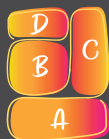




Early Years Physical Literacy Handbook




Physical Literacy
For Early Years



Co-funded by
the European Union

Project reference no.: 101134169



Everyone working within the early years sector and involved in the education and development of young children should be encouraged to explore and apply the principles of physical literacy. Physical literacy highlights the importance of child centred approaches offering safe, motivating and positive learning environments. Confidence can be developed, and knowledge and understanding built, as progression is made in the refining of physical skills.

Working definitions

PHYSICAL ACTIVITY

Physical activity in broad terms refers to all bodily movements that use energy. Physical activity has multiple benefits for the developing child and should be encouraged in a range of environments.

PHYSICAL DEVELOPMENT

Physical development is a developmental pathway for early years children. It is about how children gain control of their bodies and learn to move or be moved, and to move or manipulate objects. Physical development involves changes

and growth in the body and brain; the senses; motor skills; health; and wellness. Physical development involves both gross motor and fine motor manipulation.

Progression of growth and physical development are not linear or incremental, and practitioners should be aware of this. Growth and physical development can also not be detached from children's emotional, social and psychological development.

Growth and development are not related simply to chronological age. There are basic growth patterns and stages with an approximate *chronology* of milestones, but these patterns are followed individually and uniquely. From observing children it is evident that they are all very different and that they progress and develop at very different and individual times. All have the capacity and capability to achieve different things at different stages.

Physical development may be viewed cephalocaudally or as proximodistal. Cephalocaudal means head to toe and the pattern of physical and functional development seen in the earliest years of postnatal development. An example of this can be seen as a child's head develops much sooner than their legs. Physical growth in size, weight, and feature differentiation follows this pattern of development. Proximodistal development occurs from the centre outwards and the pattern where growth starts at the centre of the body and moves towards the extremities. An example of this is that infants learn to move and control their torsos first, then their arms and legs. They can flail their arms around before they can move their hands and fingers with any precision.

It is important to consider and remember that everyone has genetic, nutritional and environmental influencing aspects; and that progress in physical development is at different speeds and rates and can be affected by these broader aspects of genetics, nutrition and environmental influences. Progress in physical development is also not a one-way journey as it can plateau and be retrogressive, as well as progressive.



PHYSICAL LITERACY

Physical literacy is a holistic and inclusive concept which considers the whole child and acknowledges individual uniqueness. Physical literacy emphasises the significance of motivation, confidence, physical competence, knowledge and understanding, on how individuals value and engage in physical activity for life. Practitioners should offer opportunities for young children to develop a wide range of movement skills, capabilities and qualities in a range of environments. By offering personalised, purposeful, engaging, relevant and rewarding experiences children are more likely to continue to seek out a variety of physical activities, sports and leisure pursuits with a positive attitude. This will contribute to both their learning and well-being and allow them to flourish.

PHYSICAL SKILLS

Physical skills are the accuracy and consistency of how we use our bodies when performing tasks. We use our physical skills in day-to-day activities such as walking, but they come in handy when we do particularly active things such as sports, dancing, and drama.

SPORT

Sport is most often used to refer to competitive games or physical activities. Sports are governed by an agreed set of rules and require participants to learn and exhibit physical athleticism and skill. Sports can be played by individuals, pairs or teams and require physical exertion. Sports are used within the Physical Education curriculum to provide learning experiences. Previous sport related experiences can significantly impact on whether individuals engage in lifelong physical activity.



Why is physical literacy important?

Wellbeing is high on education, health and sociological agendas and it can be seen as multi-disciplinary and multi-dimensional. A significant contributor to wellbeing is physical activity. A greater interest in physical literacy arises at a time when there is unease about a drift away from physical activity, increasing concern about rates of obesity in many societies and the serious global public health challenge this presents (World Health Organisation, 2021).

Despite international research emphasising the importance and benefits of physical activity considerable proportions of children and young adults systematically continue not to achieve recommended guidelines (World Health Organisation, 2019). If physical activity is not proactively encouraged to children at an early age, there is a danger that low levels of inactivity will continue into adulthood.



According to the World Health Organization physical activity has significant benefits for physical, mental and emotional health and improves overall wellbeing.

Physical health can benefit:

A healthy body weight
Strong muscles and bones
Lower blood pressure
A decrease in the risk of heart disease, some cancers and Type 2 diabetes

Mental health can benefit:


Reducing depression and anxiety
Enhancing thinking, learning and judgment.

Consider these fundamental guidelines relating to physical activity:

(Article 12 (1966) of the United Nations Convention on Economic, Social and Cultural Rights)

- 1. Recognise the right of everyone to be able to enjoy the highest attainable standard of physical and mental health. and*
- 2. Take steps to achieve the full realisation of this right including the:*
 - provision for the healthy development of the child*
 - prevention, treatment and control of epidemic, endemic, occupational and other* diseases (*Hypokinetic)*

This has been on the global agenda for over 50 years, and a solution is still being sought. For the first time the World Health Organisation (2019) Guidelines on Physical Activity, include Sedentary Behavior in its title highlighting a need to take steps towards mitigating against this.



What is physical literacy?

The concept of physical literacy (Whitehead, 2001) evolves from the seminal work of Whitehead (1987). Practitioners developing physical literacy within education, and more specifically nurturing it, is essential in preparing children and young people for a sustained life of engagement in physical activity (Whitehead, 2010).

‘Physical literacy can be described as the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities for life’ (International Physical Literacy Association, 2017).



Physical literacy domains

Physical literacy is a holistic, lifelong concept (Whitehead, 2010) and is underpinned by a philosophy that sees the mind and body as inseparable. Physical literacy considers all learning domains as being important: confidence and motivation – the affective domain; physical competence – the physical / psycho motor domain; knowledge and understanding – the cognitive domain.

Physical literacy is underpinned by philosophies of *monism*, as a holistic perspective valuing each element of an individual; *existentialism*, drawing upon a philosophy where individuals create themselves as they exist, live and interact with the world and *phenomenology*, where individuals base their choices and perspectives on their previous experiences.

The attributes of physical literacy are not part of the definition but aid an understanding of the concept and an opportunity to expand on the domains. The attributes describe the characteristics and behaviours visible if an individual is making progress on their physical literacy journey and are those all practitioners would want to observe in their learners.

Individuals who:

Want to be **physically active**

Are **confident** in physical activities

Move **efficiently** and **effectively**

Know how to **improve** performance

Work **independently** and with **others**

Are aware of the impact on **wellbeing**

Are aware of **movement needs** and **possibilities**

Have **self confidence**




Misconceptions around physical literacy

As the concept of physical literacy is explored, utilised and operationalised there are different definitions and interpretations being used. Whitehead (2020, p. 10) herself recognises that modified definitions cause confusion, particularly in relation to practice but she is reassured that two 'essential aspects of the concept remain' namely a commitment in promoting PA for life and how recognising and appreciating the holistic nature of individuals is essential to enable the first to be achieved.

It is helpful to explain what physical literacy is not:

Physical literacy is not:

Just for children or the education sector: one misconception is that physical literacy is only targeted at children as much of the original work was done around young and school-aged children. Everyone, of all ages is on their own physical literacy journey.



A resource: physical literacy cannot be operationalised through a single resource. It is not a 'thing' that is delivered or 'done to' individuals in an attempt to get them active.

Delivered or taught: physical literacy cannot be delivered or taught in discreet sessions or blocks of activity.


Just **Fundamental Movement Skills (FMS)** or **Agility, Balance and Co-Ordination (ABCs)**: although physical competence is a key element of physical literacy, placing a sole emphasis on the development of FMS and ABC does not fully satisfy the holistic nature of the concept as it focusses development on one part of one learning domain.

Achieved or accomplished: physical literacy is a continuous journey and unique to each individual, there is no end point; an individual's relationship with physical activity changes and evolves.

Another literacy (reading/writing) initiative: physical / kinaesthetic activities are often used to teach writing e.g. a paint brush dipped in water to mark make letters on walls, these are engaging, practical and consolidating learning activities but not physical literacy.

Supporting learners with their physical development in the early years

Practitioners need to develop and build children's movement vocabulary. This can be likened to learning how to read. Phonics or an introduction to sounds are utilised when introducing early reading. From these sounds and letter blends children can make words and then sentences, paragraphs and then write more fluidly and creatively. Children need phonic building blocks to be able to create words and sentences. Without sounds, letters and letter blends children will be limited in their progressive application. In the same way physical skills can be seen as a version of physical phonics. If these building blocks are missing, children will not be able to utilise them in, and apply them to physical activity.



A movement vocabulary represents skills and techniques required to engage in physical activity. Movement vocabularies can be vast and broad, they do not need to be, and should not be a prescriptive list as they contribute to developing an individual's physical competence. Movement vocabulary, as the building blocks that constitute the foundation of all movement and physical activity, sit within movement experiences created in the early years. These are the contexts, where the physical activities take place and can be both formal and informal, planned and spontaneous. The emergence of **movement forms** in the early and formative years can be considered as **movement experiences** and offer more broad and generic opportunities. Practitioners should create appropriate environments to allow individuals to flourish through physical activity and participate in physical activity for life.

Developing physical literacy in different environments

Physical activity should be developed in a range of physical environments, for example in water or on land, air and snow. Early years practitioners also need to recognise that their roles have the potential to create both positive and negative attitudes towards engagement in physical activity, and the responsibility of this role in ensuring positive experiences for all children, regardless of ability or disability. Creating positive and non-threatening learning environments, which both enable and challenge learners are more likely to support learners in making positive choices towards them engaging in physical activity in the future. Providing safe, inclusive and supportive environments related to learner needs, requires empathy and understanding from early years practitioners.

Developing physical literacy during structured and unstructured play

Both structured and unstructured play are important to a child's development. Structured play involves a young child following directions or rules, usually given by an adult. An example of structured play includes team games and adult led playground games / activities. Unstructured play is where a child is free to explore, do what interests them, and play without direction. An example of unstructured play includes independent games in the playground and exploring the outdoor space.

Most activities can be either structured or unstructured and equipment can be utilised in both structured and unstructured ways. Both are important for young children to experience. Through a physical literacy lens both structured and unstructured play enable confidence, physical skills and knowledge and understanding to be developed.





How to develop physical literacy in the early years – for educators

Many practitioners have shared that the physical development aspect of their training was lacking, with focus and priority given to other areas of learning deemed to be more important. Practitioners have shared that they lack the confidence, skills and practical knowledge and understanding to plan, organise and deliver purposeful activities.

Some practitioners have also shared that if the children are active and busy this is sufficient, however, for it to be meaningful and developmental, opportunities should be planned, as well as there being consideration of the experience being offered. Children should be challenged to make progress from a holistic point of view, taking into consideration the experience and capability of each

individual. In the Early Years this includes encouraging an active start and an introduction to skills and techniques so that children can build up their **movement vocabulary** and physical development and refine their movement vocabulary within a range of environments.

Movements can be undertaken within a range of environments both individually and with others. The emergence of **movement forms** in the early years can be considered as **movement experiences** and offer more broad and generic opportunities. **Movement capacities** can be explained as how effectively and efficiently an individual engages within movement forms using their movement vocabulary.

All of these are **building blocks** that constitute the foundation of all movement and physical activity, and it is about creating the appropriate environment to allow individuals to flourish through physical activity, which will encourage them to participate in physical activity for life.

The build-up of skills and techniques required to engage in physical activity (**movement vocabulary**) includes locomotion, flight, manipulation and object control, projection, construction, communication, nonverbal and body management.

Locomotion offers a vocabulary of movement to enhance travel from place to place. The following list is certainly not exhaustive, but locomotion can include:

creeping, crawling, stepping, walking, jogging, running, rolling, skipping, hopping, galloping, swinging, climbing, swimming, scooting and cycling.

Flight offers a vocabulary of movement to enhance projecting oneself off the ground and back down to land.

Landing on two feet includes taking off, jumping up, along, onto, off and over.

Landing on one foot includes hopping, hopscotch, leaping, abseiling, jumping with a turn, and assisted flight with a springboard or trampette.

Manipulation considers physical development in the wider sense. It is concerned with the development of both fine motor skills and gross motor skills.

Fine motor skills are those skills which enable movements using the smaller muscles of the body such as hands and fingers, are observed in many aspects of children's educational (and home experience) and include: holding, feeling, grasping and gripping.

They can be developed through activities such as drawing, tracing, guiding, cutting, pegging, threading, moulding, typing, mouse management and picking up objects.

Gross motors skills are those skills which enable us to make movements using the large muscles of our body such as arms, legs and torso and include: receiving a rolled object, catching, cushioning, dribbling and coordination.

Projection offers a vocabulary of sending an object and includes: rolling, bouncing, throwing and striking, as well as kicking, volleying, skimming, serving and goal shooting.

Construction offers a vocabulary of picking up, lifting, carrying, arranging, assembling, adjusting, stacking, building, dismantling and storing.

Communication offers a vocabulary of pointing, waving, clapping, smiling, frowning, beckoning, bowing, curtsying, turning towards and turning away.

Body management offers a vocabulary of balance, rotation, rising, squatting, kneeling, pulling, pushing, rotation, bracing, acceleration and deceleration.

As children develop and build their movement vocabulary and physical development, practitioners are always observing and assessing what and how children are undertaking these, and how they can make progress. If practitioners do not systematically address the elements listed above some children will not have the opportunity to develop them. The development of these activities should take place through varied environments that link to learning in other curriculum areas, such as music and language, as well as within recognised physical activities.



It is imperative that the early years offer a range of movement opportunities to enable children to make sense of their world and themselves within the world. Movement enriches lives so there should be a focus on positive and meaningful experiences so that children learn and understand how to value movement as part of their lives.

Environments should be created that allow children to develop physically, emotionally, socially and cognitively through engagement in physical activity and play.



Movement capacities

Movement capacities are how effectively and efficiently individuals engage within movement using their movement vocabulary. Development and refinement of movement vocabulary is through a range of movement capacities. Movement capacities can be simple for example those of balance, coordination and flexibility.

Movement capacities can be combined for example with *poise* which combines balance and core stability or *agility* which combines flexibility, balance and coordination.

Movement capacities can be complex, involving further combinations for example, *hand eye coordination* which requires orientation in space, agility, and dexterity. Adults take many of these for granted but for children capacity building can be supported by giving opportunities in a range of environments.

Movement experiences should be attractive, simple, engaging, and challenging. Movement experiences include **object play** which includes activities such as throwing, catching and striking games; **exercise play**, which includes activities such as rough and tumble, climbing, running, chasing games, bikes, scooters, pushing and pulling; **expressive movement** such as creative movement, dance, gymnastics, action rhymes and songs, music sounds and stories; and **outdoor play** which takes children into natural surroundings such as rocks and trees and takes learning into the outdoors, primarily physical play and challenges.



Example

How can the challenges of a climbing frame reflect physical literacy?

How might confidence and motivation be developed?

Children may find the challenge of the climbing frame daunting, watching other children enjoy the challenges may motivate them to have a go.

As they proceed to a higher level, they will develop their confidence.

How will physical competence be developed?

Children will become more efficient in their grasp, balance, agility, coordination and body awareness; what does their body feel like as it contacts the frame? How does it feel to hang from the frame, fold over the frame?

How will knowledge and understanding be developed?

Children will work out a successful route or technique, they will explore and experience and understand that they can hang, use their feet, move up and down.

Challenges can be set to go higher, hang from the top, move with a partner in time and sequence, this might be choreographed to create a movement phrase.

The climbing frame offers **exercise play** through rough and tumble and climbing; it offers **expressive movement** as children create their pathways or choreograph a sequence of reach the top with a partner. **Outdoor play** is offered by being outside in the outdoors with opportunities to transfer the learning onto rocks and trees.

How to develop physical literacy in the early years – for parents

Object play: Parents can offer objects to move with, dribble with, strike, throw or kick using targets to aim and throw at. Parents can offer activities with moving objects in different ways, using different body parts in different environments. Parents can offer throwing and catching, stopping and trapping objects such as balloons, shuttlecocks, beanbags, balls and hoops.

Exercise play: Parents can encourage rough and tumble play such as running and chasing games, skipping and playground games and pushing and pulling games using wheeled toys such as go karts, balance bikes, scooters and pedalling bikes. Of course, always using appropriate safety equipment such as helmets where appropriate. Parents can use natural or man-made equipment to climb on,

swing on or hang on, bounce on or hop on, leap from and on to, swing on and from, using obstacles to jump on or off. Parents can encourage children to hang from, balance on, roll on, crawl on and crawl through.

Expressive movement: Parents can enable and facilitate children to use a range of stimuli to initiate movement such as music, stories, poems, nursery rhymes and use scarves, ribbons and streamers to enhance any movements. Parents can encourage children to be expressive when moving making them ‘bigger’ as they explore what and how their bodies are moving.

Children can be encouraged to move at different speeds, in different directions, in different ways and on different levels both individually and with others.

Parents can encourage activities that lead to gymnastic movements such as balancing, rotating, turning, swinging, jumping, landing and rolling in different body shapes. No specialist equipment or space is required.



Physical literacy informed practice

Whilst many of the examples above appear to have a focus on the practical element and physical domain, this must always be **framed within a holistic perspective**. The physical domain is often what is seen or set out to do; for example, wanting learners to be able to throw and catch but it is how this is delivered, the environment and the opportunity that practitioners need to consider from a holistic and age-appropriate perspective.

Throwing can be introduced with a focus on sending, through pushing or batting objects away and catching can be initiated using scarves, feathers, bubbles or balloon balls before a traditional ball is introduced.

Rather than formally teach the skills in the early years this can be done through exploration, curiosity and opportunity with the use of encouragement, enthusiasm and excitement. This can further be developed using more of a coaching conversation for example 'How can you make the ball roll further?' 'Will it help you if you swing your arm back a little bit more?' or 'Where do we need to get to, to catch the falling scarf?' 'Shall we try and get ourselves under it?'

When something is introduced or explained practitioner should always be mindful about how young children will be feeling and acquiring knowledge and understanding. Confidence and motivation come hand in hand with experiencing success so if children are asked to try and send or roll a ball over the line practitioners should ensure the targets are appropriately positioned to be both enabling and challenging – there can be more than one target!



References

Whitehead, M. (2001). *The concept of physical literacy*. European Journal of Physical Education, 6, 127-138

Whitehead, M. (2010). *Physical Literacy; throughout the lifecourse*. Portland, OR: Ringgold Inc.

World Health Organization.(2018). *Global action plan on physical activity 2018-2030: More active people for a healthier world*. Geneva: World Health Organization. <https://iris.who.int/bitstream/handle/10665/272722/9789241514187-eng.pdf?sequence=1>

World Health Organization. (2019) . *Guidelines on physical activity, sedentary behaviour and sleep for children under 5 years of age*. World Health Organization. <https://iris.who.int/handle/10665/311664>.

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.