Early Years Physical Development Position Paper

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on behalf of the Association for Physical Education

Introduction

The first five years of a child's life are a time of rapid brain development, when the connection of the brain with the body in response to movement stimuli occurs at a quicker rate than at any other age in the lifespan. During this time, children should be exposed to enriching movement opportunities that stimulate neurological development and connect rich neurological pathways so that they learn to move confidently and competently.

Physical development in the early years is a vitally important area to focus on to ensure children have a good level of motor competence by the end of reception. Many children fail to meet age-related physical development expectations, not helped by reduced physical activity participation during the pandemic (Huggett & Howells, 2022). Furthermore, children in deprived areas have lower levels of physical development.

Early years practitioners clearly need increased support and guidance to help them assess and enhance young children's physical development so that they can make the most of the movement opportunities provided at school and in the wider environment. These opportunities, alongside adequate time and appropriate teaching approaches help children develop a movement repertoire that acts as the foundation for their current and future engagement in physical activity.

Given increasing concerns about the physical development of early years children and the consequences of this for their current and future health and wellbeing, the Association for Physical Education considered it important to develop an evidence-based position paper on this key subject. The content is informed by national and international research (King & Howells, 2024). It aims to enhance early years practitioners' knowledge and understanding of young children's physical development and support their practice. Improving children's movement through physical development interventions, physical education and physical activity will ensure they reach early learning goals and are 'school ready'.

Physical Development

Physical development is one of three prime areas of learning for early years children (Department for Education, 2023). The Early Years Foundation Stage (EYFS) framework states the following about physical development:

> Gross and fine motor experiences develop incrementally throughout early childhood, starting with sensory explorations and the development of a child's strength, co- ordination and positional awareness through tummy time, crawling and play movement with both objects and adults. By creating games and providing opportunities for play both indoors and outdoors, adults can support children to develop their core strength, stability, balance, spatial awareness, co-ordination and agility. Gross motor skills provide the foundation for developing healthy bodies and social and emotional wellbeing. Fine motor control and precision help with hand-eye co-ordination which is later linked to early literacy. Repeated and varied opportunities to explore and play with small world activities, puzzles, arts and crafts and the practice of using small tools, with feedback and support from adults, allow children to develop proficiency, control and confidence (Department for Education, 2023, p.10).

By the end of their early years, children are expected to:

Gross Motor Skills

- Negotiate space and obstacles safely, with consideration for themselves and others
- Demonstrate strength, balance and coordination when playing
- Move energetically, such as running, jumping, dancing, hopping, skipping and climbing.

Fine Motor Skills

- Hold a pencil effectively in preparation for fluent writing – using the tripod grip in almost all cases
- Use a range of small tools, including scissors, paint brushes and cutlery
- Begin to show accuracy and care when drawing.

(Department for Education, 2023, p. 13)

To achieve these expectations, early years practitioners need to provide children with: sensory experiences and object-based activities, games-based activities, and tool-based activities. Children also need opportunities to explore, enquire and investigate on a daily basis to support their journey of learning physically. This should take the form of active, experiential, challenging learning involving interacting, intervening, evaluating and observing (Welsh Assembly Government, 2022).

Activities which enhance the gross and fine motor skills of early years children include: swimming, scootering, games-based activities and cycling. Activities which particularly enhance gross motor skill development are: tummy time; dancing; walking; jumping; skipping, cycling and climbing. Activities which focus more on fine motor skill development are: object play; messy play; throwing and catching.

The Early Years Special Interest group for the International Association of Physical

Education in Higher Education (IAPEHE) identified that physical play supports learning through 'motor activities, games involving sensory experiences; expressive movements; constructive play; manipulative play; exploratory play; household related activities; rhythmic activities; aquatic activities; sand-based activities; energetic play and exploratory inquiry-based aspects' (IAPEHE, 2019, p.267). The group also emphasises the importance of 'not just actively moving, but also developing curiosity and understanding of spatial awareness and social interaction' (IAPEHE, 2019, p.268).

In 2024, the Department for Education produced physical development guidance for early years practitioners which included practical ways to develop gross and fine motor skills, core strength and coordination.

Physical Development and Physical Activity

There is a key link between children's physical development and their levels of physical activity. Children need to be physically competent in fine and gross motor skills in order to be able to engage in healthy levels of physical activity. Physical activity in the early years is particularly important in order that children 'build relationships and social skills; maintain health and weight; contribute to brain development and learning; improve sleep; develop muscles and bones; and encourage movement and coordination' (Chief Medical Officers, 2019, p.24).

Low levels of physical activity are a major contributor to worrying health issues such as child obesity levels.

The Chief Medical Officers' guidelines for early years emphasise that 'every movement counts' and 'the more active children are, the healthier, happier and more school ready they will be'. Physical activity guidance from the World Health Organisation (2019) and the Chief Medical Officers (2019) in the UK propose the following daily recommendations:

- Infants (less than 1 year) should be physically active for at least 30 minutes a day, not restrained for more than 60 minutes at a time, have 0 minutes screen time and 12–17 hours of sleep. They should be physically active several times every day in a variety of ways, including interactive floor-based activity such as crawling. For infants not yet mobile, this should include at least 30 minutes of tummy time spread throughout the day while awake (and other movements such as reaching and grasping, pushing and pulling themselves independently, or rolling over); more is better.
- Toddlers (1–2 years) should be physically active for at least 180 minutes a day, not restrained for more than 60 minutes at a time, have 0 minutes (1 year olds) and no more than 60 minutes (2 year olds) screen time and 11–14 hours of sleep. They should engage in a variety of physical activities spread throughout the day, including active and outdoor play; more is better.
- Pre-schoolers (3–4 years) should be physically active for at least 180 minutes a day of which at least 60 minutes should be at a moderate to vigorous intensity, not restrained for more than 60 minutes at a time, have no more than 60 minutes screen time and 10–13 hours of sleep. They should engage in a variety of physical activities spread throughout the day, including active and outdoor play; more is better.

Engagement in physical activity throughout the early years develops motor competency, beginning with rudimentary skills and progressing to fundamental movement skills. A child's physical development and experiences of physical activity are influenced by a myriad of factors within and beyond the school setting. The school environment, however, is central to children's physical development as it is the only guaranteed place for children to engage in purposeful play, physical development activities, curriculum physical education and additional physical activity experiences (King, 2022).

Physical Development Issues

Research on children aged 4-5 found that their motor competency was negatively impacted by a lack of movement opportunities; many of the children appeared clumsy and struggled with negotiating space and co-ordinating their arms and legs (Huggett & Howells, 2022, 2024). Children with motor competency issues are often referred to the NHS to access pediatricians, occupational therapists and physiotherapists. However, there seems to be a postcode lottery in terms of accessing these services, with some children waiting up to four years. In 2023, 22,556 children were waiting to access occupational therapy services, 13,456 were waiting for physiotherapy services and 64,597 were waiting for community paediatric services, totalling over 100,000 waiting for over a year or longer (NHS England, 2023). In addition, 93% of children exceeding the National Institute for Health and Care Excellence (NICE) guidelines for diagnosis of a neurodiverse condition such as autism or Attention Deficit Hyperactivity Disorder (ADHD) were waiting up to 6 years to access support (Child of the North Autism Report, 2024); these children often also have motor competency issues but are unable to receive support for this until they receive a diagnosis.

Nationwide, schools are reporting that children are starting school with lower physical development and motor competency levels than they should due to numerous factors, including overuse of screen time, lack of exposure to physical activity in the early years and an over reliance on prams, cots and buggies. The pandemic added to these problems and the impact was especially evident amongst low socio-economic groups due to reduced movement opportunities including a lack of outdoor play and physical activity provision (Snyder et al., 2022).

An additional issue is a lack of expertise amongst early years practitioners with respect to understanding the key steps to building motor competency from the beginning stages of the integration of primitive reflexes to the development of rudimentary skills, followed by fundamental movement skills.

Unfortunately, within the UK, there is limited research on and a consequent lack of knowledge of young children's physical development and their activity levels and there is no national motor competency screening and intervention programme.

Early Years Foundation Stage (EYFS) Motor Screening Programme

To help remedy this situation, a diagnostic programme, the EYFS Motor Screening Programme, was developed during 2023-24 to enable early years' practitioners to assess and enhance young children's motor skills. This was supported by the Association for Physical Education and based upon an initial programme developed in 2015 by medical and educational practitioners at the Solent NHS Trust which was rolled out in schools in Hampshire. The new programme represents a novel approach as it includes the integration of primitive reflexes alongside the development of motor competency. The programme supports the school workforce in effectively screening children for functional movement issues and assigning appropriate interventions to develop motor competency and suppress primitive reflexes which inhibit children's development. It particularly aids children who have not been exposed to rich physical developmental opportunities throughout infancy.

Once the diagnostic programme identifies the motor competency of the children and any potential neuro-maturational issues such as retained primitive reflexes, they are assigned to one of three groups. Targeted, developmentally appropriate interventions are then provided for the children in these groups to guide the development of their motor skills. This can be undertaken in small groups with 10-15 minute activity sessions throughout the week. This provision is usually feasible due to the flexible nature of the early years curriculum. Children who receive these interventions develop the skills needed to enjoy moving effectively in different ways which helps their engagement with physical education and physical activity. The programme is designed to complement physical education and physical activity opportunities provided through outdoor and/or free flow play.

Ten schools in Greater Manchester who were involved in piloting the EYFS Motor Screening Programme gained increased insight into and understanding of the physical development of their reception children. This informed their physical education curriculum and allowed them to make adaptations to their learning environments to improve their pupils' physical development. The following testimonials from schools involved in the pilot indicate the benefits of the programme for staff and pupils.

The training provided by afPE was invaluable and gave Early Years practitioners the confidence to manage the programme and interventions in their schools. This is a much needed programme and I hope it can be rolled out nationally.

Dean Khaled, Managing Director and PE Consultant

As a result of this programme, children are entering KS1 with higher levels of physical development and we have seen increases in motor competence throughout the Reception class.

Siobhan Bromby, PE Lead, Prestolee Primary School

At Mesne Lea, children enter Early Years with lower than national levels in the prime areas of the EYFS. The results (of the programme) have been very impressive and we aim to continue the screening for some of our children in KS1 next year, especially those who have needs that impact on their gross motor skills.

Victoria Unsworth, Headteacher, Mesne Lea Primary School

The Screening Programme has been a big focus for our Academy Trust this year with all eight schools participating in the pilot. We have been impressed by how this piece of work has cut across PE and EYFS and has enabled middle leaders to work collaboratively to deliver improvement in motor competence. The focus on gross motor skill development has also linked with work to improve handwriting and fine motor skills generally, which cannot happen unless gross motor skills are secured. We will be screening all of the Year R children in all of our schools moving forward as it has been so successful.

Rebecca Dunne, Deputy CEO, Prestolee Trust

Conclusion

As a consequence of worryingly low levels of physical development amongst early years children, insufficient movement opportunities for this age group, and a lack of specialist early years physical development training and resources, the Association for Physical Education:

- calls for physical development to be placed at the heart of early years education and for play and daily physical activity to be prioritised to enhance children's physical development;
- believes there is a need for a national early years motor screening programme to address children's low motor competency when they start school;
- recommends that all early years children undergo motor competence screening to underpin and accelerate their physical development;
- recommends that all early years practitioners receive access to professional development focusing on the early years motor screening programme.

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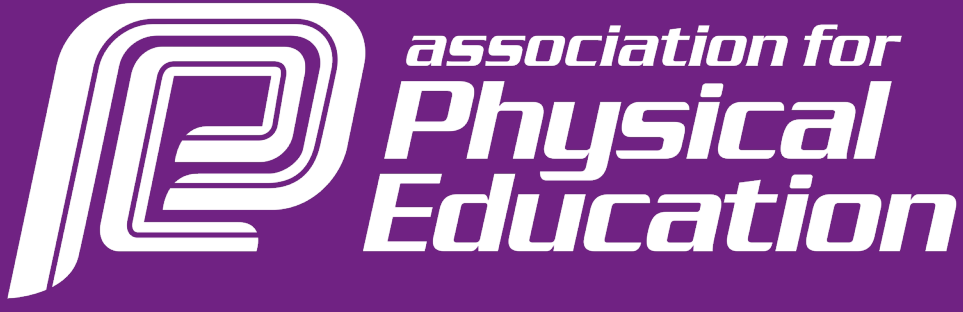
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