is, it allows you to work on the ecological aspects of that "content category" environment mentioned above. Obviously, in order for outdoor spaces to become learning environments in the school context, it is necessary to ask the teacher for a great design work that is based on Outdoor Education. The latter has several definitions, in particular, four are considered to be the most exhaustive. The National Association of Outdoor Education (NAOE) proposes the following definition: "Outdoor Education is a means of approaching educational objectives through guided direct experience in the outdoor environment, using its resources as learning materials. This experience combines both a study of environmental aspects and topics and participation in those activities associated with the natural environment" (Hunt, 1989 cited in Kida, 2017). Peter Higgins, professor at the University of Edinburgh, and Chris Loynes, professor at the University of Cumbria, propose the following definition: "Outdoor Education has often been considered to

be an approach to education which can permeate throughout virtually any curricular subject area. In addition it is used to satisfy the aims of those wishing to encourage outdoor recreation, environmental awareness and personal and social development: a role as broad as any subject area within the field of human experience" (Higgins & Loynes, 1997). The definition taken from the German literature of Professor Isabell van Ackeren is: "Die Erlebnispädagogik ist ein reformpädagogisches, handlungsorientiertes und erfahrungsbezogenes Konzept und entspringt somit einer schulischen Traditionslinie und schulpädagogisch festgestellten Handlungsbedarfen, die außerhalb fachlicher Kompetenzen bestimmter Unterrichtsfächer liegen. Dazu zählen beispielweise – u.a. bedingt durch eingeschränkte bzw. veränderte Erfahrungsräume für Kinder und Jugendliche – Bewegungsarmut und verringerte Geschicklichkeit, fehlende Eigeninitiative, Spontaneität und Kreativität sowie die zu fördernde Fähigkeit, kooperativ zu handeln und sensiblen für die anderen Mitglieder einer Gruppe zu sein" (Van Ackeren, 2005). A final definition, which is considered complete because it appears to be the goal of Outdoor Education, is: "Experiential education is an action-oriented educational concept. Physically, mentally and socially challenging, not ordinary, experience-intensive activities serve as a medium to promote holistic learning and development processes. The aim is to support people in their personal development and to encourage them to participate responsibly in society." (Paffrath, 2013). As can be seen from the aforementioned definitions, Outdoor Education is a pedagogical approach that includes educational activities carried out outdoors in which students are the protagonists who can learn through practice: we talk about hands-on activities. In the case of outdoor experience, mediation is very limited, because, although it is the teacher who chooses techniques and tools according to the purpose he wants to achieve (Santelli, 2018; Satta, 2014). The student has much wider margins of *movement* than the classroom or a simple laboratory can reserve for him. The nodal elements of such a renewed attention to outdoor spaces become, therefore, the triad of experience-action-reflection. According to Bortolotti (2018), since their appearance in the school world, outdoor educational activities have always been oriented towards enhancing experiential learning. Often, however, the lack of reflection and activation of critical thinking has ended up nullifying the value of such practices, which have remained anchored to the singularity of the moment and the context. In this direction, the application of reflexivity, the third element of the aforementioned triad, can become particularly relevant. Activating the resource of reflexivity on practices, on the implementation of actions that are significant for the subjects involved and that are therefore able to move, motivate, activate the learning process, means enhancing the activities carried out, starting paths of attributions of meaning and meaning of metacognitive matrix able to produce a learning that enhances the location that has favored it, but which, at the same time, guarantees continuity and

recursiveness of the educational experience (Casey, 2017). In summary, the most relevant aspects that characterize the educational approach of Outdoor Education are the following aspects:

1. The proposed activities are hands-on, therefore focused on the active participation of the students and take place in the open air;
2. the teacher proposes real and authentic learning situations;
3. the choice of the place where the lesson is held is decisive, as it is carried out according to the stimuli that you want to offer to the children and the group;
4. The main activities are those that allow students to activate the five senses, consequently also the consideration of emotions plays an important role; At the end of the activities there will be moments of discussion, in order to share the experiences lived by the children;
5. In order to be able to tackle the activities, children refer to everyday life experiences;
6. during the activities group work is valued;

Outdoor Education activities comply with Kolb cycle theory. The latter, referring to the results of the research of Dewey, Lewin and Piaget, bases his theory linked to the cyclical nature of learning.

Especially:

1. concrete experience tends to involve itself fully, openly in new experiences;
2. Reflective observation aims to focus on these experiences and observe them from many perspectives;
3. abstract conceptualization creates concepts that integrate observations into logically valid reference theories;
4. Active experimentation tests hypotheses and its alternatives through action.

The educational approach of Outdoor Education has objectives on different levels of personal development: affective, cognitive and psychomotor. In 1986 Priest created his "Outdoor Education Tree" (Fig. 1) which highlights two different approaches to Outdoor Education. It stands out the Adventure Education, which includes outdoor sports activities, and Environmental Education, therefore environmental education and sustainable development. The first focuses on the relationship that the student has with himself and with others, the second, instead provides for the analysis of the relationships present in ecosystems and buildings and homes present in the surrounding environment.

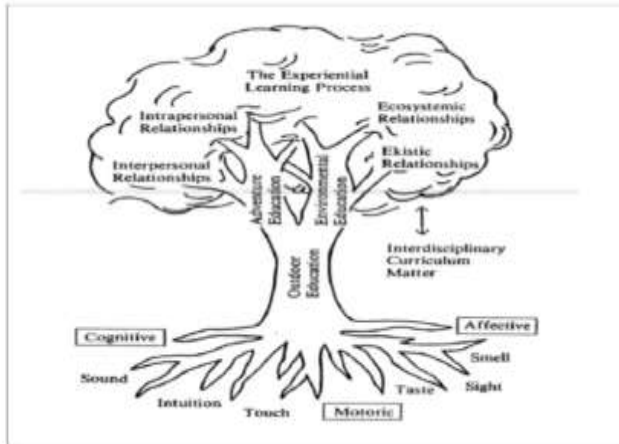


Fig. 1 Outdoor Education Tree, Priest, 1986

Later, in 1997, Peter Higgins and Chris Loynes created the model proposed in Figure 2, which illustrates the relationships between the various fundamental components, necessary to be able to design activities according to the Outdoor Education approach. The two authors argue that the educational goal is to promote the personal and social development of the child.

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Fig. 2 Higgins & Loynes, 1997.

In addition, by carrying out lessons outside and proposing issues related to the environment and sustainable development, students can be sensitized on respect for the environment in which they live and nature. Introducing outdoor education into the curriculum has many advantages on different levels:

1. *Educational and pedagogical plan.* The observation of nature makes Outdoor education an opportunity to look at the world through the eyes of a scientist, an anthropologist, a historian, a sociologist, favoring the understanding of the interdependence between ecological systems and respect for nature.
2. *Psychological plan.* Students, learning to measure themselves with the unexpected and the unpredictable, enhance the sense of effectiveness and self-awareness. Theories on biophilia state that the subject perceives a sense of well-being and wonder for the discovery of plants and animals, situations not previously observed and in a systematic way. This results in a sense of security in dealing with uncertainty, complexity and novelty.
3. *Social and inclusive plan.* Students learn to make new experiences, discover companions with whom they had not come into contact and make themselves known for provisions that could not be revealed indoors. The advantages are a greater willingness to cooperate, communicate and respect diversity, both in the animal and plant world and in the social world. Friendships are strengthened and those with teachers become deeper.
4. *Physical plane.* Students exercise, move, run, oxygenate. Walking, running, climbing, jumping, avoiding obstacles, are activities that train muscle strength and promote gross motor and fine motor skills.
5. *Organizational plan.* Outdoor education is linked to an idea of open school, connected to a territory considered "content" and "learning environment". The activities are designed within the curriculum as an extension of what happens 'inside the classroom', are based on direct experience, laboratory methodologies and provide for the active involvement of students.

Today the experiences of Outdoor Education have found several practical applications both in the school "Outdoor Learning" and extracurricular Out of the Classroom (Beames et al., 2012; Waite, 2014; Agostini & Minelli, 2018; Cavalchi, 2017). Some public schools, which in our country adopt this pedagogical approach, have come together in the network of purpose called National Network of Outdoor Schools. It is a Network of purpose that started in 2016 thanks both to the tradition of Bolognese schools and to today's outdoor educational experiences (Bortolotti, 2019; Schettini et al., 2015). The national experimentation is proceeding with simplicity and motivation in about thirty schools, an indicative element of how in our country there have long been good examples of teachers of state primary schools who practice outdoor schooling. The Network has actively intercepted and qualified these precious and decisive presences within schools, but also in environmental education centers and in local authorities most attentive to these issues. Further projects consistent with the Outdoor Education approach come from pedagogical activism, which suggests stimulating development processes not

only at school. Opportunities for choice must be created without planned actions. This means putting the process in the foreground, ensuring that everyone is "on the way" (including educators) also because to accompany people on a genuine journey it is good to listen to oneself, to seek together, to question one's own role. To this end, moments and observation tools capable of detecting the progress of the processes themselves are needed.

Conclusions

Outdoor *education* must be included in the ecological paradigm that has its own epistemological and gnoseological system. It starts from the now widespread awareness that educational spaces are one of the essential cornerstones of learning and teaching processes, real training devices that contribute to defining the proxemics of didactic action. Outdoor Education is not just a method, but an attitude on the part of the teacher. It reveals itself the possibility of starting paths oriented to reflection at multiple levels and not only on what we have defined as educational spaces *other than the classroom, but also on other learning environments*. In the environment there is an educational power that needs to be exalted, valued, but also and above all primarily considered because it is always and in any case an intervening variable in all educational activities. For outdoor experiences to be truly meaningful, it is necessary to reserve precise moments and spaces for reflection on the experience conducted to make it operating.

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