PLAY LITERACY FOR MOTOR DEVELOPMENT IN CHILDREN WITH SPECIAL EDUCATIONAL NEEDS

L'ALFABETIZZAZIONE DEL GIOCO PER LO SVILUPPO MOTORIO NEI BAMBINI CON BISOGNI EDUCATIVI SPECIALI

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ABSTRACT

Play literacy is an essential component of motor, cognitive, and social-emotional development, as it allows children to acquire skills necessary to participate in playful activities actively and creatively in a variety of settings. The paper examines the educational, methodological implications of game literacy, paying particular attention to special educational needs (SEN) and the importance of diversified learning environments, such as outdoor spaces.

L'alfabetizzazione del gioco è una componente essenziale dello sviluppo motorio, cognitivo e socio-emotivo, poiché consente ai bambini di acquisire competenze necessarie per partecipare in modo attivo e creativo ad attività ludiche in una varietà di contesti. Il contributo esamina le implicazioni educative, metodologiche dell'alfabetizzazione del gioco, ponendo particolare attenzione ai bisogni educativi speciali (BES) e all'importanza degli ambienti di apprendimento diversificati, come gli spazi all'aperto.

KEYWORDS
Play literacy, Motor development, Inclusion, BES
Alfabetizzazione del gioco, Sviluppo motorio, Inclusione, BES

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Introduction

Play literacy is a crucial aspect in the overall development of the child, as it can significantly influence the motor, cognitive and socio-emotional dimensions.
Active, creative and competent participation in games requires children to acquire a set of transversal skills, which are not limited to the motor sphere, but also extend to the ability to solve problems, collaborate with others and develop greater self-awareness. In this context, game literacy is of relevance for children with special educational needs (SEN), as it offers them an accessible and inclusive means of learning and interacting (Whitehead, 2010).
The body is the first tool through which children interact with the environment and develop their motor literacy. In the first years of life, motor experiences provide the basis for the acquisition of more complex skills, also influencing cognitive and social-emotional development. Play, understood both as a free play activity and as a structured educational practice, represents a powerful means of promoting this literacy.
Through play, children not only explore their physical limits and potentials, but also learn to solve problems, interact with peers, and develop greater awareness of themselves and others (Gallahue & Ozmun, 2012).
In this context, game literacy takes on relevance for children with SEN. Inclusive play offers the opportunity to actively participate in activities that promote motor development, considering their educational needs.
Several studies (Goodway & Branta, 2003) have shown that play activities, adapted to children's individual abilities, can improve not only their motor skills, but also their social participation and emotional well-being. The non-competitive nature of the game provides children with SEN with a safe environment in which to explore movement without the fear of failure, allowing them to progress at their own pace.
The paper aims to deepen the educational and methodological implications of game literacy, analyzing how the strategic use of play can foster the integral development of the child, with particular attention to diversified learning environments, such as outdoor spaces, which can represent a significant opportunity for SEN.
The educational implications of this perspective require a rethinking of teaching practices in the field of physical education. Teachers need to be trained not only to manage play activities, but also to create learning environments that foster inclusion and overall student development. The integration of play as an educational tool within the motor education curriculum allows children to develop the ability to move confidently and actively participate in social life, thus enhancing their motor literacy significantly.

1. The role of the body in play literacy

In recent years, the growing attention to early childhood has led to the rediscovery of the central role of the body in cognitive, emotional and motor development. In particular, the 0-3 age group has been the focus of numerous studies that underline the importance of the "lived body" and the "known body", in which the child's physical experience becomes the basis for the construction of cognitive skills. Piaget (2001) has highlighted how thought and language derive from internalized bodily action, i.e., the process through which the child experiences the world through the body and transforms these experiences into knowledge and skills. Play is one of the privileged contexts in which these skills can emerge and develop.

The body, in the context of game literacy, is the primary means through which children interact with their environment and with others. Motor skills developed through movement, such as coordination, balance and agility, are crucial not only for play itself, but also for competent and active participation in many other activities of daily living.

In children with SEN, motor literacy becomes particularly significant, as physical play offers a concrete opportunity to overcome cognitive or emotional barriers. The body, in these cases, can become a tool for non-verbal communication and for the expression of emotions and thoughts that would otherwise be difficult to externalize.

Play is not only a recreational activity, but represents a powerful educational tool, especially in inclusive contexts (Lo Piccolo, 2020), and body movement facilitates motor development and contributes to the integration of cognitive and affective dimensions.

Through physical play, children learn new motor skills while internalizing social rules, improving their self-esteem, and learning to manage their emotions.

Research in neuroscience, such as that of Ratey (2008), has shown that physical activity stimulates areas of the brain related to emotions and cognition, thus promoting learning and general well-being. In the context of game literacy, the role of the body also extends to building greater self-awareness. The child who plays not only develops physical skills, but also learns to know his limits and potential, thus improving self-esteem and the ability to self-regulate.

Recognizing the body as an essential dimension of play literacy is crucial to fully understanding how play can promote global development in children, particularly children with SEN.

Motor and play literacy should be considered not only as a tool for improving physical skills, but also as a means of promoting emotional, social, and cognitive well-being.

Physical play offers a dynamic and inclusive context in which all children, regardless of their abilities or limitations, can actively participate and grow in an integrated and harmonious way (Lo Piccolo, 2020).

2. Play as an educational tool: inclusive methodological approaches

Play, in addition to being an innate activity of childhood, plays a central role in the process of growth and global development of children, acting as a powerful educational tool in inclusive contexts.

Pedagogical and psychological studies have long shown that play allows children to develop essential motor skills, while promoting cognitive, emotional and social growth (Gallahue & Ozmun, 2012). However, the educational potential of play becomes particularly relevant in the case of children with SEN, as it offers a flexible, adaptable environment that can overcome the limitations often imposed by traditional teaching methods, such as lectures.

For children with SEN, learning through play takes on a crucial inclusive function, providing them with opportunities for active participation that may be limited in conventional educational activities. One of the main advantages of the game in this context is its ability to adapt to individual skill levels.

Children with motor or cognitive difficulties may benefit from games that encourage movement or facilitate social interaction in a non-competitive way. This approach helps to reduce performance anxiety, often experienced in traditional educational settings, allowing children with SEN to learn at a pace appropriate to their specific abilities and needs (Goodway & Branta, 2003).

From a methodological point of view, it is essential to integrate approaches that allow play to express its full educational potential.

Among the most effective models in inclusive education are cooperative learning, role-playing and peer tutoring.

Cooperative learning is based on group activities in which children work together to achieve common goals. This method facilitates the development of social skills, such as cooperation, sharing, and negotiation, which not only improve interpersonal skills, but are essential for emotional and psychological well-being (Johnson & Johnson, 2009). In an inclusive environment, cooperative learning allows children with SEN to actively participate, receiving peer support and contributing their own unique skills.

Role-play, on the other hand, offers children the chance to explore different identities, situations and roles in a safe context. This practice is particularly useful for children with SEN, as it allows them to practice social and relational skills, such as conflict management or the expression of emotions, in a mediated and

controlled way (O'Toole & Dunn, 2002). Through role-playing, children can learn to handle situations that might be perceived as difficult or stressful in real life, gaining confidence and problem-solving skills.

Peer tutoring is another methodological approach of great importance. It involves children with different skills, creating a mutually supportive relationship. In the case of children with SEN, this methodology promotes not only the learning of motor and social skills, but also the sense of belonging and inclusion in the group (Topping, 2005). Peer mentoring allows children with difficulties to receive assistance from peers who are more adept at certain skills, while strengthening self-esteem and a sense of personal effectiveness. In addition, this model promotes empathy and responsibility among students, developing a culture of welcome and support within the school context.

In addition to specific methodologies, it is also important to consider the physical context in which the game takes place. Outdoor spaces, for example, offer unique opportunities for motor literacy. The freedom of movement that characterizes these environments, combined with the richness of natural stimuli, creates an ideal context for spontaneous play and the discovery of the body in relation to the surrounding space (Louv, 2008). For children with SEN, outdoor spaces provide a less structured environment than traditional school environments, allowing them to explore movement without the restrictions often imposed by enclosed and limited spaces. In addition, the variety of surfaces, differences in height and natural obstacles present outdoors stimulates the development of motor skills such as balance, coordination and agility, providing challenges that can be adapted to the abilities of each child.

Finally, the integration of these methodologies and contexts requires careful planning by teachers and educators. It is essential that they are trained not only in game management techniques, but also on strategies to make the activity inclusive and accessible to all students. Motor and play literacy should not be confined to physical education hour, but integrated into all areas of the school *curriculum*, thus offering a holistic approach that promotes children's global development.

3. Contextual implications: learning environments and outdoor spaces

One of the key aspects of game literacy lies in its ability to adapt to a variety of educational contexts, with reference to outdoor spaces. These environments offer unique opportunities for motor, cognitive and social-emotional development, allowing children to connect with the natural world in a direct and immersive way. Several studies (Louv, 2005; Dyment & Bell, 2008) emphasize the importance of these spaces for learning, highlighting how they foster spontaneous movement and

sensory exploration. Natural characteristics, such as the variability of the terrain and the presence of obstacles, offer stimuli that not only strengthen motor skills (coordination, balance, strength), but also enhance children's problem-solving skills, pushing them to interact creatively with the environment.

Literacy in outdoor play allows children to acquire motor skills through free movement, in a context that stimulates physical and cognitive interaction with the surrounding environment. Activities such as running, jumping and climbing, typical of outdoor play, promote more complex body awareness than activities that take place indoors. This type of play also promotes the development of greater spatial awareness, which is essential for motor coordination and movement planning. The experiential approach to learning, which is achieved through outdoor play, allows children to internalize complex concepts more effectively, as shown by studies by Gray (2011) that highlight the importance of spontaneous play for cognitive and social-emotional development.

For children with special educational needs (SEN), outdoor spaces offer unique advantages, representing a flexible context in which physical barriers can be overcome. Inclusively designed environments, with adaptable paths and diversified spaces, allow active participation even for those children who require special attention.

As pointed out by Dyment and Bell (2008), the inclusion of well-designed outdoor spaces in schools and communities can significantly improve the learning experience for students with disabilities, providing opportunities for physical exploration that also stimulate cognitive and emotional dimensions. The ability to move freely in a natural environment, without the constraints of closed spaces, can promote a greater sense of autonomy and psychophysical well-being in children with SEN.

The relationship between body and space is crucial for stimulating creativity and active learning. The design of educational environments, which promote free movement and outdoor play, not only stimulates motor development, but also enriches children's social and cognitive skills (Alessandra Lo Piccolo, 2021). Outdoor play literacy fosters a holistic dimension of learning, integrating motor, social and cognitive experiences in a context that encourages autonomy and interaction.

However, it is important to address the challenges related to the accessibility of outdoor spaces, especially in urban contexts. Careful and inclusive educational and social planning is key to creating safe and accessible spaces for all children. It is essential that the creation of educational spaces that integrate natural environments becomes a central theme of pedagogical reflection, enhancing the

role of outdoor play as a fundamental tool for motor literacy and the integrated development of children.

Conclusions

Play literacy emerges as a crucial element for the well-being and integral development of children with special educational needs (SEN).
Bodily interaction and movement, which are essential in this process, not only facilitate the acquisition of motor skills, but also promote vital social and emotional skills. Through playful practices integrated into the physical education curriculum, it is possible to create an educational environment that fosters the inclusion and active participation of all students.
Additionally, using outdoor spaces as learning contexts provides unique opportunities to explore and experiment, encouraging children to interact with their environment in creative and meaningful ways. This approach not only enriches the learning experience but also helps to build a culture of respect and collaboration among peers.
It is essential that educators adopt inclusive and flexible teaching strategies, capable of responding to the different needs of students. Teacher training, the adoption of appropriate pedagogical models and the creation of stimulating learning environments are key elements to ensure that game literacy can express its full educational potential.
Finally, promoting game literacy in schools not only helps develop motor skills, but also provides a valuable opportunity to improve children's social and emotional well-being. Investing in this dimension means building the foundations for meaningful and inclusive learning, capable of fostering the global development of all students, regardless of their abilities or limitations.

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