

## OUTDOOR AND DOCUMENTATION IN EARLY CHILDHOOD

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<https://doi.org/10.54922/IJEHSS.2024.0852>

### ABSTRACT

Increasingly, experiences in nature offered to children in educational contexts are gaining more attention as they are seen as experiences that promote children's protagonism and experiential learning. Furthermore, there are various positive effects found in adults and children who spend time in the open air (Giunti et al., 2023; Rickinson et al., 2004; Remmen & Iversen, 2023).

In this sense, in early childhood facilities, pedagogical documentation constitutes a fundamental tool as it permits the valorisation of these experiences and thus of the learning, discoveries, and explorations of children who live in contact with the outdoor environment and with the materials found in nature.

In fact, documentation is an educational practice and strategy that makes it possible to make children's learning and discovery processes visible, to narrate their experiences through the point of view of the adult, but also, and above all, of the children. Documentation is fundamental practice because it enables the promotion of a participatory culture in early childhood facilities through the involvement of all the actors who experience the educational reality (Edwards et al., 2017).

What outdoor activities and experiences are promoted? What tools and ways can be used to trace the activities experienced by children in nature? What kind of documentation makes it possible to promote children's protagonism and to enhance learning processes in natural contexts?

Starting from these references and questions that emerged, it was decided to undertake a systematic review of the literature to understand in the national and international context what research has been conducted on Outdoor Education experiences and how and with what strategies these experiences have been documented.

**Keywords:** Pedagogical documentation, outdoor education, early childhood education and care, systematic review.

### 1. INTRODUCTION

In the early childhood facilities in the Italian context, one of the most widespread and used educational practices is pedagogical documentation, which constitutes a tool and an educational strategy that makes it possible to collect and narrate the lived experiences of children and thus to enhance cognitive processes, favouring the implementation of reflective processes among the educators themselves (MIUR, 2021). Documentation is therefore a tool that makes it possible to trace the everyday life experienced by children, both inside and outside the educational services.

In this regard, it is important to emphasise that in early childhood facilities in Italy, educational experiences in nature are promoted as fundamental experiences in the same way as those lived in indoor spaces.

In Italy with the term ‘educational services for children’ we refer to nurseries that welcome 0-3 years-old children and to kindergartens that welcome children from 3 to 6 years of age. There are also educational services that are for children aged 0 to 6 years defined as ‘children's centres’ (Legislative Decree 65/2017).

According to the regulations, educational services must have spaces and square metres available to ensure that children can go out and be in the open air.

Referring, for example, to the regulations of the Veneto Region, the territory in which the University of Padova is located, for the authorisation to operate nurseries (0-3 years) and children's centres (0-6 years) it is stated that ‘There must be a functional, equipped and delimited outdoor space, to be calculated in addition to the functional usable area of 6 square metres per child’ (D.G.R. no. 84/2007).

There are also other realities known as ‘schools in the woods’ that promote total everyday life in outdoor spaces, in woods and meadows, although at a national level there are no regulations governing this type of experiential education.

Schools in the forest outdoors emphasise direct contact with nature and thus also promote sustainability practices related to caring for the environment and attention to natural materials and animals encountered.

In general, the possibility of living experiences in nature, whether at specific times or throughout the day, promotes play, exploration and curiosity, enabling children to learn directly through experience and contact with the outdoors (MIUR, 2021).

Although there is a widespread awareness of the importance of living experiences in nature, not all educational services promote such practices and this often also depends on climatic factors, which in some cases are perceived as a limiting element for going outdoors.

It is therefore interesting to understand whether there are, in the national and international panorama, experiences of Outdoor Education activities that have been documented through the involvement of educators and children.

The possibility, in fact, of documenting such experiences makes it possible to attribute value to them and thus recognise the importance they hold not only as moments of ‘fun’ in outdoor environments, but as fundamentally important moments from an educational point of view for children.

## **2. THEORETICAL FRAMEWORK**

### **2.1 Pedagogical documentation**

Pedagogical documentation and observation are fundamental tools that make it possible to guarantee the quality of an educational service as they allow the construction of shared meanings between the actors that experience the educational reality.

In particular, documentation and observation stimulate the actors to ask themselves questions, to reflect on educational practices, initiating in this way processes of self-assessment and evaluation (Edwards, et al., 2017).

In the context of the children's services of Reggio Emilia, known for its approach to education, particular value has been attributed to pedagogical documentation, recognised as a modality and approach for exploring the lived experiences of children and adults in order to reconstruct their meaning in a narrative and shared manner (Rinaldi 2005; Turner & Wilson 2009).

Reflections on documentary practice draw on Bruner's (1996) narrative thinking and socio-constructivist pedagogy, which recognises the importance of creating contexts in which

educational and pedagogical values are the result of confrontation, negotiation and sharing between the ideas of those involved in the child's education, always placing the child's protagonism at the centre of any dialogue (Denzin & Lincoln 1994; Guba & Lincoln, 1989).

In this sense, we move away from the possibility of pursuing reference standards to assess the development of the child and his or her competences, valuing instead the processes of discovery and research implemented (Dahlberg et al., 1999).

Documentation is the educator's strategy for narrating children's experiences, research and explorations. It is an interpretative space of the possible and a planning tool that allows the educator to attribute meanings to the children's discoveries and to pose new questions in order to open up roads and research paths not yet known.

Documenting thus makes it possible to enhance the participation of adults and children, as they are involved in attributing meaning to what is experienced, thus enhancing the point of view and interests of each one.

Documentation is therefore also a tool used by children, enabling them to re-elaborate what they have lived through their experiences and to share them with their peers, educators and families.

The materials collected through the documentation of experiences (photographs, videos, objects, observations, etc.) constitute traces that make it possible to narrate the path taken, what has been done and what is still in the making.

This pedagogical documentation is therefore not aimed at recording and identifying what knowledge has been acquired by the children but is intended to make visible the learning processes implemented by the children during their daily lives in the childcare services. It is a process of documentation that makes it possible to enhance the explorations and discoveries that the children can then revisit, thus reinforcing the elaborations and memories of what has already happened in view of what can still happen.

As stated in the national document (MIUR, 2022):

‘Documentation is memory and trace of the experiences of the individual child, of the group and of the educational work that is transformed into narration of what has been lived; it is choice of what is most important, that communicates and speaks, it is restitution to the children and adults, it is communication for the parents and for the work group. Documentation is configured as a tool to give each individual or group an awareness of their actions also in formative and self-formative terms’.

## 2.2 Outdoor Education

Instead, before delving into the research conducted, we would like to clarify the meaning of Outdoor Education, which is an educational and pedagogical approach for educational contexts.

Outdoor Education refers to activities, experiences, and explorations that take place in natural contexts, such as in spaces outside educational services, and to didactic paths that are realised in urban environments promoting direct contact with the real world (Giunti et al., 2023).

Interestingly, a distinction between two types of Outdoor Education emerges in early childhood facilities. Comprehensive Outdoor Education, by which we refer to the ‘pedagogy of the forest’ (Miklitz, 2001), does not involve the presence of an educational structure but only of a shelter located close to the forest itself in which the children experience the outdoors (Schenetti, Salvaterra and Rossini, 2015). Integrated Outdoor Education, on the other hand, is referred to when it comes to experiences that involve alternating outdoor and indoor activities and the presence of a school building.

The Outdoor Education approach was born and developed mainly in Northern European countries, although in recent years the Italian educational system is also showing interest in creating contexts in which to disseminate this approach.

At the basis of OE (Outdoor Education) is the pedagogical principle of Experiential learning (Kolb, 1984), which values experiential learning as the core of learning and cognitive processes since it is through direct doing that the child experiences, knows, feels, and thus learns. Such learning refers to the cyclical phases of 'experience-reflection-learning' that promote observation, experimentation and thus reflection on what has been experienced. The other principle referred to is place-based education ('pedagogy of places') (Sobel, 2004) by which environments and places in the territory are valued as learning spaces that, at the same time, foster the development of a sense of belonging to a community context.

In order to be able to recognise more specifically what is meant by Outdoor Education experiences, it should be pointed out that this approach does not consist only in going out in outdoor spaces and outdoors, but includes various elements and characteristics that distinguish it, as reported in the INDIRE document (Giunti et al., 2023).

These aspects recognise the idea that the space outside the school is to be considered as a privileged learning environment in connection with indoor spaces and the idea that it is important to promote active teaching by favouring laboratorial methodologies with the active involvement of children and students. Activities are designed into the curriculum and are planned, scheduled and thought out. Linked to this is the value attributed to educational intentionality, which makes it possible to propose experiences in nature that are thought out and not subject to chance, in order to support learning and knowledge processes. At the same time, these proposals are designed to be connected and interact with all disciplinary knowledge.

The duration of experiences in nature is a decisive aspect in that they should not be regarded as occasional moments of leisure, but as experiences that are incorporated into the educational design. In this sense, particular value is placed on the flexibility of time, on a time that is slow and allows for the promotion of anticipation, discovery, curiosity with greater serenity.

Experiences in nature also enhance the protagonism of the children and students, who are seen as actors of possible changes, protagonists of their own cognitive and learning processes. Discovery and learning in nature are influenced by the relationships that are established between children of the same age, between children and adults, and with the surrounding natural environment. In order to ensure that experiences in nature respect and enhance the elements outlined so far, it becomes necessary to promote the training of school personnel so that they can acquire skills useful for designing effective didactic paths (Giunti et al., 2023).

On the basis of all the relevant elements describing what is meant by the Outdoor Education approach, it can finally be stated how the proposal of experiences in nature brings with it numerous advantages from an educational, psychological, physical, social and organisational point of view (Rickinson et al., 2004; Remmen & Iversen, 2023).

### 3. STATEMENT OF PROBLEM

Starting from the theoretical references examined so far, we wanted to carry out a systematic review of the literature with the aim of deepening the concept of pedagogical documentation connected to educational experiences in nature. In particular, we wanted to understand what research has been carried out on proposals for experiences in nature in national and international children's education contexts and how these experiences have been documented, using which tools.

Finally, we wanted to understand what significance is attributed to the documentation of experiences in nature, and thus whether this documentation practice favours and enhances children's participation.

#### 4. METHODOLOGY

Starting with the research objective outlined above, the questions that guided the systematic literature review and that we wish to answer are as follows:

Q1. In the context chosen for the research, from the literature review what experiences in nature are documented?

Q2. What significance is attached to the documentation of experiences in nature?

Q3. What type of documentation is used to document working outdoors with children?

Q4. Does the documentation of experiences in Outdoor Education enhance the protagonism of children as co-researchers in early childhood facilities?

To answer the research questions, a systematic literature review was conducted. The latter was carried out through the application of a protocol inspired by the Prism guidelines (Moher et al., 2009).

The databases used to initiate the search for articles of research interest are SCOPUS; ERIC-Education Resources Information Centre; EBSCO-Education Source; TAYLOR & FRANCIS, Google Scholar.

Consultation of the literature in electronic view was possible through the use of the Auto-Proxy service provided by the Digital Library of the University of Padova.

To initiate the literature review, we therefore identified keywords that could guide the search and at the same time could restrict the field on the data needed for the search.

The keywords that therefore guided the literature review are:

English:

- Pedagogical documentation in outdoor education
- (“documentation”) AND (“outdoor education” OR “outdoor”) AND (“early childhood” OR “ECEC” OR “early childhood education and care” OR “preschool” OR “kindergarten”)
- (“documentation”) AND (“education” AND “nature”) AND (“early childhood” OR “ECEC” OR “early childhood education and care” OR “preschool” OR “kindergarten”)

Italian:

- Documentazione pedagogica nell'educazione all'aperto
- (“documentazione”) AND (“educazione all'aperto” OR “outdoor education” OR “outdoor”) AND (“prima infanzia” OR “infanzia” OR “nido d'infanzia” OR “scuola d'infanzia”)
- (“documentazione”) AND (“educazione” AND “natura”) AND (“prima infanzia” OR “infanzia” OR “nido d'infanzia” OR “scuola d'infanzia”)

As can be seen, for the keywords, Italian was used with reference to the national context and territory and English to open the research to an international framework.

The languages considered for the inclusion of the materials are Italian and English.

From an initial review carried out from the key questions through the 5 chosen databases, a total of 105,464 texts and articles were identified.

Subsequently, considering the 10-year retroactive reference time inclusion criterion (2014-2024) and the presence of full-text and open access texts, we count a total of 63,491 texts and articles.

Proceeding with the review and then with the detailed selection of the documents of our interest, we considered among the documents only articles from scientific journals, in Italian and/or English, arriving at a total of 10,759 articles.

Finally, we proceeded with a further analysis considering only articles relating to educational contexts that welcome children from 0 to 7 years of age and, starting from the title and abstract proposed, only articles related to the topic of interest for the review concerning pedagogical documentation in connection with outdoor educational experiences.

At the end of the review, a total of 43 articles were obtained, of which 15 reappeared as the same articles and were therefore not included.

In total, 28 articles were considered for analysis, of which 21 articles were discarded for not being relevant to the topic and for not answering the research questions identified above, after downloading the full text.

Therefore, 7 articles are included in the final review.

The articles considered at the end of the review were reported within an Excel sheet with the main references: Authors; Title; Database; DOI or link; Years; Keywords; Country; Type of research; Target; Abstract; Summary elements of interest for the research.

The selection process is proposed in Figure 1 and the inclusion criteria are given in Table 1.

Figure 1. Flow chart of the selection process (Moher et al., 2009)

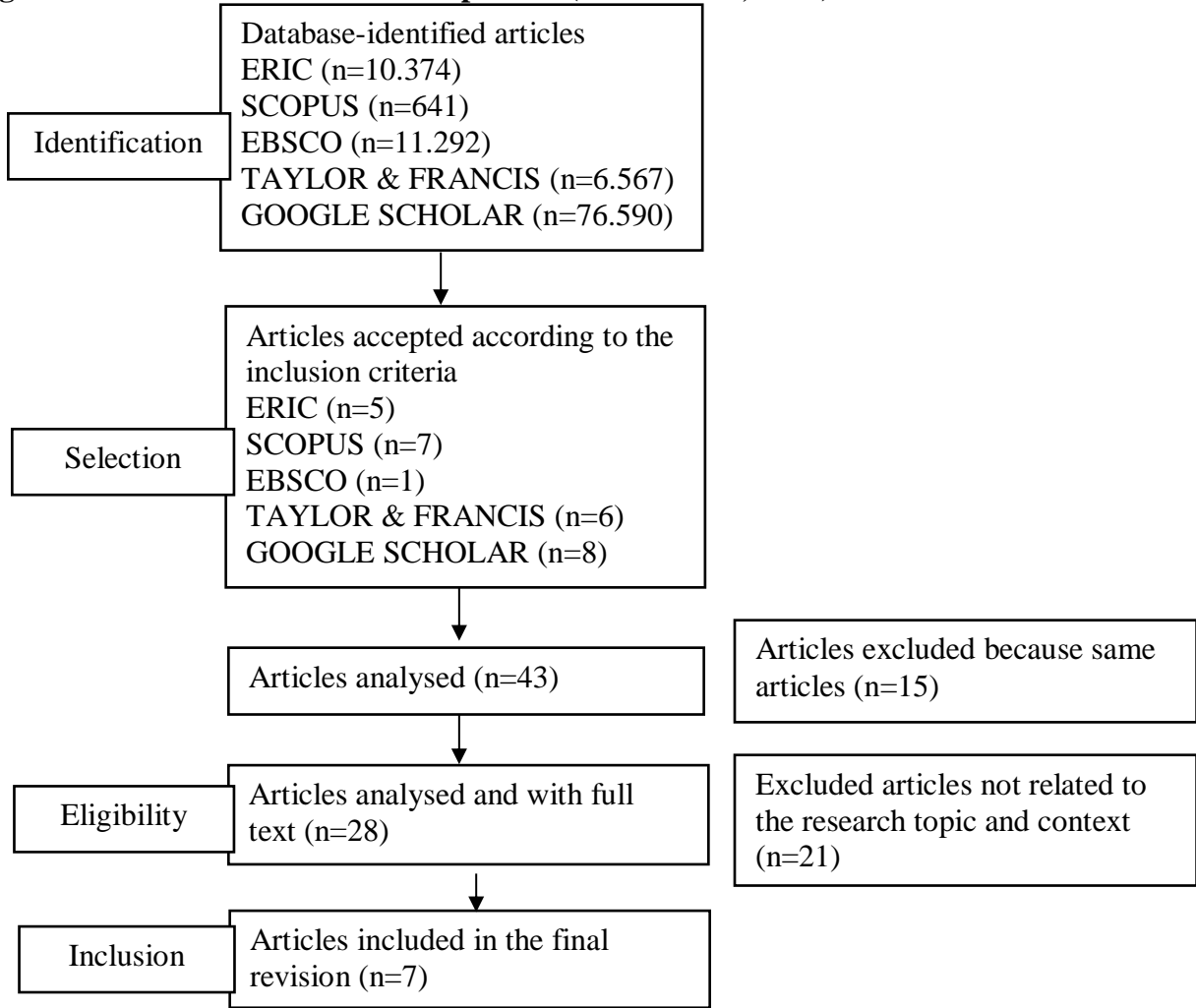


Table 1. Criteria for inclusion and exclusion of articles

Criteria	Inclusion	Exclusion
Time frame	2014-2024	Before 2014
Language	English, Italian	All languages except Italian and English
Title and abstract	Inherent to the theme	Articles not related to the theme
Context	Educational contexts 0-7 years	Research related to educational contexts above 6 years old
Typology	Articles in journals	Reports, conference proceedings, books, other
Accessibility	Open access Full text	Not open access Full text not available

A qualitative content analysis was carried out on the 7 selected articles that we propose below (Table 2), listing the essential elements that allow their identification. This consisted of an analysis of the content of the articles and subsequent classification in order to be able to answer one, the other or all of the research questions.

**Table 2. Summary of selected articles**

Author and Year	Country of Research	Target
Dardanou, M., & Karlsen, B. (2023)	Norway	4-5 years
Merewether, J. (2018)	Australia	2-4 years
Muela, A., Larrea, I., Miranda, N., & Barandiaran, A. (2019)	Spain	3-6 years
Tan, X.R., R. & Yang, W. (2022)	Singapore	18 months-6 years
Nordén, B., & Avery, H. (2020)	Sweden	3-5 years
White, E.J. (2014)	New Zealand	3-4 years
Kiewra, C., Veselack, E. (2016)	California	Preschool children; 2-5 years

**5. FINDINGS OF THE STUDY**

In order to be able to report in a clear and straightforward manner what has been gathered, a presentation of the results obtained from the systematic review is proposed by answering the four research questions on the basis of the themes that emerged and were explored in the articles.

Q1. In the context chosen for the research, what experiences in nature are documented from the literature review?

The articles selected and included in the final review report experiences of outdoor activities lived independently or proposed to children in the 18 months-6 years age range in educational contexts. The study by Dardanou and Karlsen (2023), focuses on Land Art as a form of creative expression that relates to nature, thereby emphasising the possibility for children to experiment and thus play directly with materials present in the natural environment such as water, earth, leaves, sand. Indeed, it is believed that through play and the discovery of natural materials, children discover the world freely.

The research shows how children document natural materials and what they encounter in natural space through the use of the camera.

During experiences, children collect materials such as shells and stones that then become their objects of documentation.



Other studies focus on how children use objects and with which they then create interactions in natural environments. Again, experiences in nature are proposed to understand how children can develop creativity, more so than the specific proposal of creative arts.

It is made explicit that the outdoor environment is considered as a third educator. The proposed experiences involve the presence of loose parts and different materials so that children can experiment and discover, move around the space and play. The outdoor experiences also include the possibility for children to go in and out of the educational service independently (Kiewra, C., Veselack, E. 2016).

In several of the research collected, it emerges that no specific experiences or activities are proposed for children to carry out outdoors, but that they are mainly experiences of discovery and exploration of nature, landscapes, natural environments in autonomy and freedom (White, 2014).

Thus, there emerges a focus on the choice of the natural location, the proposed environment rather than the type of activity designed as it is precisely the free exploration of children that leads to the development of learning and knowledge through direct experience with the world around them.

Proposed outdoor environments for nature experiences should offer spaces and materials that encourage interaction and play (Muela et al., 2019). In one case, research reports the connection between nature experiences and the mosaic approach as a form of documentation to understand children's considerations and interests with respect to the materials, spaces, and objects in the outdoor space and to be able to make possible changes and improvements (Muela et al., 2019).

Similarly, in another study, the focus was on possible ways to make changes in the outdoor space of the preschool in order to create an outdoor environment that can offer rich opportunities for play and learning. The aim is to subsequently modify the space and thus be able to observe possible changes with respect to adult-child interaction and opportunities for children to be involved in outdoor work (Nordén & Avery 2020).

Differences also emerge between the different countries where research is conducted. In fact, research conducted by Tan and Yang (2022) reports how in Singapore, outdoor activities are mainly associated with physical activity, movement although thanks to national documents, more is being done to promote outdoor experiences as important learning opportunities, considered in fact 'outdoor experiences intentionally provided to support children's play, exploration and discovery in natural or urban outdoor spaces.' (OLC, 2019, p.4).

Q2. What significance is attributed to documenting experiences in nature?

Documentation is seen as an experience that enables the creation of shared meanings between children and teachers, thus enhancing the processes of learning, research and exploration. The possibility for children to document their experiences in nature is a tool that allows them to explain the world and thus to understand reality and their relationship with it.

Children's participation in documentation allows them to be able to capture what they see and what is of interest to them, as shown in Dardanou and Karlsen's (2023) research in which children photograph the shipwreck in the natural environment as an important aspect from their point of view. Documentation through the use of visual arts, such as drawings by the children themselves, enables adults to visualise, understand and learn about children's views and experiences. Indeed, drawing is seen as a tool that encourages self-expression, promotes exploration, discovery and experimentation, telling, documenting and leaving a trace of oneself.

The results of the research conducted lead to the recognition that children's photographs and drawings allow them to relate more to what they have experienced and experienced directly (Dardanou & Karlsen, 2023).

Similarly, Muela, Larrea, Miranda, and Barandiaran (2019) conduct a study through the mosaic approach (Clark, 2017), which is a participatory, reflective and adaptive approach that focuses on children's lived experiences and allows them to gather their opinions through different documentation methods. In fact, documentation is considered as a tool and way in which children can represent and communicate meanings and thoughts on specific issues that affect their lives and the context they experience.

In Kiewra and Veselack's (2016) study, documentation is seen as a tool closely related to observation, whereby teachers conduct observations of how children experience environments, listen to what they do and say, and on the basis of their interests and emerging needs reflect on the curriculum to be proposed.

The authors report that the documentation used in the study, through the notes, allows them to focus and detect which aspects are crucial for children in outdoor experiences to promote their learning, imagination and creativity (Kiewra & Veselack, 2016).

The significance of documentation is traced back to the Reggio Emilia approach, describing it as the 'practice of reflection and democracy' (Dahlberg et al., 1999, pp.144-158) to listen to children. It is believed to be a process that makes learning visible and promotes reflective discourses among teachers (Kiewra & Veselack, 2016; Tan & Yang 2022).

Pedagogical documentation is considered to be similar to learning stories (Carr, 2001) in that it is a narrative that is based on children's learnings, discoveries, and interests that are considered as protagonists in their own explorations (Tan & Yang 2022). The study conducted in Singapore connects the concept of documenting experiences in nature to the consideration of the child as an active subject capable of constructing his or her own knowledge and understanding of the world, as a competent subject who is able to create meanings of what he or she has experienced in order to share it with others (Tan & Yang 2022).

The author of the article (Merewether, 2018) specifically states that she wants to use the term 'pedagogical documentation' and not just 'documentation' in order to enhance more the interpretative and reflective processes to which documentation leads through the use of tools that also allow for the collection of information and data. Pedagogical documentation is attributed the value of being able to interweave the material collected with discursive material; therefore, the strategies used in the study make it possible to enhance the children's protagonism and listening.

Through listening, it is believed that it is possible to learn about new worlds and new ways; therefore, pedagogical documentation is a tool that allows new knowledge to emerge about outdoor pedagogy, the ways in which children perceive and experience these spaces, and the research they undertake (Merewether, 2018).

Documentation is considered as a tool that through means, such as photography, allows children to give voice and to enable them to express and focus on what is of interest to them. At the same time, the value of dialogue and conversation between adult and child is emphasised in order to better understand the meanings held by their views (White, 2014).

Q3. What type of documentation is used to document working outdoors with children?

The identified research indicates the use of different tools for documenting children's outdoor experiences.

In Dardanou & Karlsen's (2023) study, the camera is used as a useful tool, and one that is common in the context of Norwegian kindergartens, to focus attention on children's actions and exploration, which can in this way attribute meanings to their experiences.

The research focuses on the use of photographs, voice recordings, videos, drawings and children's narratives, which made it possible to enhance the children's ways of interacting with their environment. It is mainly through photography that children have the opportunity to choose what to photograph and thus to focus on what is particularly interesting and important to them. Drawing is also regarded as a useful documentation tool because it allows children to experiment, discover, express themselves and document.

Also in the research presented by White (2014), children were given the opportunity to use cameras in order to document their experiences, which were later reviewed during interviews conducted by the educators in order to better understand the meaning attributed to them by the children. Specifically, in the New Zealand context, photographic images are regarded as documentary tools that enable the initiation of shared dialogues between adults and children.

In this regard, the idea emerges in the article presented that the photograph then requires an explanation and thus a subsequent interaction of the adult with the child in order to understand the interpretation and meaning that the image carries, enhancing the child's voice and his or her way of understanding and seeing the world.

This research is particularly interesting because the use of the camera by the children was preceded by a trial period in order to fully understand its functionality together with the educators, so that the children were then autonomous in its use.

In another research (Kiewra, C., Veselack, E. 2016), field notes are used for the documentation of experiences in nature from observations conducted and recorded regularly during outdoor experiences.

The notes also record the conversations between the children and the questions asked, from which the educators themselves raise other questions and provocations to stimulate new discoveries and explorations.

Again, photographs are used as a documentation tool by the adults in order to record specific moments lived by the children during the proposed experience.

Observations are considered as a relevant documentation tool for collecting descriptions of situations experienced by the children in their experiences in nature. In fact, in Merewether's (2018) research, the researcher uses observations in order to be able to understand and record what the children do, experience, and narrate. These observations are also accompanied by conversations and dialogues initiated with the children during the course of the activities, in some cases even by the use of the camera to document specific moments and details of the environment considered interesting.

During the research, the use of the camera by the researcher also involved the children, who photographed the spaces in the outdoor environment that they considered particularly 'beautiful'. In this case, too, the researcher used field notes, which together with photographs and conversations resulted in a diary to be shared with the families and children in which the research carried out was then reported.

The tools mentioned so far were also used in the study by Tan and Yang (2022).

Specifically, tools such as observations, semi-structured group interviews, research diaries and photographs were used to document the outdoor experiences.

The observations provided an insight into the way the children interacted with each other and with their surroundings, thanks also to the use of cameras that allowed them to focus on specific aspects. The photographs were then used during the semi-structured group interviews with the children and teachers. The interviews were designed to retrace the children's outdoor experiences and thus to enhance their views and considerations from the photographs taken. Learning stories about the children's outdoor experiences were also created through the photographs.

The interviews with the teachers were conducted after the interviews with the children and this allowed the researcher to share photographs, observations and also elements that emerged during the interviews with the children. In this way, it was possible to enrich the conversation with the teachers that focused on understanding perspectives on outdoor experiences and the use of pedagogical documentation tools proposed during the research.

A research diary was also used to be able to record thoughts, considerations, reflections that emerged during the observations (Tan & Yang, 2022).

Also in Nordén & Avery's (2020) research, the camera was used as a documentary tool proposed to the children to photograph what was of interest to them during their experience in nature. From these photographs, narratives were initiated between children and teachers. Formal observations and conversations with the children were also used during the study, which were then discussed with all the teachers at the school who participated in the research.

Finally, the research conducted by Muela, Larrea, Miranda, and Barandiaran (2019) based on the mosaic approach, involved the use of different documentary tools that allowed for the collection of elements, information, and considerations from the children with respect to the external environment.

In particular, tools such as observation; interviews with children, parents and teachers; photographs by the children; child-led tours of the designated environment and the creation of maps were used. Everything that was collected was then discussed with both children and adults. Participatory observations and drawings were also conducted. The research also involved the use of a tool (POEMS) that enabled the information gathered through the documentary tools to be reported according to specific items identified as interesting for describing the quality of the outdoor environment.

Photographs were useful in order to understand which elements in the outdoor environment the children preferred and which they would like in the outdoor space of their school. Also through drawing, it was possible to ask the children to report elements that were of quality to them, thinking of spaces in nature.

At the end of the research, teachers wanted to create a book that collected the children's comments and photographs in order to initiate a shared reflection and to take up and review the material collected. The book also brought out the difference between adults' and children's perspectives in order to highlight the difference in opinions and preferences regarding the design of outdoor environments (Muela et al., 2019).

Q4. Does the documentation of experiences in Outdoor Education enhance children's protagonism as co-researchers in early childhood facilities?

Regarding the possibility of valorising children's protagonism in experiences in nature and therefore in the use of documentation tools, references to this point emerge in the articles included in the review, only in one case do not emerge aspects that give particular emphasis to this aspect. In general, however, it is possible to state that there is a particular focus on the desire to promote children's participation in experiences in nature and at the same time in the documentation of the same experiences. Children are in fact seen as co-researchers and active subjects of their own discoveries and learning.

In Dardanou and Karlsen's (2023) research, children are engaged in the processes of documenting their outdoor experiences, thereby enhancing their being agents of their own everyday life.

The study values the considerations, perceptions, interpretations of what children see and experience during experiences in the outdoor space. Children's participation and involvement are considered important aspects of promoting democratic and inclusive practices, and documentation is seen as a strategy for initiating reflective discussions between children and teachers.

The cameras are seen as a means of documentation that allows the children to identify and choose the aspects that are of most interest to them and thus actively express their views. The way in which children interact with their surroundings, their participation and involvement in the processes of discovery and experimentation makes them protagonists and actors in their learning and knowledge of the world around them.

Therefore, the study emphasises the importance of being able to make the different relationships, interactions and ways of expressing the perception of the world visible to all those involved, while promoting a practice that is inclusive and democratic in early childhood facilities.

In the research considered, there emerges a willingness on the part of researchers and thus educators and teachers to make children co-researchers, actors, protagonists of experiences in order to enhance their point of view and interpretations.

Merewether (2018) emphasises how in her research the possibility of intersecting dialogue with children and listening by teachers together with the materials collected with documentary tools, such as through cameras, made it possible to promote children's collaboration and participation in the lived educational experiences and above all to enhance their point of view.

Pedagogical documentation thus emerges as a tool that encourages outdoor listening and allows children and adults to connect with each other and their surroundings.

White (2014) also emphasises the importance of the use of tools such as cameras since it allows children to express their interests through images but requires the sharing of meanings and interpretations that define meaning.

Tan and Yang (2022) consider pedagogical documentation as a child-sensitive tool that initiates learning processes and reflective discussions. The authors view pedagogical documentation as similar to learning stories, that is, narratives created about children's learning dispositions and the discovery of their interests and personalities (Carr 2001; Knauf 2018). The research conducted emphasises the centrality of children, considering them as active subjects and protagonists as they are able to construct their own knowledge and understanding of the world.

Considering children as creators of meanings capable of interacting with others leads to valuing active listening in pedagogical documentation in order to value the thoughts and voices of young children as capable individuals. The research conducted showed how the teachers involved themselves considered how decision-making processes can foster children's development and cultivate a sense of responsibility in their choices. The study therefore leads one to consider the idea that pedagogical documentation allows the children's participation and protagonism to be

enhanced, and the context allows the teachers' practices to be positively influenced, as it was possible to collect interesting aspects and elements with respect to the children's outdoor experiences (Tan & Yang, 2022).

Also in the study by Muela, Larrea, Miranda, and Barandiaran, (2019) participation is valued as a process of involvement in decisions that affect one's life and the context in which one lives (Hart 1997).

With reference to Vygotsky's (1978) sociocultural paradigm, the idea that each individual constructs his or her own knowledge through participation in and interaction with different social environments is embraced.

In this sense, the research is developed from the idea of involving children in the design and creation of educational environments through an active process in which there is an exchange of ideas and opinions between children, parents and teachers for the construction of new meanings.

## **6. SUMMARY OF MAJOR FINDINGS, CONCLUSION, AND RECOMMENDATIONS**

### **6.1 Summary of Major Findings**

The systematic review conducted made it possible to explore and deepen the topic of children's experiences in nature in children's educational contexts and at the same time to understand what pedagogical documentation practices are used in the various contexts in which outdoor education is promoted.

The research reported in the articles presented describe and explain the activities experienced by children in nature. In some cases, these are activities in specific natural environments, while in other cases they are experiences of discovery and exploration in outdoor spaces, but within the structure of the educational service.

Also, with regard to the use of documentary strategies, it emerges that the researchers, educators and teachers involved in the various research projects for the most part use similar tools in order to gather information and elements that can tell the story of the children's experiences.

The research experiences conducted emphasise the possibility of interweaving material collected through documentation with listening and dialogue between adults and children in order to attribute more shared meaning to children's interpretations.

The articles are developed from an idea of a competent child, protagonist of his/her own experiences, co-researcher and participant in his/her own learning. Therefore, it can be said that a type of documentation is promoted that allows children to be involved and participate, so that they can trace, collect and narrate interesting and important elements experienced from their own experiences in nature.

One aspect that could be considered from reading the articles concerns the age group of the children involved in the research. In fact, although we are dealing with early childhood education facilities, we refer to children from the age of one and a half years (Tan, X.R., R. & Yang, W. (2022), from the age of 2 years (Merewether, 2018;Kiewra & Veselack, 2016), from the age of 3 years (Muela, et al. 2019; Nordén, & Avery, 2020; White, 2014) and from the age of 4 years (Dardanou, & Karlsen, 2023).

This is particularly interesting considering the fact that the children involved in the research are young children, but already quite old, and therefore in some cases with greater language and motor development.

It would in fact be interesting to understand how such research can be developed in early childhood facilities and thus with children even as young as a few months old in order to understand how

they can be involved in Outdoor Education experiences and how they can be involved in documentation processes, while promoting their participation and involvement.

Another interesting aspect that emerged from the research conducted concerns the description and reflections reported with respect to the positive effects on children's development derived from outdoor education.

In most of the articles, references emerge to the positive effects and consequences that experiences in nature have on children's development, and thus to the motivations behind the desire to offer such experiences in educational services for children.

In this regard, it is reported in Dardanou, M., & Karlsen, B. (2023) that education in nature promotes the individual's curiosity and personal expression. The outdoor space and the exploration of different landscapes enable children to explore through their bodies and thus to walk, feel and talk about their experiences.

It is considered that activities in nature favour the development of attention in children as they involve the use and exploration of different types of materials. This is supported by the 'Attention Restoration Theory', which claims that people develop greater concentration after spending time outdoors or even just after observing images of natural environments and elements (Kaplan & Kaplan, 1989).

In addition, experiencing natural environments and discovering everything in nature also encourages people to open up to new ways of looking at the world.

Other positive effects are recognised on children's health, motor and emotional development. In addition, the possibility of outdoor experiences allows children to experience themselves in 'real-life contexts' (Tan & Yang, 2022, p.283) by putting their skills into action and learning to relate to others.

It is also recognised that pedagogical documentation processes have also made children's development of learning dispositions such as reflexivity, flexibility and collaborative thinking more visible. Discoveries in nature have increased the freedom and opportunities for children's inventiveness to flourish (Kiewra and Veselack 2016).

Research from different contexts suggests that participatory documentation practices are to be viewed positively as they have promoted and facilitated positive meaning-sharing in educational practices (Muela, et al. 2019).

The opportunity for children to be able to document their experiences in the outdoors is an element that enhances and promotes the development of personal skills, autonomy and creativity; it allows them to construct shared meanings, engage in critical dialogue with peers and grow as individuals. These aspects are considered as key elements of personal and social development (Hart 1997; Pascal & Bertram 2009; Muela, et al. 2019).

Furthermore, ensuring that all stakeholders (children, parents and teachers) are involved in the co-construction of the learning space is seen as contributing to greater democracy at school (Pascal & Bertram, 2009).

## 6.2 Conclusion

The systematic review conducted made it possible to report and describe experiences of Outdoor Education and pedagogical documentation, which at the same time promoted children's participation and involvement as a fundamental aspect to be fostered in educational contexts for children.

The research described constitutes interesting and valuable examples of documented practices that can be initiated and used in educational contexts, even on a daily basis, in order to enhance children's discoveries and explorations in natural environments and thus their interpretations and the meanings they attribute to their own learning.

Above all, the children's use of the camera proved to be a valuable tool and medium for tracing the elements and aspects considered important and of value to the children.

Alongside this, it is important to value dialogue and discussion between adults and children in order to understand the meanings they attach to their experiences and what is most important to them.

Placing children at the centre of discoveries and learning processes starts with offering contexts and experiences in which they can feel free to explore and learn, using their own abilities, skills and resources; knowing that what is important to them is also important to adults and to the whole community.

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