



FROM OUTDOOR EDUCATION TO OUTDOOR SCHOOLS: A NEW WAY OF TEACHINGⁱ

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Abstract:

The contribution examines the most advanced national and international literature linked to the approaches underlying the models of Outdoor Education and Outdoor Schools, launching an examination of those studies that connect to the concrete benefits that such approaches would bring to the learning of students in contexts. schools and paying attention to those dimensions of teaching which are central to guaranteeing quality training and which should be integrated within a sustainable and integrated didactic action space. We retrace the first important experiences of pedagogues of the early twentieth century who, in the relationship between culture and nature, traced the way for a "green pedagogy" and paths of "green schools" up to the of "green schools" up to the most recent experiences, which today are the expression of an intense debate aimed at guaranteeing a school sustainable.

Keywords: outdoor education, outdoor schools, green pedagogy, green schools

1. Introduction

1.1 International experiences of outdoor school and Outdoor Education

Initially, open-air schools were born for medical and welfare reasons and to meet the needs of children with specific diseases (especially widespread in overcrowded urban suburbs), as in the case of tuberculosis. Subsequently, after the experiences conducted by Giuseppina Pizzigoni's Rinnovata (Pizzigoni, 1914; 1929; 1946), in the twentieth century, open air schools, called Waldschulen in German, open air schools in English, écoles en plein air in French, etc. (Natalini, 2021), spread, in opposition to the traditional school,

ⁱ DALL'OUTDOOR EDUCATION ALLE SCUOLE ALL'APERTO: UN NUOVO MODO DI INSEGNARE

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gradually assuming an increasingly pedagogical character (Farnè, Bortolotti, & Terrusi, 2018, pp. 51-52).

It is precisely starting from the thought of Giuseppina Pizzigoni that the idea of outdoor school and the conception of the central role played by nature in global education were established with the aim of ensuring the psycho-physical well-being of the person, elements that over time they have remained at the basis of contemporary culture, and therefore still very relevant today (Chistolini, 2009).

It is interesting, in this sense, to pause in the reconstruction of a historical path that led to the widespread diffusion of Outdoor Education, literally “outdoor education”, carried out in open spaces, considered vital for hygiene and health but also real “places” full of educational opportunities, which *“invites us to take on the external space, starting from the most easily available one, as a learning environment and normal living place for children [...] is, first of all, the right of the child to inhabit outdoor spaces, to experience in contact with nature, to experience the dimensions of play and movement, of sociability and adventure”* (Farnè, Bortolotti, & Terrusi, 2018, p. 37).

The external environment and especially nature are considered formidable learning environments, placed in continuity with the external ones (and not in opposition, as sometimes happens). Starting from this consideration, Outdoor Education allows the demolition of the managerial role of the teacher, bringing with it the development of the autonomy of the students, of the respect of the rules spontaneously by the children, who learn to assess the risks by putting themselves to the test “in the environment”. In this form of education, the attention that the child has for nature and reality is the result of his curiosity, his asking pertinent questions, observation, real interest, etc., but also of the time that is granted to him. to learn according to his needs. Respect is shown here for the child's rhythms, for those proper to him and really lived, and for the methods and times of learning. At the same time, this also leads to something that affects his physical well-being (such as an increase in the immune defenses of children, as we have been able to observe even in this moment of health emergency), as the learning conditions in a natural context cause that atmospheric conditions are not considered a limit to be overcome but become manifestations of nature itself and further opportunities for knowledge, where it is sufficient to have suitable equipment.

Outdoor Education allows the learning of skills through active methods and the use of play as a cognitive tool, which become a resource for the development of positive social relationships and a more relaxed social climate that produces a lowering of tensions and conflicts between children (Farnè, Bortolotti, & Terrusi, 2018, pp. 41-43). Over time, there have been many studies and surveys at the international level that have shown how spending time outdoors and in contact with nature allows for an integral education of the person, bringing a large number of psychological, physical and social benefits, and educational, such as increasing confidence, self-efficacy, well-being (Dozza, 2019), self-awareness, cooperation, respect for others, positive behaviour, communication skills, friendships, sharing, direct experience, and participation in cultural heritage.

The benefit of “living” in different environments is reflected both on physical strength and balance, and, on an intellectual level, on the development of transversal

knowledge and skills, on environmental awareness, on respect and protection of the natural environment, on acquisition of skills of problem solving; in essence on all that set of skills essential to exercise what can be traced back to what we define “*active citizenship*”. All these positive results gradually led to the birth of Nature-Based-Therapy, meaning by this expression the set of practices and actions that use “*exposure to nature*” as a tool to prevent or cure a state of disease (Farné, Bortolotti, & Terrusi, 2018, pp. 67-95).

Some research conducted in Great Britain has highlighted not only the positive effects of Outdoor Learning, coming to define precise indicators that guide educators and adults to conduct quality outdoor learning.

The positive effects detected by the literature and attributable to Outdoor Learning can be considered broad spectrum: the permanent and continuous training of each person from pre-school to adulthood, the enrichment of the curriculum thanks to possible transdisciplinary and interdisciplinary connections, enhancement of academic success, the development of specific life skills, the personal growth of individuals, a better ability to solve problems, higher levels of social and emotional well-being, a better level of health, the development of a healthy life and more interests broad and, above all, greater possibilities to promote sustainable use, as outdoor learning promotes caring and empathic behaviors towards the environment itself (High Quality Outdoor Learning Working Group, 2015, pp. 3-4).

We can, therefore, define Outdoor Learning as a kind of learning that implies not only opening to the outside as a vehicle for the development of meaningful and unforgettable experiences to be transformed into skills, behaviors and knowledge, but which also contains stimulating and adventurous. Regarding to improve the effects of such learning, the results should be progressive and integrated into the programs and that there is a collaboration between different schools and educational agencies, such as voluntary youth organizations, clubs, sports societies, etc., in such a way as to act to territorial level as an integrated system. These results would be such as to invest different plans of well-being: fun, confidence and character, health and well-being, social and emotional awareness, environmental awareness, activity-related skills, personal qualities, life skills, increased motivation and desire to learn and to broaden one's interests and horizons (High Quality Outdoor Learning Working Group, 2015, p. 8).

Numerous surveys carried out to explore these aspects have clearly clarified how correct and well-planned Outdoor Learning experiences add value to daily classroom experiences and produce a positive impact on young people on a cognitive, emotional, physical, behavioral level, but also on the level of interpersonal skills. and social, attitudes and perception of self, commitment, environmental awareness and active citizenship etc. However, some main barriers have also been identified that would induce schools to avoid feeding Outdoor Learning experiences, such as: fear and concern for health and safety; teachers' lack of confidence in teaching outdoors; school and college curriculum requirements that limit outdoor learning opportunities; lack of time, resources and support; and wider changes within and outside the education sector.

In this regard, however, it is always essential to take into consideration both the factors that facilitate or inhibit Outdoor Learning activities and the factors relating to the

nature of the didactic proposal and the place where the activities take place, as well as those relating to the recipients to which these are directed. Indeed, further research is needed to help define and better explain positive and negative aspects.

This is in order to improve the Outdoor Learning proposals and to broaden their benefits, since this expression can be traced back to a broad and complex domain, which involves a wide range of educational activities (Rickinson *et al.*, 2004) and activates interest of policy makers towards this approach. In addition to the external factors indicated above, other forms of personal influence have been identified, such as: age (as primary school children were more enthusiastic about the experiences than secondary school children); previous knowledge and experience; fears and phobias (such as towards external environments); learning styles; disabilities and special educational needs, to which some barriers still remain today that can hinder their learning outdoors; the characteristics of the environment in which outdoor experiences take place (Dillon, Rickinson, & Teamey, 2006, p. 3).

The National Center for Outdoor Environmental Education and Health or NCU of the University of Linköping in Sweden, in 2004, proposed to include the following in the definition of Outdoor Education:

1. *“Approach that places learning at the interface between experiences and reflection, based on concrete experiences in real situations;*
2. *Interdisciplinary research and the field of education, which implies, among other things: the learning space transferred beyond the classroom, in life, in society, in the natural and cultural environment; the emphasis on the relationship between sensory experience and learning; highlighting the importance of the place [...] The natural environment is conceived both as the place and as the object of learning”* (Crudeli, La Serra, & Monti, 2012, pp. 12-16).

This area can therefore be said to be characterized by sensory-experiential approaches linked to the child's psychological development and learning, whose positive effects are evident to teachers, which, despite some barriers, are well aware of their potential and benefits, from the first moments of starting the school course, that is from the kindergarten and even before (Crudeli, La Serra, & Monti, 2012, pp. 13-16).

Another form of expression linked to this approach is that of "Education Outside the Classroom", literally "learning outside the classroom", conceived as any structured learning that takes place beyond the classroom environment during school days, in the after school or during holidays. It includes activities of a different nature, such as cultural travel, scientific and geographical field research, environmental education, adventure group meetings, outdoor games, visits to museums and cultural heritage sites, etc.

It is configured as a type of learning that supports, strengthens and provides a contribution to the scholastic one, adding value to teaching, as it is conceived as a real interdisciplinary resource. Regarding the role taken by teachers in Outdoor Education experiences, the literature has highlighted how they deem it necessary to have specific training regarding the conduct of Education Outside the Classroom, as well as greater coordination, greater funding and an extended time. to be dedicated to such programs

and more information, materials, places and platforms for sharing virtuous practices (Kendall et al., 2006, pp. 68-75).

Other studies, especially related to the Scottish context, have shown how teachers are aware of the importance, meaning and value that outdoor learning can have for their students, so much so that they employ various efforts to be able to overcome any difficulties encountered in using it (Natalini, 2020). These obstacles pointed out by the teachers are related to different aspects, such as costs, times, safety, transport, etc., which change according to the different contexts and school cultures of reference, since they often concern "situational" problems (it can be deduced that the teachers who intend to carry out outdoor learning activities will find less difficulty in a context that facilitates the carrying out of the activities and more "fertile" in didactic terms).

Furthermore, the very attitudes and personal dispositions of teachers towards the educational value of this approach, as well as the size of the classes, that is the often too high number of children with which they are composed, and an adequate training of teachers are able to influence the effectiveness or otherwise of outdoor learning. It therefore seems useful, in this sense, to work on those factors that "hold back" outdoor learning and to underline the numerous benefits it produces in terms of holistic development (Zanato, 2020). It is about benefits that go beyond just "curricular" reasons. Starting precisely with adequate teacher training, it is also advisable to consider periods of use of this approach in the long term and organize training courses or meetings with experts to be able to create effective educational paths with the aim of building stable caring behaviors and environmental protection (Higgins, Nicol, & Ross, 2006, pp. 50-53). Since the establishment of the first Outdoor Education Centers in 1940 and 1950 to date, this form of education has gradually become a priority received in school and university programs, especially as a tool for education for democracy, the sense of community, sustainability and to active citizenship. It is based precisely on the idea that the natural environment allows the child to learn by doing, observing, discovering, reflecting with joy and, in this sense, it is connected to the Deweyan thought. According to Dewey (1916), the method is based on interaction and the influence of the environment on man and experience, as a continuous process in human existence: knowing means modifying experience and authentic education can only derive from experience.

Man lives in nature, which is changeable. From this emerges a circularity between nature and spirit and between experience and nature, which interact with each other and are a single process of human life. If, as Rousseau first stated, the natural environment can be considered as an ideal place for learning and as the only one capable of developing the child's abilities, in Outdoor Education the attention for it is expressed in the desire to give outside the classroom a meaning steeped in pedagogical wilfulness to allow students to immerse themselves in the context to learn to take care of the environment, to protect it and preserve it, without, on the contrary, exploiting or damaging it, with the idea of making the best use resources and grow the whole community together (Natalini, 2020). Furthermore, in Outdoor Education, the external environment "*plays a fundamental role: girls and boys are encouraged to live an active relationship with nature, through observations and sensory experiences [...] the experiences lived outside, in fact, become insights and research within*

school premises" (Bosoni, 2018, p. 36). A logic of learning through movement with harmony, respect, civic sense and social responsibility also prevails. Smith, Carlson, Donaldson and Masters (1963) have identified ten goals that can be achieved thanks to outdoor education:

- 1) increase in observation skills, as all the senses are involved in the learning process;
- 2) constant growth of interests and improvement of the quality of the experience;
- 3) availability of learning material: nature is the best laboratory available and there are all the necessary materials;
- 4) offer of opportunities aimed at acquiring the skills of being outdoors, which are part of lifelong education and which lead the subjects to become living material;
- 5) extension of the class outside the school walls, allowing children to experience first-hand what they have learned at school;
- 6) opportunity to experience exploration and research, as the teacher during the outdoor experiences is not directive, but leaves the child with his or her space for personal discovery and research, while the systematization of what has been learned takes place in the classroom ;
- 7) help to verbalize and communicate, as the freedom and spontaneity of the outdoor experience make communication easier, the ability to express oneself and elaborate deep thoughts;
- 8) development of knowledge and dexterity, as well as abstraction procedures thanks to outdoor education;
- 9) improvement of the professionalism of the teacher, who continuously enriches the teaching material and creates learning paths together with the pupils;
- 10) encouragement of social life, as the outdoor experience develops better human relationships and educates to live together, to help each other, promote the values of friendship and cooperation and dissolve difficulties, therefore such outdoor education is inclusive.

Phyllis Ford (1986) to highlight how different meanings converge on the expression Outdoor Education, identifies nine categories of meaning:

- 1) environmental education: education that concerns the environment in general, population growth, pollution, resource consumption, urban and rural planning, modern technology and is therefore a broader concept of Outdoor Education (which concerns only natural resources);
- 2) conservation education, understood as the wise use of natural resources;
- 3) residential school education, which involves taking children to places outside of school for 3-5 days with the intention of extending the curriculum through outdoor teaching;
- 4) outdoor education, which includes a wide range of recreational activities carried out in free time (such as camping, etc.);
- 5) outdoor education in non-equipped areas and carried out in places far from built-up areas;
- 6) adventure education, including activities that participants perceive as dangerous, involving risks and requiring educational courses;

- 7) experiential education, or pragmatic educational experiences ("Learning by doing");
- 8) education in parks and reserves, which takes place in national parks, in equipped centers and in the woods where visitors find activities that pique their curiosity and offer information;
- 9) recreation, in the sense of learning that takes place in free time in contact with nature.

In addition, other categories can be added to these meanings, such as:

- 1) energy education, attentive to the wise use of non-renewable resources;
- 2) pedagogy of place, according to which attachment to the social, geographical and cultural place means the formation of a person's identity and nature is seen in terms of man's attachment to the Earth, as in Thoreau (1854);
- 3) education in (in), on (about) and for (for) nature, based on being carried out outside the classroom and dealing with topics relating to environmental education, in an interdisciplinary way;
- 4) forest school, the school in the woods, where the curriculum is integrated with outdoor activities;
- 5) orienteering, which includes various skills, such as knowing how to read a map, knowing how to move with a compass, etc.
- 6) learning outside the classroom, literally "learning outside the classroom" (not necessarily outdoors), which includes educational visits, artistic, musical, theatrical events, visits to museums or parks and other activities carried out both inside the building learning by doing (Chistolini, 2016, pp. 132 -139).

However, a further distinction must be made between "Experiential education" and "Learning by doing". This last "Learning by doing" is a process of learning skills and knowledge that is implemented with the use of active methods used in both informal and formal learning for developing the potential of each and which avoids the adoption of a holistic perspective. On the contrary, "Experiential education" is conceived as an experiential training based on a holistic vision, integrated between personal identity, purpose and meaning, and in which nature plays a central role as an essential agent for the complete development of the human person. and for the awareness of his being (Loynes, 2012, pp. 6-8). To do this, Outdoor Education requires very large external structures and spaces, obtained above all thanks to a collaboration between schools, territories, universities, etc., and adequate teacher training.

Concerning to training of teachers, who must possess a set of key skills, including those related to research, to be able to transform themselves into attentive researchers, ready "*to grasp the mutability of phenomena and relationships*" (Farnè, Bortolotti, & Terrusi, 2018, p. 109) and directors, who activate moments of work and learning, conceiving the inside and the outside as complementary and interdependent elements (Farnè, Bortolotti, & Terrusi, 2018, p. 109). It becomes strategic, therefore, for teachers to know the characteristics of the spaces to highlight limits and possibilities, as well as possess specific knowledge and meta-knowledge, as well as knowing how to stay and respect the natural environment.

The teacher must equip himself with a habitus based on the ability to "get out of the center, maintaining a responsible but not visible control, able to accept the risk inherent in the experience. An adult who manages challenges and does not inhibit them" (Farnè, Bortolotti, & Terrusi, 2018, p. 111), developing a holistic relationship with experience and preparing the environment to facilitate the child's operation. Thus, in Outdoor Education, the teacher is able to use new technologies effectively and in a relevant way, favoring the development of direct observation, the ability to select, reflection, sharing and comparison, etc. at the same time, children to a correct and conscious use of the media. It is interesting to underline that it is parents who are the first to believe that the educational practice of Outdoor Education is relevant for the complete education of their children.

It is therefore clear from what has been stated so far that it is essential to start from school, which, as a "community", becomes the privileged environment for "giving and receiving" active citizenship and for promoting the responsibility of young people and future citizens towards the care and protection of the common natural heritage, as the experience of the "Asilo" in the Ostia Antica forest shows.

2. The "Asilo nel Bosco" in Ostia Antica

The lifestyle of adults and children is today often characterized by a sedentary lifestyle, intense and frenetic rhythms, diffusion and abuse of the media and technological tools and an increasingly consistent distance from nature, so much so that, even in schools, there is a decrease time dedicated to sustainability and environmental education, capable of promoting positive behaviour towards the environment. Hence the need to rediscover the union between man and nature, starting from very young children and from kindergarten and rediscovering the value of the natural environment as an educational source rich in stimuli and resources capable of ensuring global development. of the person (both on a cognitive, social, emotional and physical level, in addition to the fact that it favors curiosity, autonomy, the capacity to be amazed, imagination, creativity, motor skills, senses and freedom). This distancing from nature can be attributable to several factors, including: the massive housing and school buildings built in such a way as not to take into account the needs of the person, who spontaneously feels the need for contact with nature; the excessive fears and over-protection of parents; the abuse of technology and the constantly changing family and social structure (as a result of industrialization, globalization, divorce, women's emancipation, etc.). This distancing from nature can have adverse effects on different levels, such as increased stress, obesity, behavioral or health problems and other risks, which can be associated with a "nature deficit disorder", such as masterfully defined in the volume *Last child in the woods: saving our children from nature-deficit disorder* in 2005 by the American pedagogist Richard Louv, who believes that ADHD also derives in part from this lack of nature. One of the answers to this lack could be precisely Outdoor Education, understood as a global educational approach, which starts from the rediscovery of an authentic need and the awareness of restoring centrality and enhancing the outdoor environment as a source of learning, and that adapts to the needs and socio-cultural characteristics of the territory

and its educational institutions in order to "*develop a sensitivity and an ethical disposition towards the surrounding world, since we are part of the world and the quality of our life is closely connected with the state of health of the ecosystems we inhabit*" (Fromella & Perillo, 2018, p. 74).

In the field of outdoor education there are the Kindergartens in the Wood, which can be called pedagogical realities and ways of "teaching" that were born, starting from the second post-war period, around the 50s, mainly as kindergartens, for children aged 2 to 6, in Northern European countries. The idea comes from Ella Flatau, mother of four children, who spent time with them and with the neighbors' children in the open air and in the woods and who created the first Forest Kindergarten around 1954 in Søllerød, Denmark, thanks also to the collaboration of the other parents. This new educational approach soon spread throughout Europe, taking on different names: in Denmark with the term "Skovbørnehave"; in Sweden with "I Ur och Skur" (in Italian "*with good and bad weather*") thanks to the school founded in 1985 by Siw Linde on the island of Lidingö; in Germany with "Waldkindergarten" following the school founded in Flensburg in 1993 by the educators Petra Jäger and Kerstin Jepsen; in Great Britain with the "Bridgwater Early Excellence Center" and with the "Forest Schools"; in Austria there are 23 schools of this type and in Switzerland about 8, of which the first was the one founded in Brütten in 1998 by Katrin Metzner.

In Italy, following the experimentation of an "outdoor school" such as the Rinnovata, other experiences spread, such as "The school in the rabbit forest" in Anzio (Rome), "The School in the Wood", founded in 2010 in Emilia Romagna by the Villa Ghigi Foundation and, finally, thanks to the educators Paolo Mai and Giordana Ronci, parents of three forty-year-olds, who ran an "L'Emilio" kindergarten in Rome in the Madonnetta Park, and who later in 2014, together with the "Manes" association, they founded the Asilo nel Bosco in Ostia Antica, leading to the birth of many other kindergartens. Among these we remember in Pomino (FI) "The dragon tree" in 2010, for children aged 2 to 5, created, and totally self-managed and financed, by a group of families; again the "Asilo nel Bosco" of Trento in 2006, which offers a few weeks in contact with nature for children in kindergartens and primary schools, and many other experiences such as the "Casina Santa Brera" Farm School near Milan; the "Yurt in the woods" in Arona (Piedmont) and "At school in the woods", near Pavia. While, starting from September 2015, other projects in this sense have been launched in Piacenza, Parma Rapallo, Monza, Biella, Pisa, Cerveteri (Rome), Castelli Romani, Verona, Cavriana (MN), Dicomano (FI) (Mai, 2004), highlighting a need "of nature" in education.



Figure 1: Places where there are some "Asili nel Bosco" [Kindergartens in the woods"]. **Source:** Santarelli (2005)

The movement of kindergartens in the woods, which also extended to elementary school, is an integral part of a new contemporary pedagogy known as "Waldpädagogik", falling within the Pedagogy of nature and the global movement "Waldkindergartenbewegung" (Fromella & Perillo, 2018, pp. 17-19). These Schools in the Woods, while each having their own specific features, are characterized by having common traits, such as the training of teachers, based on active and participatory methodologies, the teaching program which has a global, ecological character based on environmental education and on sustainability, adequate organic nutrition and natural teaching materials (Chistolini, 2015). In particular, in Germany these kindergartens had full recognition with the establishment in 1996 of the "Federal Labor Committee on the Waldkindergarten", ie the "Bundesarbeitskreis der Naturkindergärten in Deutschland", and of the "Federal Association of the Waldkindergarten", in 2000, for training courses or help in decision-making processes.

The founders and supporters of the Asilo nel Bosco share the assumption of the holistic conception of education, pursuing the goal of promoting the global development of the child and considering the forest as an optimal place to learn how to:

- 1) form your own opinions;
- 2) express needs and expectations through words;
- 3) develop self-awareness and self-confidence;
- 4) experimenting with different ways of resolving conflicts;
- 5) exercise reciprocal roles both to win and to lose;
- 6) appreciate the value of participation and involvement;

- 7) know the different points of view and understand the importance of compromises;
- 8) listen to others and have the freedom to speak;
- 9) assume responsibility towards oneself and towards the environment they take over. (Chistolini, 2016, pp. 27-28).

Le Scuole nel Bosco [The Schools in the Woods], therefore, are characterized by a *modus vivendi*, such as spending time outdoors and in the woods, using material from the natural environment, carrying out specific activities and games, such as role-playing ones, of imagination, listening to songs and stories, drawing, discovering, climbing, reflecting, etc., which allow the development of autonomy, creativity, social, motivational and cognitive skills in various fields (art, mathematics, expressing oneself in the mother tongue, etc.), knowledge, self-awareness, respect for the surrounding environment, memory, physical strength, endurance, physical coordination, etc. They pay a lot of attention to the growth of the individual and to respect his needs and psycho-physical needs. With regard to the Italian context, there are still some obstacles to the spread of these realities due to too long distances of green areas and woods, stereotypes in vogue (such as that of running more risks of getting hurt, getting sick, high costs, etc. .) and lack of skills in teachers, although it has been shown that Kindergartens in the Wood allow not only better physical, social and cognitive learning, but also have lower costs than traditional kindergartens, if they received the support of the administrations (Santarelli, 2015).

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Here it is interesting to recall how the pedagogical-didactic project "L'Asilo nel Bosco", thanks to the international circuit of alternative education "Reevo" and the "Manes" Association (which deals with training and coordinates the projects of the Asylum of the Mare, the Bosco primary school and the street teachers), was carried out after a year of experimentation in the kindergarten inside the Madonnetta di Acilia Park, in Rome, which achieved excellent results. In fact, in 2014 the Asilo nel Bosco in Ostia Antica was opened, aimed at children aged 3 to 6, in the countryside and near the Tiber

and the excavations, which started from the idea of the importance of contact with nature, especially in a context like the current one that needs a new education aimed at respecting the surrounding environment, and has focused on five fundamental axes:

- 1) outdoor space as a privileged teaching room;
- 2) great attention to the relationship and the relationship between educator and child, where the teacher has the role of "facilitator" (maximum 1:10);
- 3) direct experience at the center of the learning process;
- 4) the importance of emotions, of knowing how to relate to each other and of loving;
- 5) play as a privileged didactic vehicle and as the main communication tool (Mai & Ronci, s.d.).

The "Asilo nel Bosco di Ostia Antica" hosts about 80 children and, while retaining its uniqueness and specificity, in some ways approaches the experiences in Northern Europe and the theories advanced by Rousseau (1762/1995), Fröbel (1826/1993), Freire (1980), Pizzigoni (1914), Montessori (1909), as well as that the work of Henry David Thoreau (1854) and the concept of school expressed by Adolphe Ferrière (1958a; 1958), according to which the "new school" was located in the countryside and in it the personal experience of the child was at the basis of education. The Kindergarten in the Wood is therefore part of a world pedagogical culture, in continuity with the past and is configured, at the same time, as an original educational reality, where every day from 7:30 to 17 every child has access to about eight covered square meters and countless square meters outdoors which offer him many possibilities and better conditions to "cultivate" himself as a unique and unrepeatable person. A way, therefore, to learn while having fun and rediscover that happiness of the human being in nature and essentiality, moving away from consumerism and the frenetic times of the current world, which is configured as a need that, since the past, has been expressed in the thought by authors ranging from Thoreau to Gandhi (Chistolini, 2015, pp. 30-37).

It is precisely by being outdoors that we learn how beautiful it is to live together and that the responsibility towards the world around them and nature grows in children, pushing them and learning to love and protect them. The central idea of this type of school is therefore that the child is competent, responsible and with the right to decide what to do, so much so that every morning we get in a circle to decide together what we want to do; here educators become real "facilitators", who observe the spontaneous action and choices of children, supporting them. Furthermore, the Asilo nel Bosco allows for harmony between theory and practice and proposes a new experimentation, followed by the University of Roma Tre since 2014 and appreciated by other European, North American, Latin American and American pedagogists. Asia, Turkey and China. Specifically, the Asilo nel Bosco allows "*all children to look out into the world of tomorrow in the best conditions*" and to work for intelligent, sustainable and inclusive growth (Chistolini, 2016, pp. 199-200). In fact, in the Asilo nel Bosco nature is considered as a "teacher" and as the main source of learning, so much so that the teaching activity is carried out in the open air, especially in the three gardens, in the woods, in the countryside and near the river, and through play and direct experience in order to

guarantee an integral development of the individual and his enhancement as a unique and unrepeatable being.

The programming is flexible and comes from the needs and interests of children and is based on life in the open air, which allows them to get sick less and to be more creative, independent and with greater self-esteem and sociability. The effectiveness of this approach, also from the point of view of achieving the goals indicated by the National Guidelines for the nursery and primary school curriculum, has also led to a growing interest from the academic world, so much so that in March 2015 an international conference organized by the Roma Tre University took place. Finally, particular attention is paid to the materials, all the furnishings are built with recycled materials and the toys are stones, pieces of wood, cardboard games, cloth dolls, corks, etc. as a choice against current consumerism and to develop fantasy and imagination. In addition to kindergarten, this approach has been extended to primary school children starting from 2016 and above all with the "Piccola Polis" project of 2017, in which attention is paid both to National Indications and to direct experience and play. In addition, there are several proposals: music, dance, theater, sport, reading in the library, vegetable garden, work with animals, experiments in the scientific laboratory or in the technology room and numerous trips to the area (one a week), which allow children to become passionate about history, geography, science and art.

The Kindergarten in the Wood of Ostia Antica, therefore, has the aim of stimulating the spread of a new educational model and the well-being of the children who have been entrusted to it, or that they grow up happily through contact with the natural environment, through natural materials (i.e. an essential material, endowed with meaning and beauty, which allows you to develop the senses and creativity and is rich in potential and different characteristics, such as color and smell and offer the possibility of relating to the living), direct experiences that affect different fields and play, understood as *"an instrument through which the child knows himself, others and the surrounding world"* (Manes, 2016, p. 34).

Nature becomes a "teacher", which educates to sharing, welcoming and appreciating every single moment of time, as well as bringing out the desire to take possession of places, naming them, and establishing a relationship with the place, in the awareness that to the child *"the possibility of taking inspiration from Nature is a gift that is given to him for his entire life"* (Manes, 2016, p. 62). In addition, the natural environment allows the child to grow up happily and to internalize and understand the rules and the need to be together, in addition to the fact that at the Asilo nel Bosco one wants to *"educate starting from the good, the beautiful, the good. Only if you are treated with love can you love, only if you are educated by happy people can you be happy, only if you are educated to freedom can you be free"* (Mai & Roi, 2019, p. 60). In fact, the internal space is structured in centers of interest: the reading corner, the symbolic game, fireplace with sofa and rocking chair, etc., while the external space is characterized by the presence of rows of eucalyptus trees, pines, fields, of the river, a large lake and an educational farm, as well as a garden with a tree house and a farm with animals, a second garden that houses a vegetable garden and a green space free for movement games and the third garden where you it is a space to

light the fire, a series of swings and ropes for the balance paths. These are spaces in continuous evolution (Mai & Ronci, 2019, pp. 29-31).

During the day there are frequent moments of sharing in a circle and activities, such as drawing, songs and theater. The collaboration and trust between educators and families are important, in order to transmit serenity to the child, and in the Asylum in the Wood the educator becomes *"the one who, starting from the observation of the needs and interests of each child, works in a discreet on the context to facilitate the natural growth process"* (Mai & Roi, p. 32), as well as having the task of knowing the particularities, rhythms and needs of each child and above all loving their children, giving them care, listening and dedication, so much so that a lot of time is dedicated to the insertion of children and to mutual knowledge between educators and children, especially in the first six / eight weeks of attendance. *"It is never too early to teach the value and respect for life to a child"* (Mai & Roi, 2019, p. 76) and, concluding with the words of Petra Jager, it emerges that in the woods everything is perceived much more intensely, both joys and pains are shared, and empathy also develops because *"if a child [...] gets blood from the anso, the whole group comes to take care of him [...] they all run to take their backpack, to extract the packet of handkerchiefs and the child with the bloody nose soon finds himself in front of a mound of paper handkerchiefs"* (Mai & Roi, 2019, p. 195).



Figure 2: The “Asilo nel Bosco” in Ostia Antica

“L’Asilo nel Bosco” / The Kindergarten in the Wood allows us to open up to nature and let it teach us to discover "how" we are and "why" we are in the world, as *"it is a school without walls, built between trees, walls, mountains and the sea, where children live in the sun and in the rain, with the wind that caresses their laughing faces and with the hail that docilely lends itself to the game of running between heaven and earth"* (Chistolini, 2016). This initiative was so successful that these experiences also spread to China with the

Zhengzhou Kindergartens in Henan, taking up the characteristics of the Kindergarten in the Ostia Antica Wood, where educators follow the principles of autonomy and creativity and teach a deep respect of nature for every living creature, while children *"learn by doing"* and *"live with nature, in contact with air, wind, sun, water, earth. They are joyfully accompanied in a learning full of love, patience, attention. Staying one day with the children of the forest restores the spirit and above all offers a lot of trust and well-being to everyone"* (Chistolini, 2015), becoming more attentive and responsible citizens in the future.

The forest, therefore, is a complex biological system, dynamic, rich in biodiversity, a learning laboratory and the richest natural environment that allows experiences of multi-sensoriality, a place of calm and serenity, that encourages needs, allows a game without boundaries, as well as socialization, growth in health and the development of motor skills, observation, collaboration, autonomy, self-confidence and in one's ability to seek and find new solutions, self-learning and self-evaluation.

Furthermore, the forest is a "master" and a market full of objects, which can be transformed with imagination and imagination, in addition to the fact that it opens up new questions and infinite educational paths and allows you to find the right "distance" between adult and child and the right time, which is not time constrained by institutional rhythms, but *"which has the interests of children at the center"* (Schenetti, Salvaterra, & Rossini, 2015, p. 177). It is necessary to make children understand that the forest is an ecosystem, in which all living beings interact with each other and with the inorganic environment, and it is important for humans, since it has many benefits, such as the production of timber, protection (curbs soil erosion, decreases the risk of landslides, purifies rainwater and is a refuge for fauna), health and recreation (it produces oxygen and humidity and creates situations of calm and silence) (Pennisi & Zavalloni, 1992, pp. 91-96). In addition, various key points of Forest Pedagogy have been identified, such as:

- 1) Health and motility;
- 2) Experience the rhythm of the seasons and natural phenomena;
- 3) Activation of sensory perception through direct experiences;
- 4) Global learning and free play;
- 5) Environmental education (both through information and through experiences);
- 6) Promote self-esteem, autonomy and knowledge of one's body;
- 7) Experience the passage of time and silence;
- 8) Promote coexistence and social attitude;
- 9) Living the environment in a global way (the forest is constantly changing and favors the development of imagination, curiosity, creativity, etc.) (Schenetti, Salvaterra, & Rossini, 2015, p. 7).

The basic idea underlines how fundamental for man, both adults and children, is the need for nature and to be in direct contact with it. In fact, even for adults, especially the teacher, immersion in the natural environment allows them to regain their own time, to enjoy the silence, to let the memories of their childhood emerge, to discover that they can still be amazed, to rediscover the sense of freedom, to share new work environments with one's colleagues etc. In particular, teachers learn to use green spaces with continuity and constancy, they assume the awareness of their own way of thinking and the

responsibility of their role, in addition to the fact that they learn to value relationships between peers and relationships between adults and children, to educate to adventure, or to risk and the unpredictable, to develop a forecasting ability or preventive attention, to know how to enter the world of the child and to understand and speak the concrete language of nature (Schenetti, Salvaterra, & Rossini, 2015, 226-240). The skills that the educator of the kindergarten in the woods must possess are:

- 1) love for nature and the pleasure of being outdoors;
- 2) be flexible, that is, make decisions progressively based on situations;
- 3) accompany in the empathic perception of the surrounding environment;
- 4) perceive children's needs and interests;
- 5) have time and give affection;
- 6) encourage social and empathic behaviors;
- 7) be willing to communicate;
- 8) recognize the natural skills of children;
- 9) offer children the opportunity to overcome obstacles independently;
- 10) not to disturb the children involved in the game;
- 11) know the characteristics of the natural environment in which one operates, such as the forest (Schenetti, Salvaterra, & Rossini, 2015, pp. 64-66).

Only in this way will it be possible to create an educating community, in which the backpack becomes an object to collect treasures, a useful travel tool containing a water bottle and a change (while that of the teacher also ropes, scissors, first aid kit, twine, a rain towel, toilet paper, glasses, etc.) and in which the child is seen as an active subject and protagonist, who has the responsibility and the right to choose what to do, in the awareness that "*through nature it is possible to educate a child also to respect for a part of oneself*" (Schenetti, Salvaterra, & Rossini, 2015, p. 74).



Figures 3-4: Villa Ghigi. Source: Schenetti, Salvaterra, & Rossini (2015)

3. La Scuola del Mare e del Bosco [The School of the Sea and the Woods]

Among the Outdoor Education experiences, it is worth mentioning the birth of the project for the kindergarten and primary school called "School of the Sea and the Wood", or a new experience linked to the Outdoor Education experience centered on the Sea, which originated thanks to the collaboration between the "Manes" Association, the "Amendola Guttuso" Comprehensive Institute in Ostia and the naturalistic oasis "Centro Habitat Mediterraneo della Lipu di Ostia" (CHM) starting from 2015.

This new experience was born after the experience of the kindergarten in the woods of Ostia Antica and takes up the idea behind Outdoor Education, that is the growing need and need to live in direct contact with the natural environment in order to develop creativity, cognitive and relational skills, psycho-physical well-being and autonomy of children and "so that the school becomes a place in which to discover, cultivate and share their talents for the integral formation of identity" (Casertano, 2019). In this regard, it is believed that these Outdoor Education experiences, which respond to the current "Nature deficit", cannot develop an environmental education and ecological awareness through books or in an abstract way, but through direct experiences and a daily immersion in the natural environment. This project ensures that outdoor education can extend to all types of schools and that children can find their place in the world. In this way, it is possible to create an educating community, which respects the needs of adults and children, starting from existing resources and state schools to accompany teachers, parents and educators in a new path that is gradual and accessible to all children.



Figures 5-6: Scuola del Mare e del Bosco [The School of the Sea and the Woods]



Figura 7: L'Asilo del Mare [The School of the Sea].
Source: Mancuso (2016), consultato il 28 ottobre 2019.

This project, as Danilo Casertano states, was born from the desire to redevelop a territory with the strength of ideas and the desire to enhance its beauty, as well as from love for the sea and nature, learning to know its limits and potential. Thanks to the collaboration between the equipped classroom at the "Amendola Guttuso" School, the CHM Oasis, the tourist port, Parco Pallotta and the Ostia seafront with its free beaches and cliffs. This environment will lead to different outdoor activities and to satisfy the different fields of experience and disciplinary areas indicated by the Ministry, learning about the world through taking care of the animals of the marine environment and developing their physical abilities through walking and running on the sand. Natural ones, such as woods, shells and wet sand, will be used as teaching materials, which allow the development of imagination and creativity.

The marine environment, therefore, is configured as a "teacher of life" and as a rich source of learning, but also has a fundamental role, due to its characteristics, in the development of psycho-physical well-being and the health of children and adults. Also in this experience, the relationship between educator and child will be taken care of, which must not exceed 1: 10, and collaboration with families. Not only the forest, but also the marine environment is a unique ecosystem, full of life and at the same time full of very delicate food chains and balances (Spoto & Zuppa, 2000). This new experience is attributable to the desire to respond to the current situation, characterized by "nature deficits" and in which learning disabilities are only "the tip of the iceberg" of a greater malaise for a school still anchored to compulsory education and repetition. This school and the new Outdoor Education experiences make it possible to definitively abandon the surviving traces of a traditional school to develop critical thinking, creativity, autonomy, etc. instead of each child, starting precisely from the radical change of the learning environment and school method, above all by creating an educating community and a network that allows and supports these innovative outdoor learning experiences (L'Asilo del Mare: in Ostia).

Among these new experiences it is also necessary to remember the one proposed by the architect Sabbadini to the Don Gnocchi Concorezzo primary school, in the province of Monza (Lombardy) in 2005. This project envisaged the involvement of children in the design and construction of the garden area in order to favor an

environmental education program through the redevelopment of the school's outdoor spaces. *"The school garden has become a place for enhancing one's own experiences, experiences and opportunities for relationships. In it our children were able to develop the 'sense of place'"* (Sabbadini, 2011, p. 17), that is the perception of the sense of belonging to an environment, as well as the possibility of creating a community of dialogue, developing motivation, involvement, commitment and empathy towards nature and promoting an environmental culture that is the premise for building a better society through some active learning contexts and an experiential approach (Sabbadini, 2011, p. 20).

In conclusion, we remind you that outdoor teaching includes adventurous or ecological activities, team games, educational trips and simple exercises to be carried out outside the classroom, as the important thing is that the experience is meaningful and authentic and at the same time will be different from time to time thanks to the weather conditions, seasons, space outside the classroom and landscapes etc., or it is about *"making the most of any place or space outside the traditional school walls"* (Robertson, 2014, p. 14). The importance of the impact of the place on children's learning, therefore, should not be underestimated as it should be considered that outdoor experiences are those that remain most etched in the memory, as demonstrated by several studies including that of Chip and Dan Heath from 2007. The reasons lie in the fact that outdoor experiences are simple, unexpected, concrete (i.e. they develop practical skills and foster authentic and real learning), credible (as they are based on learning through the senses), emotional and allow you to create new stories.

As such, outdoor experiences, included within a well-planned project, can improve school results, have a positive impact on children's health and well-being, contribute to the growth of responsible citizens who are able to appreciate nature for all life, improve children's social and communication skills and their understanding of the concept of sustainable development. Furthermore, outdoor education has the advantage of leading to the realization of interdisciplinary teaching, of using school skills in other extracurricular areas and routines to develop skills and autonomy, of involving children in planning and decisions, and of learning nature from within (Robertson, 2014, pp. 17-19). When working outdoors it is important to adopt an approach oriented towards sustainability and rights, as well as stimulate free play and playful teaching, offer a formative and natural environment and develop the creative skills of children, especially in the awareness that we have the right to use a place, but also the responsibility to take care of it.



Figures 8-9: Outdoor teaching.
Source: Robertson (2014)

It therefore emerges that *“teaching in nature does not simply mean moving teaching activities outside, but presupposes a different involvement of the child who is left free to explore, move, understand through the body, without excluding well-defined disciplinary objectives and clear goals to be achieved”* (Robertson, 2014, p. 178), which has a triple advantage, namely that of providing children with interest and motivation towards what they learn; bring benefits to their development; act on the representation they have of nature and the environment, forming responsible and respectful future adults. To do this, the school must abandon the habit of dividing the inside from the outside early and favor the birth and spread of outdoor schools. In this regard, a network of open-air public schools was born in 2006, i.e. schools in which the inside and the outside are one, in which the outside is as important as the inside, and in which the care of space it is everyone's commitment, and learning takes place through direct experience. They are schools where education is carried out outdoors, schools shared with families, which encourage the natural exploration of children, which transform questions into opportunities, who care about outdoor spaces and have no borders. The importance of these outdoor experiences emerges above all by reflecting on the importance of educating future generations in sustainability and the protection of the planet, as we will see in the next chapter. The beauty of nature lies in its smells, colors, perfumes and its spaces, but above all in its mystery and children are attracted and interested in contemplating this beauty, but to do so they must be left free to *“get dirty”* and immerse themselves completely in the environment. natural, as depriving children of this experience means depriving them of *“being part of the world”*, while protecting them *“means exposing them consciously to the world”* (Mantegazza, 2008, p. 9). Consequently, we must not ignore that *“civilization is part of nature”* (Mantegazza, 2008, p. 10) and that *“the true return to nature is perhaps [...] letting boys and girls discover an extraordinary deposit of possibilities”*, as *“passing the Earth with a light foot, making it one's world, is possible only if it is understood as the home of all [...] the house that hosts us and that demands from us a correct behavior and a deep respect”* (Mantegazza, 2008, p. 11).

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Conflict of Interest Statement

The author has no conflicts of interest to declare. There is no financial interest to report. I certify that the submission is my original work and is not under review at any other publication and I have no commercial associations (e.g., consultancies, stock ownership, equity interest, patent/licensing arrangements, etc.) that might pose a conflict of interest in connection with the submitted article.

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The author is a primary school teacher. Her academic interests are aimed at educational research in the field of environmental education and sustainable development from the educational design perspective.

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