

PHYSICAL LITERACY AND INCLUSION: PEDAGOGICAL-ORGANIZATIONAL IMPLICATIONS

ALFABETIZZAZIONE MOTORIA E INCLUSIONE: IMPLICAZIONI PEDAGOGICO-ORGANIZZATIVE



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ABSTRACT

Motor-sports activities have a formative, educational and above all inclusive value for every person, regardless of age, gender and the presence of any disabling physical or mental condition. In this perspective, physical literacy becomes a pedagogical and organizational tool capable of stimulating education for inclusion on the one hand, and on the other tends to promote a series of multiple social, psycho-physical, educational and relational benefits.

L'attività motorio-sportiva ha una valenza formativa, educativa e soprattutto inclusiva per ogni persona, indipendentemente dall'età, dal sesso e dalla presenza di qualsiasi condizione fisica o mentale invalidante. In questa prospettiva, l'alfabetizzazione motoria diventa uno strumento pedagogico e organizzativo in grado di stimolare l'educazione all'inclusione da un lato, e dall'altro tende a promuovere una serie di molteplici benefici sociali, psico-fisici, educativi e relazionali

KEYWORDS

Physical literacy, Inclusion, Special Educational Needs
Alfabetizzazione motoria, Inclusione, Bisogni Educativi Speciali

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Introduction

Physical literacy is understood as a process of acquisition and development of motor skills through which the individual expresses his or her movement skills, knowledge and motivations as well as the degree of perceived self-efficacy (Martins et al., 2020). Physical literacy develops mainly in childhood, but can continue into adulthood, contributing to an improvement in general physical performance and the promotion of health and well-being (Colella et al., 2020). Basic motor skills, such as walking, running, jumping, throwing-grabbing, and the complex skills, characterizing the various sports, play a crucial role in daily motor practice and contribute to the growth of the person. Motor literacy is of particular importance in educational and social dynamics, especially for individuals with Special Educational Needs (SEN). The organisational-pedagogical implications related to this issue require a targeted and inclusive approach, which takes into account the specific needs of each child. In particular, there are different aspects to be analyzed. A fundamental aspect is the personalization of interventions (Latino et al., 2024). It is essential to assess each child's individual motor skills and needs, creating tailored motor literacy programs. This involves adapting physical activities, making them accessible and engaging for everyone, regardless of their abilities. The training of educators and professionals in the field is also crucial (Colella, 2016; 2019). It is important that they are prepared to recognize and manage the diverse needs of children with SEN, developing skills to facilitate inclusion and create positive learning environments. Specific training courses can help implement inclusive strategies and promote empathy and sensitivity towards diversity. Another aspect to consider is the collaboration between school, families and other professionals, such as therapists and psychologists. This support network is critical to ensuring a holistic approach, where shared information helps to create a more effective and integrated learning environment (Chatoupis, C. 2005). Involving families in motor activities and educational decisions fosters a sense of community and support. Finally, it is necessary to design spaces and equipment that are accessible and stimulating for everyone. Facilities must be adapted to meet the needs of children with different abilities, allowing everyone to participate actively and without obstacles. This not only facilitates motor learning, but also contributes to a sense of belonging and the strengthening of social relationships (Colella & Morano, 2011). In this sense, an integrated organizational and pedagogical approach is required for SEN subjects, combining personalization, training, collaboration and accessibility. These elements together can foster an inclusive environment, in which every child has the opportunity to fully develop and actively participate in social and school life.

1. Personalized Approach

The personalized approach to motor literacy for individuals with Special Educational Needs (SEN) is essential to ensure that each child can develop their motor skills in an inclusive and stimulating context. This type of approach is based on a few key guidelines. It starts with an initial individual assessment of each child's motor skills and specific needs (Trecroci et al., 2021). This assessment may include practical observations, interviews with families, and collaboration with professionals such as occupational therapists or psychologists (Colella & Lanza, 2020). The goal is to understand each child's abilities, difficulties, and preferences. In particular, reference is made to the following aspects to be analyzed (Table 1):

Table 1. Elements of the Customised Approach

Custom Goals	Adaptation of Activities	Individual Support	Monitoring and Feedback	Creating an Inclusive Environment
It is important to set clear and personalized learning objectives. These goals should be realistic and measurable, so you can track progress over time. It is crucial to involve the child and families in setting these goals, to ensure that they are	Physical activities must be designed and adapted according to individual abilities. This can include changing the rules of a game, using specific equipment, or creating custom motor paths. The goal is to ensure that every child can actively participate and have fun,	This may include the support of an educator or companion who can guide and encourage the child, thus facilitating learning and participation. Additionally, it's important to encourage autonomy, allowing children to explore and	Tracking progress is essential to assess the effectiveness of the personalized approach. It is useful to keep a record of the activities carried out and the results achieved, providing constant feedback to children and families. This	Finally, it is important to create a welcoming and positive environment, where each child feels valued and supported. Social inclusion is fundamental for the well-being and development of children with SEN,

meaningful and motivating.	regardless of their abilities.	learn at their own pace.	helps to keep motivation high and to make any adjustments to goals and activities.	and the context must foster cooperation and mutual respect among all participants.
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2. The training of educators

The training of educators is crucial to ensure that all children, including those with Special Educational Needs (SEN), can benefit from inclusive and quality physical education (Tafari & Latino, 2024). Here are some key aspects that should be considered in training:

- **Understanding Physical Literacy:** Educators must have a solid understanding of what physical literacy means and its benefits. This includes knowledge of basic motor skills and the importance of developing them in children to promote active behavior and a healthy lifestyle;
- **Knowledge of Diversity:** it is essential that educators are trained to recognize and understand the different needs of children, especially those with SEN. This involves knowing the various types of disabilities and strategies for adapting Physical activities so that they are accessible and engaging for everyone.
- **Inclusive Teaching Strategies:** Training should include specific teaching strategies to create an inclusive environment. Educators must learn to design activities that can be modified according to individual abilities, using appropriate tools and resources. It is helpful to encourage creativity in planning games and physical activities.
- **Group Management:** Educators must acquire skills in group management, learning to promote cooperation and respect among children. Creating positive group dynamics is key to facilitating inclusion and ensuring that everyone feels like they are part of the group.

- **Evaluation and Monitoring:** training should also concern the evaluation of children's progress. Educators must be able to monitor motor and social skills, providing constant and motivating feedback. Appropriate assessment tools can help you set personalized and measurable goals.
- **Interdisciplinary Collaboration:** It is important that educators are trained to work in teams with other professionals, such as therapists and psychologists. Interdisciplinary collaboration allows for the development of an integrated and holistic approach to the education of children with SEN, ensuring that their needs are addressed in a coordinated manner.

The training of educators with respect to physical literacy must be multidimensional and multiprofessional, therefore it must include the understanding of diversity, inclusive teaching strategies, group management, evaluation and monitoring as well as interdisciplinary collaboration (Tafari & Latino, 2024). Proper training not only improves educators' skills, but also helps create a positive and inclusive learning environment for all children.

3. Creating inclusive spaces

Physical literacy and the creation of inclusive physical spaces are closely interconnected, as a well-designed environment fosters the learning and participation of all children, including people with Special Educational Needs (SEN) (Molisso et al., 2019; Colella et al., 2021). Here are some key things to consider:

Accessible Design: Spaces must be designed to be accessible to all. This includes removing physical barriers, such as steps or inadequate equipment, and creating paths that allow for easy mobility. Using adapted materials and equipment, such as balls of different sizes or non-slip surfaces, can make all the difference.

Diversified Activity Zones: It is helpful to create different activity zones that allow children to experiment with various motor skills. Areas for free play, motor paths, spaces for group activities and reflection zones can promote learning through movement and social interaction.

Inclusion of Natural Elements: Integrating natural elements, such as plants or green spaces, can make the environment more stimulating and relaxing. The use of natural materials and the creation of outdoor spaces encourage active play and contact with the environment, promoting richer motor learning.

Cooperative Activities: The spaces must encourage cooperative activities, where children can work together, developing not only motor skills, but also social and relational skills. Creating areas dedicated to team games or activities in small groups can facilitate this interaction.

Stimulating Environments: It is important to make spaces stimulating and engaging. Using bright colors, visual cues, and clear indicators can help children find their way around and understand the activities on offer. This also promotes a positive and motivating atmosphere.

Training and Involvement: it is essential to involve educators and families in the creation and management of spaces. Training educators on how to effectively use these spaces and involve families in the process can help create a truly inclusive environment.

In summary, the creation of inclusive spaces for physical literacy requires careful and targeted design, which takes into account the different needs of children. A well-structured and stimulating environment can facilitate motor and social learning, promoting the active participation of all.

4. Physical Literacy, School Inclusion and SEN

In the school environment, physical education is not only an opportunity to improve physical health, but also to promote social inclusion and emotional learning (Bertagna, 2004; Borgogni, 2016). This is particularly significant for students with SEN, who may face more complex challenges not only on a cognitive level, but also on a physical, psychological or relational level (Di Palma & Tafuri, 2017). School inclusion, therefore, must extend to all aspects of school life, including motor activities, so that each child can develop their potential in an environment that respects and values diversity (Ciotto et al., 2014). Physical literacy and school inclusion are two concepts that are deeply intertwined and play a fundamental role in ensuring a school that is truly accessible to all students, including those with Special Educational Needs (SEN). Physical literacy is not limited only to the ability to perform physical exercises, but includes a broader process of acquiring skills that allow each individual to be aware of their body, to use it with coordination and harmony and to interact with the environment in a positive way (Castelnuovo et al., 2029). Physical literacy, in this context, must be designed in such a way that all children, regardless of their difficulties, can actively participate and feel part of the group. Inclusive motor teaching does not only imply the adaptation of physical activities, but requires a change of mentality: it is a matter of recognizing the right

of every pupil to develop motor skills, promoting well-being and improving the quality of life (Colella, 2018). For children with SEN, movement represents a privileged channel to promote integration and the development of social and emotional skills. Participation in games and physical activities allows you to experience cooperation, sharing, conflict management, but also overcoming your own difficulties. For example, through exercise, the child with SEN can learn to manage anxiety, develop resilience and improve self-esteem. In addition, motor activities can help stimulate other areas of the brain, improving concentration and the ability to learn in other school settings as well (Latino et al., 2024). Inclusive schools must therefore offer activities that are able to involve all students, adapting to their individual needs. This implies that PE teachers must be prepared to identify the different needs of students and to create an environment conducive to inclusion, in which each child can experiment with their body and motor skills (Tafari & Latino, 2024). Teachers must work to develop a positive school climate that promotes solidarity and empathy among students. With already argued above, the spaces in which children move must be welcoming and respectful of diversity, allowing each one to participate, experiment and have a successful experience (Molisso et al., 2019). This is especially important for children with SEN, who may feel more vulnerable or struggling in an environment that is not tailored to their needs.

Conclusions

Physical literacy for individuals with SEN is a fundamental process that is not limited to the development of motor skills, but also embraces the emotional well-being, socialization and autonomy of the child. Adopting personalized, inclusive teaching that is attentive to the specific needs of children is essential to foster a positive and stimulating learning environment, which helps to overcome motor, cognitive and emotional difficulties, promoting the full development of the child. To integrate physical literacy into school life, schools should offer varied and stimulating physical education programmes that go beyond traditional sports teaching to include activities that enhance movement and health in all its forms. At the same time, it is important that families and the school community cooperate, to support the development of a healthy lifestyle even outside the classroom.

References

Bertagna, G. (2004). *School in motion: The pedagogy and didactics of motor and sports sciences between school and university reform*. Milan: FrancoAngeli.

Borgogni, A. (2016). The sustainable teaching of motor activities. *Education & Teaching*, 14(1F), 119–132. Retrieved September 30, 2022, from <https://ojs.pensamultimedia.it/index.php/siref/article/view/1884>

Castelnuovo, C., Zottola, C., & Lovecchio, N. (2019). Measuring teaching: Cooperative physical education with adolescents. *Training & Teaching*, 17(3), 261–269. https://doi.org/10.7346/-fei-XVII-03-19_21

Chatoupis, C. (2005). Effects of practice and inclusion styles on perceived athletic competence of Greek primary school children. *Studies in Physical Culture and Tourism*, 12(1), 2-13.

Ciotto, C. M., & Fede, M. H. (2014). PASS: Creating Physically Active School Systems. *Journal of Physical Education, Recreation & Dance*, 85(8), 13–19. <https://doi.org/10.1080/-07303084.2014.946191>

Colella, D., & Morano, M. (2011). Gross motor development and physical activity in kindergarten age children. *International Journal of Pediatric Obesity*, 6(S2), 33–36. <https://doi.org/10.3109/17477166.2011.613661>

Colella, D. (2016). Teaching styles, motor learning and educational process. *Training & Teaching*, 14(1), 25–34. Retrieved September 30, 2022, from <https://ojs.pensamultimedia.it/index.php/siref/article/view/1874>

Colella, D. (2018). Physical Literacy and teaching styles. Re-orienting Physical Education at school. *Training & Teaching*, 16(1S), 33–42. Retrieved September 30, 2022, from <https://ojs.pensamultimedia.it/index.php/siref/article/view/2759>

Colella, D. (2019). Motor skills and teaching styles in Physical Education. *Training, Work, Person*, 3, 85–93. Retrieved September 30, 2022, from <https://forperlav.unibg.it/index.php/fpl/article/view/48>

Colella, D., & Lanza, M. (2020). Evaluation models and methods. In *Physical Education in Primary School* (pp. 141–161). Carocci.

Colella, D., Bellantonio, S., D'Arando, C., & Monacis, D. (2020). Interventions for the promotion of motor activities in primary school. Evaluation of motor performance in relation to perceived self-efficacy and enjoyment. *Italian Journal of Educational Research*, (25), 49-62.

Colella, D., Monacis, D., Mancini, N., & D'Arando, C. (2021). Non-linear learning and teaching styles in physical education and sport. A new paradigm for teachers?. In *Research in Educational Neuroscience. School, Sport and Society* (Vol. 26, pp. 80-82). Roman University Editions.

Di Palma, D., & Tafuri, D. (2017), Sport activity and disability management to benefit scholastic inclusion.

Latino, F., Romano, G., & Tafuri, F. (2024). Physical Education Teacher's Continuing Professional Development Affects the Physiological and Cognitive Well-Being of School-Age Children. *Education Sciences*, 14(11), 1199.

Martins, J., Onofre, M., Mota, J., Murphy, C., Repond, R. M., Vost, H., Cremosini, B., Svrdlim, A., Markovic, M., & Dudley, D. (2020). International Approaches To The Definition, Philosophical Tenets, And core elements of physical literacy: A scoping review. *Prospects*, 50(1-2), 13-30

Molisso, V., Ascione, A., & Di Palma, D. (2019). Learning to Learn: a pedagogical proposal in the scientific field for SLDs. *Italian Journal of Health Education, Sport and Inclusive Didactics*, 3(1).

Tafuri, D., & Latino, F. (2024). Physical Education and inclusive educational-didactic practices. *ISSN 1828-4582-Year XLI*, 210.

Trecroci, A., Invernizzi, P. L., Monacis, D., & Colella, D. (2021). Physical illiteracy and obesity barrier: how physical education Can overpass potential adverse effects? A narrative review. *Sustainability*, 14(1), 419.