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Research and analysis

Best start in life part 2: the 3 prime areas of learning

Updated 8 September 2023

Applies to England

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Introduction

This report is part of our series of subject-based curriculum research reviews. Its purpose is to support early years practitioners in raising the quality of early years education. The report has [3 parts](#):

- part 1: setting the scene
- part 2: the 3 prime areas of learning
- part 3: the 4 specific areas of learning

[Part 1](#) examined the factors that contribute to a high-quality education in the early years. It considered:

- the early years context
- staffing
- curriculum and pedagogy

It also set out the principles behind the research review series.

Here in part 2, we examine the factors that contribute to developing young children's knowledge and skills in the 3 prime areas of learning in the early years foundation stage (EYFS):

- communication and language
- physical development
- personal, social and emotional development

This part of the review also considers:

- the principles of curriculum design and delivery that ensure all children, including disadvantaged children and those with special educational needs and/or disabilities (SEND), learn what they need in order to do well in their education
- what it means to make progress in the 3 prime areas of learning in light of research evidence, and the implications for practitioners

research relating to early years education, drawing on a range of sources, including academic and policy literature

This review builds on research evidence underpinning the education inspection framework (EIF), focusing on early education.[\[footnote 1\]](#) Therefore, it is not a comprehensive guide to research into early education. Instead, it highlights useful evidence that practitioners can put into practice to help make sure every child gets the best start in life.

The research is clear: a strong educational foundation in the early years, increases the likelihood of later success.

The prime areas of learning are vital for all babies and young children because they underpin all later learning. The [statutory framework](#) for the EYFS says they are ‘particularly important for building a foundation for igniting children’s curiosity and enthusiasm for learning, forming relationships, and thriving’. The long-term benefits come from the knowledge and behaviours that children acquire at this early age. These are closely related to the 3 characteristics of effective teaching and learning set out in the EYFS.

Summary of findings

There is no single way to provide high-quality early education. So, parts 1 and 2 of this research review identify some guiding principles and implications that early years practitioners can consider.

Summary of findings from part 1

Part 1 highlighted the following evidence about the importance of every child getting the best start in life:

- High-quality early education benefits all children, both during their early childhood and later in their schooling. It is particularly beneficial for children from disadvantaged backgrounds and for children with SEND, and these benefits continue into secondary school.
- Gaps in a child’s early years education can have long-term consequences. Some children are more likely to have gaps than others. Children from disadvantaged backgrounds and children who speak English as an additional language are less likely than others to take up their full entitlement to funded early years provision. Children from disadvantaged backgrounds lag behind other children by the end of the EYFS. Boys lag in communication with the widest gender gap for the most disadvantaged children.
- The effects of the COVID-19 pandemic still include delays in children’s development of social skills, communication and literacy.
- ‘Process’ quality and ‘structural’ quality are important in early education. Process quality relates to children’s experiences in early years settings. Structural quality relates to staff ratios and qualifications. Setting quality is generally higher with more high-quality staff. Having a qualified

teacher has the greatest impact on the progress children make.

- Support at home is important for children's early development, in particular opportunities to share books and develop a wide vocabulary. However, children's experiences at home vary. This is why it is important that practitioners focus on communication and language for all children, and particularly for those who do not benefit from a rich vocabulary at home.
- Better-developed executive function in the early years is associated with better outcomes in school. For example, attention in 5-year-olds predicts ability in literacy at the end of primary school.
- Effective early years pedagogy includes:
 - play-based learning, with well-timed and sensitive interaction with adults;
 - guided play, where adults have learning outcomes in mind; and
 - short periods of direct instruction to introduce new knowledge.[\[footnote 2\]](#)

Part 1 found that a high-quality curriculum and pedagogy may have the following features:

- The curriculum considers what all children should learn. It offers plenty of opportunities for children who are disadvantaged or speak English as an additional language to learn and practise speaking and listening.
- Practitioners choose activities and experiences after they have determined the curriculum. The most appropriate activities and experiences then help to secure the children's intended learning.
- Adults think carefully about what children already know and can do when deciding what to teach first.
- Children with gaps in their knowledge get the additional teaching they need so that they can access the same curriculum as others.
- Practitioners consider a child's interests when choosing activities while also expanding interests further, so that children make progress in all areas of learning.
- Children's play is valued and is used to teach many aspects of the curriculum. Their learning through play is enhanced by skilful adult intervention.
- Explicit teaching is used to introduce children to new knowledge and followed up by opportunities to practise new learning through play.[\[footnote 3\]](#)

Summary of findings from part 2

Part 2 highlights the following evidence about the importance of ensuring that every child experiences a high-quality curriculum in the prime areas of learning:

- The 3 prime areas of the EYFS are crucial to children's early learning and their later success in education and life.
- The prime areas are interlinked. For example, more developed language and communication are associated with better emotional well-being.[\[footnote 4\]](#) Children who are more physically active in the early years are better at regulating their emotions and achieve better in primary school.[\[footnote 5\]](#) Furthermore, as explained in the EYFS [framework](#), 'the specific areas of learning provide children with a broad curriculum and with opportunities to strengthen and apply

the prime areas of learning.^{[[footnote 6](#)]}

- Communication and language are fundamental to every aspect of young children’s thinking and learning. The rate of children’s development depends on their interactions with adults.^{[[footnote 7](#)]} Every interaction between a practitioner and a child is a teaching opportunity. The quality of interactions is likely to be more important than the quantity.^{[[footnote 8](#)]} Communication and language also provide the foundations for later literacy skills.^{[[footnote 9](#)]}
- Personal, social and emotional development underpins children’s early learning and emotional well-being. Warm and positive relationships with practitioners help children understand and manage their emotions and relate positively to other children.^{[[footnote 10](#)]} Children also benefit from careful and sensitive teaching about emotions and relationship-building.^{[[footnote 11](#)]} Developing executive functioning in the early years helps children learn and form positive relationships when they start school.^{[[footnote 12](#)]}
- Physical development is central to children’s health and fitness, and provides the foundations for later participation in and enjoyment of physical activity and sport.^{[[footnote 13](#)]} It supports academic achievement in later childhood.^{[[footnote 14](#)]} High levels of physical activity improve young children’s health, and reduce the risk of them being obese when they start school.^{[[footnote 15](#)]} Practitioners play an important role in encouraging less active children to move more and in teaching children movement skills like balancing, jumping and catching.^{[[footnote 16](#)]}
- Frequent, high-quality interactions between children and practitioners play a fundamental role in building the knowledge and skills that children will need. High-quality interactions are more likely to take place when:
 - practitioners notice what children know and can do, and respond accordingly: their responses are based on what they know about each child and their wider understanding of child development
 - practitioners know the curriculum in advance: interactions are more effective when staff know what they want babies and young children to learn
 - all children experience enough planned and incidental interactions with adults to learn what they need: some babies and young children will need more targeted time and attention than others.

Communication and language

Every early education setting should prioritise communication and language.

Communication and language are vital for young children to develop. Early interactions are crucial to children’s language development. The quality and quantity of interactions matter. An environment that promotes and supports young children’s language and communication skills will influence their language development.^{[[footnote 17](#)]} Recent research suggests a correlation between children being in an environment that supports communication and language when they are 18 to 24 months old, their literacy skills and social adjustment at age 5, and their linguistic and social competence at age 7 to 9.^{[[footnote 18](#)]} Further, a long-standing body of research suggests that early communication and language skills have a significant influence on children’s achievement at school and other later outcomes, including employability and mental health.^{[[footnote 19](#)]}

Children's exposure to communication and language at home varies. Some children come to early years settings from homes with lots of conversation and book-sharing. Others arrive with less-developed language and communication skills.^[footnote 20] Nearly a quarter of children who struggle with language at age 5 do not reach the expected standard in English by the end of primary school. In contrast, this figure is only 4% for children with good language skills at age 5.^[footnote 21]

Children whose language appears delayed at the start of the early years need targeted support with careful monitoring to check they are making progress. Practitioners need to work closely with parents and keep a watchful eye over their development. With the right support, most will catch up. A few children will need to be supported by, or receive specialist intervention from, a speech and language therapist.^[footnote 22]

Around 1 in 5 children in English schools are learning English as an additional language (EAL).^[footnote 23] EAL is a broad term: many children will speak English fluently, alongside one or more other languages, but some will speak little or no English. Gaining proficiency in English, building on the foundations of their home language, is crucial for children so that they can communicate, play, make friends and learn. While these children may initially go through a quiet phase of saying little, it is important for practitioners to interact and play with them to teach them key words and phrases in English. Speaking more than one language can provide many advantages for children in the longer term.^[footnote 24]

Early years settings have a pivotal role to play, therefore, in ensuring that all children develop their communication and language skills, regardless of their knowledge on entry.

Research suggests that children make more progress in oral language when practitioners:

- understand how children learn and develop oral language
- understand which specific techniques help children to develop oral language
- can link their knowledge of children and pedagogy to understand why specific techniques are effective^[footnote 25]

This knowledge helps practitioners make decisions and act straight away to prioritise communication.

Links to learning and later life

Communication and language underpin all other areas of learning in the EYFS framework. This is because children typically learn and share what they know through oral communication and language before they can read and write. Communication and language are also vital for social and emotional development.^[footnote 26] They enable children to build relationships with their peers and the adults around them, to talk about what matters to them and to express their needs.

There are also links between early communication and language and a range of cognitive abilities. Research has found that learning words helps children to form object categories (such as owls as birds; birds as animals).^[footnote 27] From around 18 months onwards, verbal information feeds into children's representations of objects, numbers and spatial relations.^[footnote 28] There is also

evidence that language is linked to children developing the ‘theory of mind’.^[footnote 29] This is the ability to attribute mental states, such as desires, beliefs and intentions, to oneself and to others.^[footnote 30] Research further indicates that early language acquisition contributes to young children’s ability to regulate their emotions.^[footnote 31]

Curriculum and pedagogy in communication and language

The EYFS programme for communication and language states that:

- the development of children’s spoken language underpins all 7 areas of learning and development
- back and forth interactions form the foundations for language and cognitive development
- the number and quality of conversations children have with adults are crucial
- adults build children’s vocabulary by commenting on what a child is doing and echoing back what they say with new vocabulary added
- reading to children and engaging them in stories, rhymes and songs helps children to learn new language
- modelling vocabulary and asking questions help children to use and embed newly acquired vocabulary and language structures in a range of contexts^[footnote 32]

In this review, we consider what young children need to learn in a programme for communication and language. That is what we mean by ‘curriculum’. We also consider how they can learn that knowledge. We look at which experiences and activities might best help children learn what they need to become effective communicators. That is what we mean by ‘pedagogy’.

Well before they start learning to speak, babies communicate with their parents or carers through eye contact, crying, cooing, smiling and making gestures such as pointing and waving. Early back-and-forth interactions with responsive adults helps meet children’s physical, psychological and social needs. For example, a child may put out their arms to be picked up and held. These interactions lay the foundations for the development of communication and language in babies and young children.

To communicate effectively, babies and young children need to develop an understanding of how other people’s thoughts and feelings can differ from their own. From very early on, infants become aware that if someone is looking at something, then they are paying attention to it.^[footnote 33] Through interacting with others, they also realise that people act with intention: that they are goal-oriented and have feelings about what they encounter.^[footnote 34] Early education in communication and language should include making sure that children interact frequently with responsive adults so children gain the knowledge they need to interact with others.^[footnote 35]

The role of interactions in learning to communicate with others underlines the importance of relationships between babies/young children and those who care for them. Relationships provide the emotional support that children need.^[footnote 36] Very young children benefit from shared experiences where adults help them to maintain interest, focus and attention.^[footnote 37] This gives these adults intimate knowledge of the child’s characteristics and shared social experiences. It

allows them to anticipate the child's needs and find opportunities for learning.

Positive social experiences also give babies and young children the knowledge and skills they need to learn. Early back-and-forth interactions help them learn, for example, how to initiate communication and when and how to respond to others.^[footnote 38] These interactions help children to develop cognitive and social skills, such as self-regulation and cooperation. Children's understanding of themselves, others and the world around them grows from these skills.^[footnote 39]

Young children need to learn the names for things. Objects may look different but share a common category, and so learning names (labels) enables children to learn about concepts.^[footnote 40] Improving spoken language requires children to increase their vocabulary, average sentence length, complexity and sophistication of sentence structure and grammar, and consequently their capacity to share ideas.^[footnote 41]

Frequent, high-quality interaction with adults exposes children to a wide and varied vocabulary and a range of linguistic structures. For example, a practitioner might narrate what a child is doing ('Oh, you're picking up the box! Aren't you strong?') or extend the child's utterance ('Yes, that's right, it is a box – a big, brown box!'). Early interactions provide multiple opportunities for repeating and extending language in routine contexts that are clear, meaningful and predictable. For example, practitioners and children can talk about food and tableware at mealtimes.

Reading to children and engaging them in stories, songs, rhymes and poems exposes children to new language and its use in a range of contexts. It also increases children's understanding of the world. Modelling to children how to communicate and use language can support and extend their language development.

Vocabulary

Learning words is split into 2 categories: expressive vocabulary (words children say) and receptive vocabulary (words children understand). Children generally understand more words than they can say. Hearing new words repeatedly in a range of contexts helps children to develop their receptive and expressive vocabulary.^[footnote 42]

The words that children know represent concepts and information.^[footnote 43] Therefore, children need to understand these concepts in order to appreciate the meaning of the words they hear. Vocabulary knowledge is related to all the other 6 areas of learning. It gives children the words they need to describe their thoughts and feelings to understand the world around them, and to conceptualise the past, future and imaginary world.

Practitioners need to think carefully about the sorts of words they prioritise in teaching vocabulary. They need to select the words that will be the most useful in supporting children's development and enabling them to learn. They also need to take account of children's prior knowledge of language. For example, they can select:

- words that occur frequently, which children are therefore highly likely to encounter outside the early years setting

words that will help children make sense of the world around them (prepositions of place such as 'under' or 'behind'; nouns such as 'egg hunt' or 'basket' at Easter)

- words that introduce children to knowledge of the world and prime them for future learning

Studies consistently show that several pedagogical approaches are effective for teaching vocabulary and social communication skills. These include explicit vocabulary teaching, modelling and interactive shared book reading.^[footnote 44] Using multiple approaches helps children's development.^[footnote 45]

Research shows that it is effective to teach vocabulary explicitly. Children can and do learn new words and phrases when they are exposed to language used in context, such as through listening or being read to.^[footnote 46] But multiple studies show that explicit teaching is more effective for children to acquire vocabulary.^[footnote 47]

Explicit teaching of vocabulary may be planned in advance or can occur incidentally, taking advantage of opportunities that arise naturally. Planned teaching may involve introducing children to new language through a story or group activity. Practitioners can also plan experiences that give children further practice in using new words that have already been introduced. Vocabulary teaching, whether planned or incidental, includes strategies such as modelling (for instance, using a target word in conversation to show how it can be used) and recasts (repeating the child's utterance, but correcting a word-based or grammatical error). Incidental teaching of vocabulary is, therefore, more effective when practitioners are clear about the sorts of words and phrases they want all children to learn and remember.

Children at risk of developing language and learning difficulties may benefit more from frequent and targeted vocabulary teaching approaches.^[footnote 48] Practitioners should consider children's current vocabulary knowledge when deciding how to allocate time between children for intentional vocabulary teaching. It may be time-efficient for practitioners to introduce and practise new vocabulary with a group of children at the same time.

Storytelling

Storytelling includes narratives in the form of song, nursery rhymes and poetry. Studies show that these are an effective way of developing children's communication and language skills.^[footnote 49] For example, children or adults can tell and retell (or sing and re-sing) a story, and thereby produce or model sequenced sentences. They can ask and answer questions about stories. Children can sequence narratives and practitioners can relate narratives to children's experiences.

Practitioners can supplement storytelling with a range of oral pedagogical techniques. For example, they may model correct grammar and prompt children to repeat it. They can then give praise and corrective feedback (such as repetition of correct utterances and recasts).^[footnote 50]

Shared reading

Books are very important for early vocabulary learning, and for language learning in general. Before children learn to read for themselves, they learn language from what they hear. However, adults' day-to-day speech uses relatively few words.^[footnote 51] Compared with the language adults use when talking to children, children's books use:

- a wider range of words
- a higher proportion of lexical items (such as nouns, verbs, adjectives and adverbs) than function words (such as prepositions and conjunctions)
- a higher proportion of rare words (words that are not among the 1,000 most used words)^[footnote 52]

Books are therefore critical in exposing children to a rich variety of language.

Despite this, a recent National Literacy Trust report found that nearly 20% of children surveyed (aged 5 to 8) said they have no books of their own at home.^[footnote 53] It is therefore crucial that in early years settings all children benefit from shared reading and related back-and-forth communication related to the book.

Sharing carefully chosen books with children is therefore an important part of the curriculum. It is important that practitioners engage children in the content of the book (its text, images and concepts). A discussion about the content makes children active participants in the reading, even when they have not yet learned to read. It is this interactive element of shared book reading that makes the difference to young children's communication and language.^[footnote 54]

The more children interact with practitioners during shared book reading, the greater the benefit to their communication and language.^[footnote 55] Adults can, for example, prompt children to say something about the book, then evaluate and expand on that response. It is likely that this style of interaction benefits children because it develops their linguistic and cognitive skills at the same time. For example, through shared book reading:

- both the practitioner and the text model language (in particular, vocabulary and grammar)
- practitioners help children to make connections between new language and its meaning (receptive language) and encourage them to use new words and structures (expressive language) in their responses to prompts
- the interaction around the book's content requires cognitive processes such as memory recall, joint attention and inhibition to distractions

Reading aloud to children is a familiar and much-loved aspect of practice in the EYFS. Whole-group reading can help children to learn new vocabulary. Children love repeated readings of high-quality picture books. They also learn new words much faster when the book is read several times over a short period, for example 3 or 4 times in a week. Repeatedly reading the same story is more effective in promoting word learning than reading different stories.^[footnote 56] Some research suggests that small-group reading is more beneficial than whole-group reading and leads to better comprehension than whole-group and individual (1:1) reading.^[footnote 57]

Key messages for practitioners

Developing children's communication and language benefits from careful and deliberate curriculum planning, taking account of all areas of learning. Staff will need to decide what they want all children to know and think about and identify the vocabulary and concepts that are associated with this.

Paying attention to children's social and emotional well-being has positive effects on their development of language and communication. [\[footnote 58\]](#)

Practitioners will need to think about the most effective ways to introduce and embed vocabulary and language structures. These might include:

- frequent and high-quality interactions between adults and children
- oral storytelling
- shared reading
- repeated reading

Practitioners will also need to provide plenty of opportunities for repeated practice in a range of contexts. This is especially important for children with less prior knowledge.

Physical development

Physical development is an integral part of learning in the EYFS programmes. Developing confidence, enjoyment and competence in performing movement skills has a positive effect on children's emotional well-being and health. [\[footnote 59\]](#) These skills also enable children to play, build relationships, become increasingly independent in self-care and take part in a wide range of activities.

Most babies and young children have a natural desire to move and be physically active. They will explore the different ways their bodies can move, and so initiate their own early physical development. They will use considerable effort and determination to learn how to roll, crawl, sit, stand, walk and run.

Given the right experiences and interactions, babies and young children can refine their physical movement over time, gaining increasing control over both gross and fine motor skills. To do this, children need sensory experiences, and to develop an understanding of the position of their body parts in relation to one another and to the world around them.

Research tells us that some children do not get the physical development opportunities and support they need at this vital early stage. [\[footnote 60\]](#) There are also studies that suggest physical development is associated with early numeracy and literacy outcomes at age 5, and supports other areas of learning. [\[footnote 61\]](#) So it is important that practitioners know what children can do and what they need to learn next, to support not only their early physical development but also their wider achievements. [\[footnote 62\]](#)

Links to learning and later life

Many studies have found that children's physical activity in early childhood has a positive impact on their proficiency in fundamental movement skills in later childhood.[\[footnote 63\]](#) Children's early physical development influences their proficiency and engagement in physical activity for their entire life.[\[footnote 64\]](#)

Fundamental movement skills are a set of basic motor patterns that benefit from good teaching and practice to aid development. They can also facilitate (or impede) physical activity in childhood and beyond.[\[footnote 65\]](#) They can be subdivided into 3 sets of skills that have common aspects for the range of movement:

- locomotor skills, for example running and jumping
- stability skills, for example twisting and balancing
- manipulation skills, such as throwing and catching

It is important that young children learn fundamental movement skills as soon as they can, so that they can take part in a range of physical activities, games and sport. This will help children develop positive attitudes to exertion, which can help them to form healthy practices and reduce the risk of cardiovascular disease in later life. Increasing physical activity will also help children to maintain a healthy weight and support mental health and well-being.

Research suggests that children with poor gross motor development are less likely to participate in social play, particularly social physical play.[\[footnote 66\]](#) This can mean they become isolated when playing and learning.

It should be acknowledged that research has focused mainly on children who are developing typically, rather than those with disabilities or medical conditions.[\[footnote 67\]](#)

When children begin to move more it can help them seek out and engage with things that interest them. They can make gestures to communicate or move to be close to other children and familiar adults. This helps children form positive relationships and establish interactions that can help them develop communication and social skills.

Developing a positive perception to physical competency, control of the body and of different equipment can also give children a sense of achievement and a positive sense of self.[\[footnote 68\]](#) This encourages persistence, which further helps children in developing fine and gross motor skills.[\[footnote 69\]](#)

Curriculum and pedagogy in physical development

The EYFS programme for physical development states that:

children should benefit from experiences that develop their gross and fine motor skills incrementally, enabling them to develop strength, coordination and positional awareness

- the curriculum for gross motor development should help children to build their core strength, stability, balance, spatial awareness, coordination and agility
- the curriculum for fine motor control should help children to develop precision, hand–eye coordination, proficiency, control and confidence

There is a strong tradition of active play indoors and outside in early years provision in England. The UK Chief Medical Officers note that ‘the average level of physical activity reaches a lifetime peak around the age of school-entry (5 years old)’.^[footnote 70] Given the importance of early physical development, early years settings have a critical role in supporting children with this. Practitioners have to think carefully about the building blocks needed so that all children make the best progress.

There is a close link between physical development and self-regulation. This positively impacts academic achievement.^[footnote 71] Theorists suggest that ‘voluntary locomotion’ is a critical point in a child’s cognitive development. Voluntary locomotion is being able to choose to move the body from one place to another, for example by rolling, wriggling or crawling.^[footnote 72] Purposefully travelling from one place to another – even if only by a few centimetres – opens possibilities for infants and babies in terms of exploring and understanding their environment. For example, a baby who can crawl to discover whether the person hiding in a game of hide and seek or ‘peekaboo’ is still there. This feeds into the development of ‘object permanence’ (understanding that people/things continue to exist when they cannot be seen, heard or touched).^[footnote 73]

Some research indicates that not all of the youngest children have the physical activity they need to develop. A range of studies have found that ‘tummy time’ (lying an awake baby on its front) is positively correlated with physical development.^[footnote 74] The NHS recommends that infants have opportunities for tummy time from birth, gradually increasing the amount day by day.^[footnote 75] However, research indicates that only approximately 30% of babies have this.^[footnote 76] Some children may spend too long in ‘containers’, such as pushchairs, bouncers or car seats.^[footnote 77] These inhibit young children’s movement and may limit their physical interaction with the world around them.

Higher levels of physical activity are likely to benefit young children with a medical condition or a disability.^[footnote 78] For children with wheelchairs, wheeling and seated exercises are examples of physical activity and not sedentary behaviour.^[footnote 79]

There are also links between a child’s early experiences and their physical development. As well as the movements children learn themselves, like rolling and crawling, there are ‘experience-dependent’ movements. These develop if the child has specific opportunities, resources or environments. For example, the ability to use a scooter is dependent on whether the child has access to a scooter, and on the amount of time and help available to them. The ability to throw a ball depends on the availability of balls and partners to catch and then throw back.

Research suggests that adult encouragement is important for children who might otherwise be more inactive in their setting.^[footnote 80] Outdoor play can give more opportunities to move vigorously,^[footnote 81] but play is not sufficient in itself to help children develop their physical skills and become more active.^[footnote 82]

Gross motor skills

For babies and very young children, physical development starts from the top and works down. They gain control of their head before their shoulders; they learn to sit before they can walk. Control also starts from the centre and moves out. For example, children develop strength and control of their shoulders before their elbows.^[footnote 83] Opportunities for children to move in lots of different ways, such as twisting, turning, jumping, stretching and bending, help them to gain more control of their body, refine their gross motor skills and develop coordination.^[footnote 84]

As already mentioned, children need direct instruction to acquire full proficiency in fundamental movement skills.^[footnote 85] For instance, a child may learn to roll a ball when sitting or lying down. As they grow and learn, they need to know that standing up and increasing the swing of their arms will make the ball roll further. Not only do children gain pleasure from this activity, but it also prepares them for games and activities that involve throwing and catching. Practitioners need to pay attention to the physical processes and sequences by which children improve their fundamental movement skills. There is a series of small steps for each skill that builds from novice to proficient.^[footnote 86] For instance, as babies learn to walk, they usually go through the 'cruising' stage, when they hold on to furniture for support, before moving on to 'toddling'. This process helps them to develop the strength, balance and coordination they need to walk confidently.

There are a wide range of games and activities for pre-school children that give them opportunities to practise a combination of multiple fundamental movement skills. Physical games involving gross motor skills lay the foundations for the development of fine motor skills, by building children's stamina and endurance.

Children need many and varied opportunities to use their gross motor skills to develop strength, coordination and stamina. This involves risk-taking with supportive adults who help children climb, negotiate large spaces or manoeuvre equipment. Children need to develop their sense of balance by having opportunities to swing and spin, which helps them acquire spatial awareness.^[footnote 87] This enables them to develop physical control and, along with other physical activities, helps them to form a sense of self in relation to others and the immediate environment.

Fine motor skills

Young children also need opportunities to develop fine motor skills as well as gross motor skills so they can become confident to explore the world around them.

Learning gross motor skills helps children to develop fine motor skills.^[footnote 88] For example, once a baby can sit without support, their arms and hands are freed up to reach, grasp and hold objects.

Fine motor skills give children more control over objects. For example, they will go from whole-hand grasping, to a pincer grip using the thumb and forefinger, to a pincer grip using the thumb, middle finger and index finger. This eventually gives them the ability to hold and control small tools with ease and confidence. They will need repeated practice to develop the muscle strength and hand-eye coordination needed. Young children can practise by turning the pages of board books, playing

with small bricks, cutting with scissors and bead-threading. They can then move on to mark-making and drawing.

It is important to consider the toys, tools and objects available to children in a setting, and how they will help children to learn precisely what practitioners know they need to learn. An example is the choice of eating utensils and cups for toddlers who are developing independence. These should be chosen with an understanding of the skills that the toddlers need to develop and hone. In addition, young children need to be taught how to use the equipment and to be careful when handling liquids, food and other substances.

The importance of adult interactions

Interactions between practitioners and children should be informed by an understanding of what the child can already do, what they need to learn next and what they need to know and be able to do by the time they leave the setting. Once this is clear, planned activities and opportunities to practise skills and knowledge can follow. For example, children need to learn how to jump and hop with accuracy and control. Children will benefit from watching a practitioner demonstrating these skills, and from having a go themselves. Once children have learned these skills, practitioners can teach them a motivating and fun activity, such as hopscotch. This will give children the opportunity to put isolated movements together and practise some fundamental movement skills.

It is important that practitioners understand how to teach and facilitate early physical development. This is especially vital when teaching younger children who are beginning to form their self-concept: what they feel they are 'good' at and where they can succeed.^{[[footnote 89](#)]} Without security in the building blocks of movement, it is unlikely that children will become full and enthusiastic participants in school-level PE or lifelong physical activity.

Key messages for practitioners

Developing young children's fine and gross motor skills requires careful planning that takes account of their stage of physical development. Some children will take advantage of opportunities to learn, practise and refine their physical skills through play. But many need explicit guidance and teaching. Without this, children may only choose games and activities that they already know. This could narrow the curriculum they receive and potentially limit their physical development.

Practitioners may want to consider the extent to which their curriculum for physical development:

- identifies small steps that, when taught and practised purposefully, lead to proficiency in a physical skill
- enables practitioners to understand what children need to learn and practise so they can help children to build on what they already know
- includes explicit modelling and teaching of fundamental movement skills^{[[footnote 90](#)]}

provides activities that deepen and extend a child's capabilities

- gives children the space and time they need to practise and refine their emerging skills through play

Personal, social and emotional development

High-quality early education includes a strong emphasis on personal, social and emotional development (PSED).^[footnote 91] Effective PSED gives children the best chance of becoming healthy, well-rounded, confident individuals who are able to form and sustain positive relationships. It also increases children's chances of academic success. It is important that the youngest children get the right support; research suggests that by age 3 disadvantaged children exhibit worse emotional health and self-control than their more advantaged peers.^[footnote 92] Research has also shown that later catch-up interventions are less effective.^[footnote 93]

The foundations of PSED are in the positive relationships that practitioners plan and develop with each child. Positive interactions between children, their key person and familiar adults can help children manage their emotions and reduce negative behaviour towards others.^[footnote 94]

Supportive relationships with practitioners and other children can help children explore emotions and social interactions and develop personal awareness that will help them through life. As well as teaching children a positive sense of self, respect for others and emotional well-being, PSED includes healthy eating and managing personal needs. Healthy eating practices begin early. Modelling healthy eating routines and ensuring that mealtimes are pleasant social occasions will help children to learn how to keep themselves well.^[footnote 95]

Links to learning and later life

PSED in the early years is linked to educational achievement in a variety of ways:

- Children's positive relationships with teachers and peers at pre-school are associated with better emotion knowledge. Gains in emotion knowledge are in turn a predictor of better academic achievement later in school.^[footnote 96]
- Children's PSED at age 4 is a statistically significant predictor of attainment in both reading and maths at age 7.^[footnote 97]

Early self-regulation is also important for later educational outcomes. As children get better at controlling and directing their cognition, emotions and behaviour, they can get more from teaching and learning activities. In this way, self-regulation is linked to academic achievement from early childhood to adolescence and into adulthood.^[footnote 98]

Children who can cooperate, share, listen to each other and manage conflicts will be increasingly able to take part in games and activities as they get older. In turn, these help their physical development, self-expression and imagination.

Shared reading can support children's social development, as they listen to each other, wait for their turn and get to know each other. Children can suggest solutions to dilemmas or conflicts, and adults can model different responses and expand on the narrative.[\[footnote 99\]](#)

When children build positive relationships with their peers, they can play cooperatively in imaginative scenarios to help them make sense of the world. This helps them develop effective communication skills by listening to others and building confidence in expressing their ideas.

Curriculum and pedagogy in PSED

The EYFS programme for PSED states that children should learn to:

- understand their own feelings and those of others
- manage emotions, develop a positive sense of self, set themselves simple goals, have confidence in their own abilities, be persistent and wait for what they want and direct their attention as necessary
- look after their bodies, including eating healthily and managing personal needs independently
- make good friendships, cooperate with others and resolve conflicts peaceably[\[footnote 100\]](#)

When deciding how to encourage PSED for young children, it is useful to consider the best ways to promote warm and secure relationships and to think about what children might need to learn and what building blocks they need. Practitioners can then think through the ideal ways to help children learn that knowledge.

There are many ways to help children develop PSED knowledge. These include:

- play, which gives children time to tackle challenges and find solutions to problems
- modelling and teaching emotional awareness and regulation, social communication and language, relationship skills and positive relationships[\[footnote 101\]](#)

Settings have an important role in teaching children social skills like saying 'please' and 'thank you', taking turns, helping others and being kind and caring to others.

Personal development also relates to positive attitudes. Supporting children to achieve a goal can help them to develop a positive view of themselves. It gives them a sense of purpose – so enhancing motivation – and can lead to improved confidence and self-esteem.[\[footnote 102\]](#)

Practitioners can help children build motivation and achieve goals by being specific in how they praise children's contributions and small steps towards success. This can help children to achieve goals such as handwashing and sharing. Children also need to learn to set goals for themselves.[\[footnote 103\]](#) These must be achievable and realistic. Practitioners can help young children to do this by showing them how to break tasks down into smaller steps, through sensitive interaction and feedback, and by recognising and rewarding success.

To be able to understand feelings, children need to know about different kinds of emotions. This knowledge is linked to the ability to show sensitivity to their own and others' needs.[\[footnote 104\]](#)

Research indicates that children tend to have more knowledge about emotions when they have strong relationships with practitioners who talk about, name and explain the cause of emotions.^[footnote 105] Babies need consistency in who looks after them, so that they can form positive relationships that help their socio-emotional development. Likewise, young children need positive emotional experiences. They benefit when practitioners talk sensitively to them about emotions, elaborating and reflecting on what the children say to help them 'understand their emotional and social world and their own place within it'.^[footnote 106] These are the building blocks for developing social and emotional well-being.

Knowledge of emotions

Early childhood is a time of strongly expressed emotions, whether joy and excitement or upset and frustration. Children need to learn how to understand and, when appropriate, regulate their emotions. Practitioners' responses to the child's emotions are critical to this. This includes how practitioners regulate their own emotions and respond warmly to children.^[footnote 107] Practitioners need to be clear and consistent when responding to children's emotions, naming them, showing understanding and providing support in the moment to soothe and calm the child.

It would be easy to assume that, if children understand emotions, then they will automatically develop the ability to regulate their own negative emotions. Research has found that more emotion knowledge is associated with better emotion regulation;^[footnote 108] however, more recent research has also found that emotion regulation helps to develop emotion knowledge.^[footnote 109] As children become better able to regulate their own emotions, they have more capacity to focus on identifying emotions and their causes. So, not only is it useful to teach children about emotions, but it is also useful to teach them how to regulate them. In this way, it is likely that there is a reciprocal relationship between emotion knowledge and emotion regulation.^[footnote 110]

Studies have found that emotionally supportive environments help children interact positively with each other and learn appropriate behaviour.^[footnote 111] In these environments, practitioners' interactions are characterised by warmth and low negativity. Practitioners respond sensitively to children's needs. They also model positive ways of relating to others and give children individual attention. It is important for practitioners to model the language, knowledge and behaviours they want children to learn. Teaching about emotions and having an emotionally supportive classroom environment is especially important for children whose home environment is more stressful or less emotionally supportive.^[footnote 112] Practitioners play a crucial role in reducing the risk to some children of developing social difficulties.

Research has also identified a range of effective approaches to teaching and modelling emotion to young children. Using books and illustrated stories to discuss emotions is a common and helpful approach. Other approaches include:

- encouraging children to name emotions with words
- discussing feelings and emotions
- linking events to emotional outcomes
- encouraging children to recognise facial expressions^[footnote 113]

Research shows that this explicit teaching of emotional awareness is effective for children from 2 years old. It has a greater effect as they get older.[\[footnote 114\]](#)

Research has identified the positive impact of teaching children strategies to control their emotions when they are very upset or angry.[\[footnote 115\]](#) Children may need opportunities to practise these techniques through role play and conversations with practitioners about the strategy after it has been taught.[\[footnote 116\]](#) Adults can then prompt children to use the strategy they have learned when needed.

A child's development of emotional self-regulation may not progress from one stage to the next in a linear way. Practitioners can use their professional knowledge and judgement to decide which skills they should focus on, to help each child.[\[footnote 117\]](#) Adults may need to adjust their approaches as the child's needs change.[\[footnote 118\]](#)

Relationship skills and positive relationships

Young children need to learn how to interact with other people in ways that build and maintain positive relationships. This includes learning how to cooperate, collaborate, negotiate and build rapport. Collaborative play and group activities, particularly where joint problem-solving is involved, can help children to develop relationship skills.

Children need to develop 'inhibitory control' (being able to suppress or stop a thought, action or feeling) before they can foster positive relationships[\[footnote 119\]](#) – for example, learning not to take a toy that someone else is playing with. Inhibitory control is one component of 'executive function'.[\[footnote 120\]](#) Executive function is a set of cognitive processes that are necessary for controlling behaviour. Children's executive function develops rapidly in early childhood.[\[footnote 121\]](#) In the early stages, children learn not to snatch, exercising their inhibitory control. Playing games and activities can help children practise exercising behavioural inhibition, such as not interrupting, taking turns or responding to the rules in a game like 'musical statues'.

Teaching relationship skills and modelling positive relationships are effective ways to develop children's executive function.[\[footnote 122\]](#) Practitioners can use approaches such as reflecting children's feelings back at them, using a consistently applied set of expectations and giving explicit praise to reinforce positive behaviour.

High-quality practitioner-child interactions lead to significant improvements in children's executive function and self-regulation,[\[footnote 123\]](#) especially among vulnerable and disadvantaged children.[\[footnote 124\]](#)

Setting out routines, rules and expectations helps children learn how to look after themselves and get along with others.[\[footnote 125\]](#) As young children grow, appropriate rules and routines also provide the familiarity and security they need. Conversely, a lack of routines is associated with behavioural problems.[\[footnote 126\]](#) For routines and rules to work, practitioners must apply them consistently and take into account the age of the children involved.

For babies, routines help them know what will happen next and can provide emotional security and stability. These may need to be adapted to meet their individual needs. For toddlers, routines and

clear expectations help them to learn what is positive social behaviour and what is not. They may often need to be reminded of these expectations or have them repeated and modelled. This is natural at this stage of young children's development. A degree of non-compliance may be important, especially around the age of 2, when children are becoming more independent and making their own choices.^[footnote 127] Literature has identified approaches that make routines easier to remember. Choosing key words, phrases and actions, such as when teaching children what to do during transition times, make it easier for practitioners to apply routines consistently and for children to know what to expect.^[footnote 128]

When practitioners teach and model how to get along together, young children are more likely to learn these desired behaviours. Research suggests that the most effective settings teach children to rationalise and talk through conflicts.^[footnote 129] When staff are consistent and help children to develop their social skills through the use of stories and group discussions, children's social and behavioural outcomes are better.^[footnote 130] The Researching Effective Pedagogy in the Early Years report found that 'in settings which are less effective ... there is often no follow up on children's misbehaviour, and on many occasions, children are 'distracted' from interfering with other children, or simply instructed to stop'.^[footnote 131] Providing opportunities to practise social skills and giving praise and feedback also help children who are at risk of developing antisocial behaviour problems.^[footnote 132]

Children's imaginative play is often cited as being integral to their development of social skills. Children's play is of course very important. But evidence supporting correlations between pretend play and social development is inconsistent.^[footnote 133] In other words, being able to get on with other children is important when playing, but playing does not necessarily help children learn how to get on with others – teaching and modelling through adult interactions are important too. However, play gives children good opportunities to work through challenges and find solutions when things become tricky. It also gives them time to make friends and rehearse and refine their social skills.^[footnote 134]

As they grow older, children's play develops from physical exploration of movement and objects to solitary pretend play, to non-pretend and pretend social play.^[footnote 135] Shared meaning is important for pretend social play. For example, if children are pretending to be superheroes, they need knowledge of superhero stories as well as the language to negotiate their roles.

Research suggests that adult-guided play, for example using puppets and other resources, can help children learn about relationships skills.^[footnote 136] These skills can help children negotiate and collaborate during their play.

Self-care

Self-care is an important aspect of PSED. It includes healthy eating and managing personal needs with increasing independence. Several reviews have reported practitioners' concerns that the pandemic affected children's self-care, including their independence in toileting.^[footnote 137]

However, despite the importance of self-care in early years practice, there is little high-quality evidence about effective approaches to curriculum design or pedagogy.^[footnote 138]

Toilet training

Evidence from the United States suggests that ‘more than two-thirds of U.S. children achieve the physiological, cognitive, and emotional development necessary for toilet training by 18 to 30 months of age’.^[footnote 139] In England, the NHS advises parents that:

- by age 3, 9 out of 10 children are dry most days – even then, all children have the odd accident, especially when they’re excited, upset or absorbed in something else
- by age 4, most children are reliably dry during the day^[footnote 140]

Successful approaches to toilet training include encouragement from adults, and patience.^[footnote 141] Many children with SEND benefit from a structured approach to teaching the skills they need for toilet training, rather than waiting for signs that the child is ready.^[footnote 142] The Institute of Health Visiting advises that ‘starting early has shown to be particularly successful. Becoming toilet trained is about learning a set of skills that can be taught’.^[footnote 143]

Healthy diets

Diets rich in vegetables and fruit have many health benefits.^[footnote 144] If vegetables and fruit are lacking in a child’s diet, this can affect their long-term health.^[footnote 145]

It is widely agreed that early childhood is a critical period for establishing healthy eating habits.^[footnote 146] Early years settings can play an important role in developing these habits. The most effective approaches to encouraging healthy eating have many components, including:

- healthy menus for meals, snacks and drinks
- professional development for all staff
- adults encouraging and modelling healthy eating with the children
- educational activities that focus on improving children’s knowledge^[footnote 147]

Children use their senses to explore the world around them, and this can help them learn to enjoy eating fruit and vegetables.

Children should learn about food in a safe environment. It should be planned for precisely, so that practitioners can spend time familiarising children with different fruits and vegetables, teaching where they come from and how they grow. Some research indicates that children are more likely to eat fruit and vegetables they are familiar with at mealtimes if they have had prior sensory experience of them.^[footnote 148] Involving children in preparing food, growing fruit and vegetables and cooking can help to broaden their awareness of different foods. The sensory experience of growing sugar snap peas and snapping the outer casing to find the pea will not only teach children about sugar snap peas but will also contextualise the language used to describe and name them.

The opportunity to experience different foods, from the local region and from other countries and cultures, widens children's food preferences. It helps them to develop their taste, awareness of different smells, and knowledge about the look and texture of a variety of foods.

Research also indicates that young children who are exposed to pictures of different foods are more willing to eat those they have previously seen and are familiar with. [\[footnote 149\]](#) These experiences can help to teach children the names of different foods. Talking about the pictures will teach children new vocabulary and new knowledge about healthy foods.

The EYFS [framework](#) says that providers must promote children's oral health. Children with good oral health benefit from better speech and language development, and less pain from toothache and infections. Settings can promote good oral health by reducing children's sugar consumption, offering drinks in open cups once babies are over 6 months old, and encouraging tooth-brushing.

Key messages for practitioners

For effective PSED, practitioners need to be dependable and show genuine concern, care and respect for every child. They need to respect and understand children's perspectives and feelings.

Practitioners need to think about the most effective ways to help children learn how to look after themselves and how to get on with others. These might include:

- knowing how to support children to develop warm, positive relationships and interactions
- being proactive in supporting children to develop a positive sense of self
- planning sessions that help children to develop an understanding of emotions
- modelling routines, rules, and expectations that help children learn how to get along with each other
- providing opportunities for children to explore, prepare and eat healthy food in supportive and meaningful contexts.

Conclusion

This review has drawn on a range of evidence to identify the features of an effective curriculum for the prime areas of the EYFS.

A high-quality curriculum is carefully organised and is appropriate to the children, their families and the local context. It is taught effectively by skilled and knowledgeable practitioners who understand the importance of sensitive, high-quality interactions with children.

High-quality interactions are central to effective early education. But they are not sufficient in themselves to guarantee that all babies and young children will learn what they need. When adults know children's starting points and are clear about what they want the children to know and be able

to do, they can identify which children need to receive more targeted time and attention to learn and practise new knowledge.

The decisions that managers and leaders take are important. By prioritising the prime areas in their curriculum thinking, and allocating sufficient time and resources, they can ensure that children get the best start to their early education. The most effective settings also invest in high-quality professional development and a well-qualified staff team.

Play is fundamental to the prime areas of learning. It enables children to explore and experiment with movement so they consolidate new motor skills. Play promotes communication and self-regulation, and is fertile ground for children to learn and practise collaboration, problem-solving and negotiation.

Children's learning in the prime areas also requires effective, explicit teaching approaches. For example, research highlights the importance of teaching vocabulary, fundamental movement skills and understanding of emotion. Effective teaching is essential if we are to ensure that all children make progress in the prime areas. As the EYFS framework states, these provide the essential foundations for all later learning, 'igniting children's curiosity and enthusiasm for learning, forming relationships, and thriving'. [\[footnote 150\]](#)

In the EYFS, the different areas of learning are interconnected. For example, effective support for children's emotional development also helps them to develop their communication. Children who are more persistent also show better physical development. The EYFS framework explains that the 4 specific areas of learning 'provide children with a broad curriculum and with opportunities to strengthen and apply the prime areas of learning'. [\[footnote 151\]](#) In turn, the specific areas strengthen the prime areas. For example, looking for minibeasts outdoors in 'understanding the world' provides a motivating context for children to learn new vocabulary. 'Expressive arts and design' offers many opportunities for children to refine their fine and gross motor skills and engage in extended back-and-forth conversations.

The third and final part of this research series will focus on the 4 specific areas of learning. A broad curriculum which is well thought-out and carefully sequenced enables staff to make the most effective use of planned and incidental interactions. Taken together, these factors ensure that children experience a curriculum by design, rather than by chance.

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