

PEDAGOGICAL SUPPORT AND OUTDOOR EDUCATION: FACILITATING LEARNING DURING HOSPITAL STAYS

SUPPORTO PEDAGOGICO ED EDUCAZIONE ALL'APERTO: FACILITARE L'APPRENDIMENTO DURANTE LA DEGENZA OSPEDALIERA



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Elisabetta Faraoni
Niccolò Cusano University
elisabetta.faraoni@unicusano.it



Francesco Maria Melchiori
Niccolò Cusano University
francesco.melchiori@unicusano.it



ABSTRACT

This study examines the impact of prolonged hospitalizations on the emotional well-being and learning of school-aged children, proposing outdoor education and pedagogical support as effective strategies to mitigate their effects. Using a holistic approach based on theories emphasizing the importance of nature in learning, the study explores how outdoor education can foster meaningful learning experiences, promoting cognitive and emotional resilience. The findings aim to inform hospital policies and educational practices, integrating outdoor education as an essential component for the recovery of the sick child.

Questo studio esamina l'impatto delle ospedalizzazioni prolungate sul benessere emotivo e l'apprendimento dei bambini in età scolare, proponendo l'educazione all'aperto e il supporto pedagogico come strategie efficaci per mitigarne gli effetti. Utilizzando un approccio olistico basato su teorie che sottolineano l'importanza della natura nell'apprendimento, lo studio esplora come l'educazione all'aperto possa favorire esperienze di apprendimento significative, promuovendo la resilienza cognitiva ed emotiva. I risultati mirano a informare le politiche ospedaliere e le pratiche educative, integrando l'educazione all'aperto come componente essenziale per la ripresa del bambino malato.

KEYWORDS

Hospital Schools, Outdoor Education, School Re-entry, Learning Barriers, Cognitive Resilience
Scuole ospedaliere, Educazione all'aperto, Rientro scolastico, Barriere all'apprendimento, Resilienza cognitiva

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Introduction¹

Advanced care protocols and advances in medical research have resulted in children with chronic illnesses being absent from school and the social environment for varying lengths of time (Kirk & Hinton, 2019), facing numerous challenges beyond those related to medical treatment, and being deprived of normal daily life (Hopkins et al., 2014), with significant social and academic consequences. Reduced physical and communicative interaction with the external environment can interfere not only with medical treatment, but also with the psychophysical state of the patient (Holt-Lunstad et al., 2015). The school environment is particularly important in a young person's life, but during illness, poor attendance and loss of school days can lead to poor performance (Hopkins et al., 2014), risk of dropping out (Emerson et al., 2016), significant barriers to learning with subsequent poorer outcomes, lack of motivation, and greater difficulties upon return (Fotheringham, 2021). The quality of life is correlated with the field of education, as it influences the future society (Marcelli, 2023), allowing the salvation of the most difficult situations, as education shapes the relationship with the world, strengthening and providing indispensable tools to actively contribute to a society projected towards a more inclusive future (Arendt & Fistetti, 2001). In recent years, specialists from various disciplines have been reflecting on educational models that could go beyond the traditional school boundaries, especially after the COVID-19 pandemic, looking back to the eighteenth and nineteenth centuries, which truly revolutionized traditional teaching, focusing on the great value contribution of nature and taking education outside the spaces traditionally designated for teaching, aiming at an unprecedented relationship with the outside world. Outdoor education was born to address the learning difficulties of children with health problems from disadvantaged social classes, through the work of important educators convinced of the need to restore the relationship with nature for the full development of the human being; just think of the works of Jean Jacques Rousseau, Locke, Pestalozzi, Froebel, the Agazzi sisters and Montessori (Pironi & Salustri, 2023). The practice of outdoor education has experienced alternating phases, while today it is more developed, especially in areas where teachers and doctors have interacted to invest in the fight against childhood diseases and school hygiene (D'Ascenzo, 2018). Currently, there is widespread concern about young people's lack of interest in the outdoors and an increasingly widespread consensus that schools should facilitate relationships with the natural environment (Gill, 2014). However, there is a growing body of international research highlighting the benefits of learning in natural and outdoor environments (Malone & Waite, 2016). This concept, well articulated in

¹ The paragraphs in this article are attributed to Elisabetta Faraoni, with the exception of paragraph 4, which is attributed to Francesco Maria Melchiori, who was also responsible for the conception, scientific supervision and drafting - revision and editing of the text.

the past, has undergone significant changes over time due to urbanization and industrialization (Tourula et al., 2013). Despite this, health research informs us of the benefits of fresh air and sunlight exposure, which are recognized as extremely important in overcoming health crises due to vitamin D deficiency (Shin et al., 2013). Through this narrative review, we aim to critically analyze the literature on this topic, examining the benefits of outdoor education, the challenges of implementing it in hospital schools, the best practices to improve its impact on learning, and the stimulation of patient resilience. Although this review provides a comprehensive overview, an empirical study is desirable to more thoroughly evaluate the effectiveness of outdoor education in hospital schools. Such a study could deepen the findings and conclusions of this review and make a valuable contribution to understanding the ways in which outdoor education can enhance learning and promote resilience and well-being in hospitalized children (Bertolino & Filippa, 2021).

1. Outdoor Education and the Hospital Educational Context

In recent years, the attention to environmental awareness and respect has grown, with a particular focus on outdoor education as a means to counteract the negative effects of urbanization. This educational approach is both sensory and experiential, drawing from local realities and educational institutions (Carpi, 2017). Research has highlighted the positive impact of outdoor educational practices on psychophysical, cognitive, and emotional development, improving peer interactions and reducing antisocial behavior in school contexts (Moore, 1996; Pyle, 2002, Martin, 2010; Malone & Waite, 2016). The external environment serves as a significant source of motivation, which is fundamental for creative and meaningful learning processes (Dahlgren & Szczepanski, 1998). Pedagogical attention to this theme is paramount (Benetton & Zanato, 2020), but it requires a conscious understanding that being outdoors alone does not constitute responsible educational action. A methodological approach that involves careful observation of reality and managing issues is necessary to truly understand oneself and one's environment (Nigris, 2007). In the context of hospital schools, where children's health can be fragile, outdoor education must be approached with care. The activities offered to hospitalized students have gained attention and value over time, both educationally and inclusively, despite the challenges posed by long hospital stays (Di Jorio, 2020). Hospital schools provide a vital learning environment where chronically ill children can avoid isolation due to poor communication with the outside world. These children have the right to be educated equally to their peers and in a manner appropriate to their needs, as long as their health permits (Chen, et al., 2015). Hospital schools offer a service that focuses on the student with

illness-related difficulties, providing an educational environment tailored to the specific needs of the sick. In many developed countries, the educational aspect of hospitalisation is an essential component of hospital services (Department of Health, 2003). When children are hospitalised for long periods, they should not be deprived of the right to pursue happiness; 'learning to live and living to learn' are fundamental and effective aspects of improving happiness even during the darkest days of illness (Akerman et al., 2003). The educational aspect also plays a crucial role in improving the understanding of the illness and can be useful for the child's compliance with treatment, with positive effects on the outcome of the illness itself (Kurtz 2002). Implementing outdoor education in hospital schools requires a thorough understanding of the specific needs of sick children and the challenges they face on a daily basis. It is important to adapt outdoor activities to ensure safety and comfort while promoting both learning and active participation.

2. The importance of targeted intervention: the role of the hospital educator and its counselling

Scientific literature has emphasised that the role of the teacher changes profoundly in the context of the hospital school, especially in long-term care wards (Benigno & Fante, 2020). The effectiveness and retention of teachers, their satisfaction and commitment are considered crucial factors in the education of sick children (Canrinus et al., 2011). The hospital school environment is constantly changing and requires teachers to have specific training to understand the different physical, emotional and cognitive needs of children (Faraoni, 2023), as well as the ability to work with a multiprofessional team on a daily basis (Äärelä et al., 2016). The educator's role during hospitalisation is not to alleviate the fears and anxieties associated with the profound changes brought about by the illness, but rather to teach children, through a path based on awareness, to listen to their emotions and learn to manage them (Gramigna & Poletti, 2020). The role of the teacher in the hospital is much more than mere entertainment; it is fundamental in helping the children to seek balance and future projects through the path of resilience, placing them in the position not of victims, but of active participants in the journey towards healing (Catarci, 2016). The teacher in the hospital often finds himself or herself working closely with a child who needs to be understood from different perspectives, both physical and emotional, interacting with other professionals in the hospital (Benigno et al., 2020). Unfortunately, even today, the role of the educator working in the context of illness is underestimated or, more often, limited to teaching alone. The educational aspect of the sick child is outlined in the co-presence of many different perspectives, whose integration leads to a more adequate response to the complexity of each different situation that arises.

Throughout the period of hospitalisation, the whole situation of the child should always be kept in mind, whether he or she may recover or if the outcome is unfavourable (Guarcello, 2017). The role of the educator during hospitalisation is not to minimise the fears and anxieties associated with the profound changes that the illness brings, but to teach them, through a path of awareness, to listen to their emotions and learn to manage them (Gramigna & Poletti, 2020). In order for research in the field of pedagogy to have an impact on children's health, it is important to adopt strategies that give a voice to teachers; only in this way will the information derived from research work become a useful tool in the hands of expert teachers (Faraoni, 2023).

3. Efficacy of Outdoor Learning

The term 'outdoor education' has been used to describe a variety of educational activities, ranging from playful environments immersed in nature to lessons formally integrated into the school curriculum (Genter et al., 2015). Numerous aspects through which contact with the natural environment can influence a child's development have been documented (Braus et al., 2018), showing positive associations between those who spend time immersed in nature and their social, physical, cognitive (Selhub & Logan, 2012) and emotional development. Moreover, outdoor learning has been linked to enhanced social skills, as it often requires teamwork, communication, and problem-solving in a collaborative environment (Fägerstam & Blom, 2013). It also encourages a connection with nature, which can lead to environmentally responsible behaviors and attitudes in the future (Chawla, 2007). Improvements have also been assessed at the level of communication (Breunig et al., 2015), resilience (Booth & Neill 2017), and self-regulation (Sibthorp et al., 2015). Research also suggests that even spending a few moments outdoors throughout the day, or simply observing natural landscapes, can help lower heart rate, blood pressure and even reduce circulating cortisol, providing benefits and activating parasympathetic activity (Lee et al., 2012). As noted in a study by Herten et al. (2011), contact with the natural environment can enrich the human microbiome with significant benefits on the inflammatory state and immune balance, not to mention improving the health of not only students but also teachers (Puhakka et al., 2019). Another benefit linked to frequenting natural environments, although still little studied, concerns learning (James & Williams 2017); in fact, frequenting outdoor environments rather than the usual frontal teaching, especially when activities are centred on children's ideas (Vartiainen et al., 2018), positively influences learning processes more when children interact directly with what they have learned (Tuuling, Öun, and Ugaste 2019). Despite this, it is clear that teachers do not practise outdoor learning very often, even though they believe

that outdoor learning is important. However, the idea that the outdoors poses risks that are of great concern to both teachers and parents is still very present, so much so that artificial, 'safe' and non-challenging play environments are often noted, especially for the younger children (Morrissey et al., 2015). This leads to more attention being paid to risk management than to the quality of time spent outdoors, making the outdoor environment less interesting. This growing anxiety about possible accidents influences adults, who tend to keep children under control and more engaged in well-structured indoor activities. Adult involvement is therefore fundamental in influencing the type of experiences children have access to during outdoor activities (Bento & Dias 2017). In this scenario, there is a need to raise awareness of children's right to be outdoors, based on the importance of the positive impact on children's own well-being, learning and development.

4. Methods

The narrative review was conducted using a critical qualitative approach, focusing on a selected subset of literature relevant to the topic as the most appropriate methodological approach (Snyder, 2019). Key factors were identified through a comprehensive analysis of peer-reviewed articles and empirical studies. Inclusion criteria focused on relevance to outdoor education in hospital settings, impact on learning and emotional well-being, and publication date within the last two decades. Initial searches for relevant studies were conducted using databases such as Google Scholar, Eric, and PubMed, which allowed targeted access to a wide variety of publications and sources. Keywords used in both Italian and English included: outdoor education, hospital school, hospital-based education, hospitalized child, educational continuity, hospitalized students, and various synonyms and related terms. This search resulted in the identification of primary sources, with the main inclusion criterion being peer-reviewed articles specifically related to outdoor education and hospital schooling. Selection was based on scientific quality and significance, resulting in a total of seven articles published in the last decade. In cases where the results of the selected articles were not entirely clear, collaborative discussion was used to resolve any uncertainties. A thematic analysis was then used to synthesize the findings to ensure a rigorous examination of the effects of outdoor education on hospitalized children. This activity involved a correlational and contextual search strategy, looking for patterns or connections between the cited papers to deepen the understanding of how outdoor education can enhance learning and promote resilience and well-being in hospitalized children. More specifically, the primary objectives of this review were to address the concerns associated with outdoor education for hospitalized students and to evaluate its impact. This is a precursor to advocating for increased awareness about

the importance of outdoor education. From this perspective, the study aims to shed light on the concerns of teachers and parents regarding the risks associated with outdoor activities. It underscores the necessity for robust risk management strategies to successfully incorporate this pedagogical approach within a hospital setting. Additionally, the analysis delves into the positive and negative aspects of this methodology, examining its impact on the personal and social development of hospitalized children. It also explores the multilevel factors that influence the overall well-being of these children.

5. Discussion

The narrative review highlighted several key factors related to the implementation of outdoor education in hospital schools and its impact on the learning and emotional well-being of hospitalized children. First, it was found that outdoor education can provide significant benefits to the learning and emotional well-being of hospitalized children. Previous studies have shown that exposure to nature and outdoor activities can foster cognitive and emotional resilience and promote meaningful and creative learning experiences (Breunig et al., 2015; Booth & Neill, 2017). In addition, interaction with the outdoor environment can help reduce stress, improve emotional self-regulation, and facilitate communication among hospitalized children (Sibthorp et al., 2015; James & Williams, 2017). However, several challenges have arisen in the implementation of outdoor education in hospital schools. These include concerns about the safety and comfort of children during outdoor activities, as well as the need to adapt activities based on the specific needs of patients and the limitations imposed by their medical conditions (Morrissey et al., 2015; Bento & Dias, 2017). Furthermore, a lack of awareness and training among teachers about the importance and benefits of outdoor learning has been highlighted, as well as concerns among parents and adults about the risks associated with outdoor activities (Vartiainen et al., 2018; Selhub & Logan, 2012).

Integrating Outdoor Education into the school curriculum brings forth a series of significant benefits across various dimensions:

1. Educational and pedagogical dimension: Outdoor Education (OE) allows students to explore nature from multiple disciplinary perspectives, including those of scientists, anthropologists, historians, and sociologists. This multidisciplinary approach enriches their knowledge base significantly, encouraging them to explore the world with a critical and in-depth perspective.
2. Psychological dimension: Outdoor experiences expose students to unexpected situations, contributing to the development of efficacy and self-awareness. According to biophilia theories, exploring flora, fauna, and natural environments

generates a sense of wonder and well-being, strengthening their ability to handle uncertainty and adapt to new challenges.

3. Social and inclusive dimension: OE facilitates interactions among students from diverse experiences and backgrounds, promoting active engagement in socio-environmental realities. This fosters cooperation, communication, and respect for diversity, thus building strong and meaningful relationships.

4. Physical dimension: Outdoor activities involve students in active physical movement, enhancing the development of both gross and fine motor skills, while promoting an active and healthy lifestyle.

5. Organizational dimension: The OE approach reflects an open school concept that integrates the surrounding environment as an essential part of the learning environment.

Outdoor activities are designed to complement the traditional curriculum, extending learning beyond the classroom and encouraging a hands-on approach and active student participation. In summary, integrating Outdoor Education into the educational context offers a wide range of benefits, from deepening knowledge to fostering personal and social growth, from promoting physical activity to creating a more inclusive and engaging curriculum. These benefits underscore the intrinsic value of outdoor experiences as an essential enrichment to education (Bortolotti, 2018).

Although outdoor education can provide significant learning and well-being opportunities for hospitalized children, the challenges and concerns associated with its implementation need to be addressed. It is crucial to promote awareness and training for teachers and healthcare workers, and to actively involve parents and adults in supporting and facilitating outdoor activities for hospitalized children.

Conclusions

Using a comprehensive and interdisciplinary method that integrates the cognitive, emotional, social and physical aspects of a child's life, we have explored the role of outdoor education in promoting inventive and effective learning opportunities. This method strengthens both the cognitive resilience and emotional adaptability of young patients, with the aim of maintaining educational progress in the midst of hospital stays. Maintaining this educational link is essential to reduce the educational disruption caused by medical treatment. Our research has stimulated a valuable investigation into the relatively unexplored area of outdoor education in the context of hospital schools. This highlights the need for approaches that integrate hospital-based educational experiences with children's mainstream learning pathways, facilitating an uninterrupted and cohesive educational process. Considering the implications for healthcare, our findings suggest that outdoor

education has the potential to revolutionise the patient experience by adding a healing aspect to education, thus shaping healthcare practices within the hospital environment. In conclusion, there is a call for further research that can validate and build upon these initial observations. Subsequent research should focus on gathering concrete evidence of the success of outdoor education initiatives, their integration into patient care, and the cultivation of educational processes that are unattainable within conventional school settings.

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