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## The Characteristics of Effective Teaching and Learning

Presented by Jan Dubiel

Project Lead hey!



# The characteristics of effective teaching and learning

## 1.18 GBP/SBP version/ 1.13 CM version

1.1 In planning and guiding what children learn, practitioners must reflect on the different rates at which children are developing and adjust their practice appropriately. Three characteristics of effective teaching and learning are:

- playing and exploring - children investigate and experience things, and 'have a go'
- active learning - children concentrate and keep on trying if they encounter difficulties, and enjoy achievements
- creating and thinking critically - children have and develop their own ideas, make links between ideas, and develop strategies for doing things



Every child deserves the best possible start in life and the support that enables them to fulfil their potential. Children develop quickly in the early years and a child's experiences between birth and age five have a major impact on their future life chances. A secure, safe and happy childhood is important in its own right. Good parenting and high quality early learning together provide the foundation children need to make the most of their abilities and talents as they grow up.

The Early Years Foundation Stage (EYFS) sets the standards that all early years providers must meet to ensure that children learn and develop well and are kept healthy and safe. It promotes teaching and learning to ensure children's 'school readiness' and gives children the right foundation for good future progress through school and life.



# Overarching principles

Four guiding principles should shape practice in early years settings. These are:

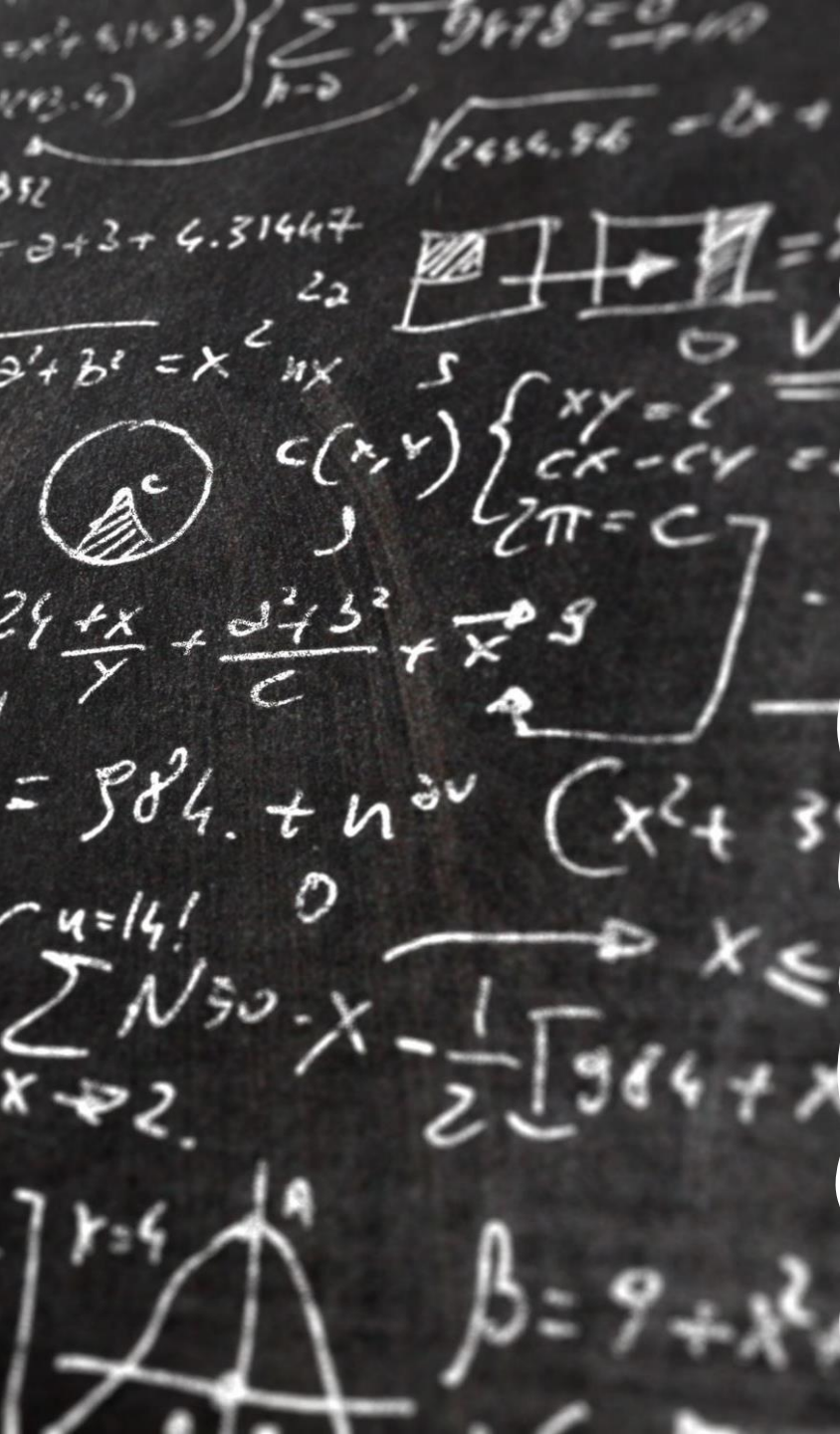
- every child is a **unique child**, who is constantly learning and can be resilient, capable, confident and self-assured
- children learn to be strong and independent through **positive relationships**
- children learn and develop well in **enabling environments with teaching and support from adults**, who respond to their individual interests and needs and help them to build their learning over time. Children benefit from a strong partnership between practitioners and parents and/or carers.
- importance of **learning and development**. Children develop and learn at different rates. (See “the characteristics of effective teaching and learning” at paragraph 1.15). The framework covers the education and care of all children in early years provision, including children with special educational needs and disabilities (SEND).



“No other period in human history can match the present one in sheer scale, speed and global complexity of the changes and challenges we face... We are preparing children for jobs that don't exist yet, using technologies that haven't been invented, in order to solve problems we don't even know are problems yet.”

*'The Element', Sir Ken Robinson*

What kinds of learners?



Trilling, Bernie and Fadel, Charles: *21st Century Skills: Learning for Life in Our Times*, Jossey-Bass (publisher), 2009.

- **Learning and innovation skills:** critical thinking and problem solving, communications and collaboration, creativity and innovation
- **Digital literacy skills:** information literacy, media literacy, Information and communication technologies (ICT) literacy
- **Career and life skills:** flexibility and adaptability, initiative and self-direction, social and cross-cultural interaction, productivity and accountability



“As educators, our role here is to use Personal Knowledge as a context to develop precisely the behaviours that will shape and enable brain development and learning potential. Through pursuing Personal Knowledge , children develop behaviours such as their meta cognition, executive functioning, cognitive flexibility, inhibitory control, self regulation and retrieval alongside the equally apparent and more visible Areas of Learning and Development such as Language and Communication, PSED, Physical Development and a range of Specific Areas of Learning that support different elements as required. It is precisely the intense motivation that enables this, and by this fascination they will demonstrate Csikszentmihalyi’s description of ‘flow’ and Ferre Leavers concept of ‘High Levels of Involvement’.

Dubiel, J, Its Not Really About Dinosaurs... Children’s Fascinations and the roles of Core and Personal Knowledge in Early Childhood Education (ECE). Voice Of Early Childhood, (2023)

# Conceptualising Curriculum

# Lilian Katz (2015)

- **Academic goals** are those concerned with the mastery of small discrete elements of disembodied information.
- **Intellectual goals** ...are those that address the life of the mind in its fullest sense (e.g. reasoning, predicting, analyzing, questioning, etc.), including a range of aesthetic and moral sensibilities.

“An appropriate curriculum in the early years then is one that includes the encouragement and motivation of the children to seek mastery of basic academic skills, ..., **in the service of their intellectual pursuits.**”

Katz (2015)

Executive Functioning

Metacognition

Cognitive Flexibility

Motivation

Curiosity

Resilience

Creativity

Co-regulation / self-regulation

Working memory / retrieval

Emotional Literacy

Independence

Involvement







Executive Functioning

Metacognition

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Emotional Literacy

Independence

Involvement

Research and analysis

# Best start in life part 1: setting the scene

Published 14 November 2022

Applies to England

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## Introduction

A high-quality early years education is vitally important. Children attend early years provision at a crucial developmental point in their lives. The education and care that they receive affects not only future educational attainment but also their future health and happiness.

This report is part of our series of subject-based curriculum research reviews.<sup>[[footnote 1](#)]</sup> Our 2017 report 'Bold beginnings' and the more recent schools research reviews covered the Reception Year of the early years foundation stage (EYFS), whereas this review focuses on the pre-school age range, from birth to 4 years.<sup>[[footnote 2](#)]</sup> Its purpose is to support early years practitioners to raise the quality of early years education.

This review examines the factors that contribute to a high-quality early education. We explore literature relating to early years education, drawing on a range of sources, including academic and policy literature.

This review considers:

- the early years context for children aged from birth to 4 years
- staffing in the early years sector
- the principles behind the early years research review series

# Filters we use to select research

## **An understanding that curriculum is different from pedagogy**

In the EIF, we set out a conception of a high-quality curriculum. This is based both on our review of existing research and on our own curriculum research programme. Progress in curricular terms means knowing more and remembering more, so a curriculum needs to plan carefully for that progress by considering the building blocks and sequence in each subject. In contrast to some definitions of curriculum, we see it as different from (though of course connected with) pedagogy and assessment. Curriculum is about what teachers teach and when, and what children learn.

## **How children learn and cognitive science**

In recent decades, we have seen a knowledge explosion in the field of cognitive science, which has given us a growing insight into how learning happens. This important body of work has informed our thinking in developing the EIF, and we believe it is necessary to take into account the way children learn to develop a high-quality curriculum.

Unfortunately, some literature is based on outdated understanding, for example that children have different learning styles. We are therefore using alignment with cognitive science (as outlined in the EIF overview of research) as part of this filter.

# Early years curriculum and pedagogy

Our overview of research for the EIF provides an explanation of how we understand curriculum:

“ Our working definition of curriculum is that it is a framework for setting out the aims of a programme of education, including the knowledge and skills to be gained at each stage (intent); for translating that framework over time into a structure and narrative, within an institutional context (implementation); and for evaluating what knowledge and understanding children have gained against expectations (impact). The curriculum lies at the heart of education. It determines what learners will know and be able to go on to do by the time they have finished that stage of their education. [\[footnote 45\]](#)”

# Executive function

Executive function (also known as cognitive control) refers to mental processes that begin to develop from birth and are considered essential for learning, as well as for cognitive, social and psychological development. [\[footnote 57\]](#) Researchers in cognitive science agree that there are 3 core areas of executive function:

- inhibition (self-control of behaviour and attention)
- working memory (holding information in mind and working with it)
- cognitive flexibility (changing approaches to a problem, and switching between tasks) [\[footnote 58\]](#)

Essentially, executive function makes it possible to mentally play with ideas and successfully navigate challenges, and to stay focused while doing so.

## Implications of executive function for early years teaching

Findings from research on executive function have implications for the ways that young children are taught, as well as the ways that babies are cared for and interacted with from birth. Teachers should consider what we know about executive function, how children's executive function develops and what early education can add to that development.

Considering executive function has several implications for early years teaching:

- Research from cognitive science highlights that the practice of retrieving knowledge at intervals over time helps children to remember that knowledge in the long term. [\[footnote 61\]](#) This means that learning should be revisited periodically to ensure that it has been remembered – that it has entered the long-term memory, which reduces demand on the working memory. This also means that, when new knowledge is taught, it can be integrated with existing knowledge.
- Young children do not actively choose to use their executive function (as older children do); they use it in response to environmental demands, such as when an adult encourages them to. [\[footnote 62\]](#) This means that it is not sufficient just to provide opportunities for children to take part in activities (such as setting up an outdoor area). Practitioners need to guide children towards engaging with activities. This is also an equality issue: research from the University of Bristol, for example, has shown that boys participate less in the types of activities that support language and literacy development, and are given less encouragement in settings to do so. [\[footnote 63\]](#)
- Executive function demands need to be continually and incrementally increased or they will not improve. [\[footnote 64\]](#) This means that practitioners should be aware of what children already know and are able to do in terms of inhibition, working memory and cognitive flexibility, so that they can provide opportunities and teaching activities that will continue to develop the children's executive function. This is important, because children's executive function will develop at different rates. [\[footnote 65\]](#)



## Based on this research review, high-quality curriculum and pedagogy may have the following features:

- The curriculum considers what **all** children should learn. It offers plenty of opportunity for children who are disadvantaged or who 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 their peers.
- Practitioners consider a child's interests when choosing activities and they expand children's interests, to 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 practice through play.

# The Characteristics of Effective Teaching and Learning

The origins...

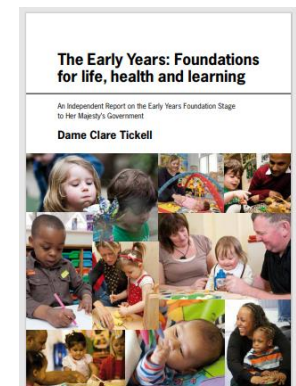
# The Early Years: Foundations for life, health and learning

An Independent Report on the Early Years Foundation Stage  
to Her Majesty's Government

**Dame Clare Tickell**

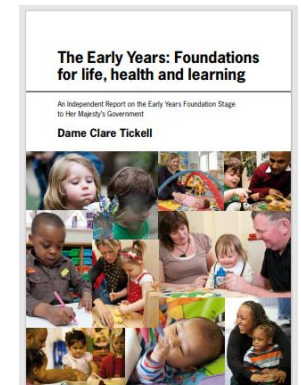


“In addition to the prime and specific areas of learning, this report proposes that a number of characteristics are highlighted, describing factors arising within the child which play a central role in learning, and in becoming an effective learner. These learning characteristics run through and underpin all seven areas of learning and development. As enduring characteristics, pertaining to lifelong learning, they need to be continuously observed and fostered but cannot be described in a developmental sequence.”

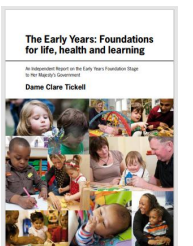


# Playing and Exploring - engagement

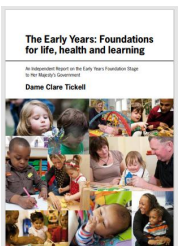
“Play is the prime context for development.” (Evangelou, 2009: p4) Alongside development in all areas of learning which is enhanced in play, this strand particularly highlights the agency of the child in actively constructing knowledge and understanding through playful qualities of engaging with their environment and with others.



**Finding out and exploring** is concerned with children's open-ended, hands-on experiences which result from innate curiosity and provide the raw sensory material from which children build concepts, test ideas, and find out;

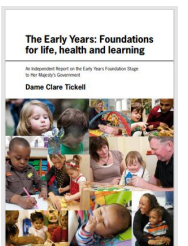


**Using what they know in their play** describes the importance of play as a context for children to bring together their current understandings, flexibly combining, refining and exploring their ideas in imaginative ways. Representing experiences through imaginative play supports development of narrative thought, the ability to see from other perspectives, and symbolic thinking (Evangelou, 2009: p78);





**Being willing to have a go** refers to the role of play in children finding an interest, initiating activities, seeking challenge, having a 'can do' orientation, being willing to take a risk in new experiences, and developing the view of failures as learning opportunities.



## Playing and exploring

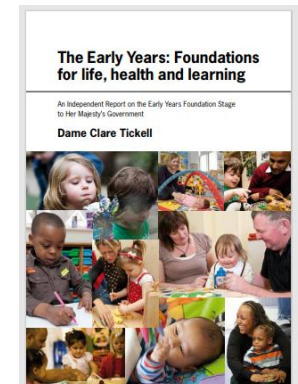
Children will be learning to:	Examples of how to support this:
Realise that their actions have an effect on the world, so they want to keep repeating them.	Encourage babies' exploration of the world around them. Suggestions: investigating the feel of their key person's hair or reaching for a blanket in their cot.  Offer open-ended resources like large smooth shells and pebbles, blocks and lengths of fabric for babies and toddlers to play freely with, outdoors and inside.
Plan and think ahead about how they will explore or play with objects.	When playing with blocks: encourage children to discuss what they will make before and while making it, or draw a picture before building.
Guide their own thinking and actions by referring to visual aids or by talking to themselves while playing. For example, a child doing a jigsaw might whisper under their breath: "Where does that one go? – I need to find the big horse next."	Visual aids can help children to keep track of what they need to do next, for example counting on their fingers or referring to a series of pictures on the wall to remind them what they must do before lunch.  Verbal mental aids include providing a sensitive commentary. You might comment: "I see you are looking for the blue horse. Do you think that's going?"  Children may copy your commentary by talking out loud to themselves and develop into their 'inner voice'.

Children will be learning to:	Examples of how to support this:
Make independent choices.	Provide a well-organised environment so that children know where materials and tools are and can access them easily.  Provide enough materials and arrange spaces so that children can collaborate and learn alongside peers. Give children enough time and space to engage in large-scale projects that may continue over several days.  Explore the reasons behind children's choices e.g. 'I'm interested that you're using a paintbrush rather than a pencil to make your picture.'
Bring their own interests and fascinations into early years settings. This helps them to develop their learning.	Extend children's interests by providing stimulating resources for them to play with, on their own and with peers, in response to their fascinations.  Join in with children's play and investigations, without taking over. Talk with them about what they are doing and what they are noticing.  Provide appropriate non-fiction books and links to information online to help them follow their interests.
Respond to new experiences that you bring to their attention.	Regularly provide new materials and interesting things for children to explore and investigate.  Introduce children to different styles of music and art. Give them the opportunity to observe changes in living things in the setting, and around the local environment. Take children to new places, like a local theatre, a museum, a National Trust heritage site, a fire station, a farm or an elderly people's home.  Involve children in making decisions about science experiments: what might we feed the plants to make them grow? Why do you think fizzy water might work? How will we know if one is growing faster than another?'

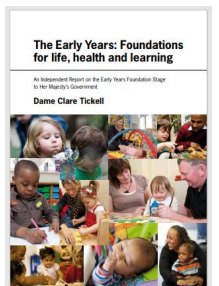


# Active Learning - motivation

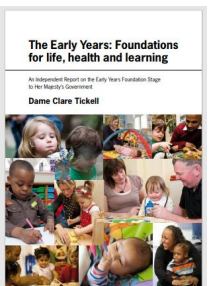
This strand highlights key characteristics which arise from intrinsic motivation to achieve mastery – to experience competence, understanding, and autonomy.



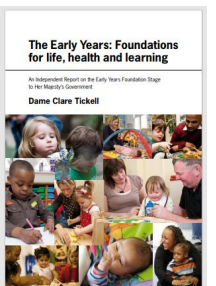
**Being involved and concentrating** describes the intensity of attention that arises from children concentrating on following a line of interest in their activities. This supports the deep level learning (Ferre Laevers) which should be a goal of early education: ‘In enhancing children’s thinking, it is more important to aim at depth and not breadth. Deep understanding is more important than superficial coverage.’ (Evangelou, 2009: p8);



**Keeping on trying** refers to the importance of persistence even in the face of challenge or difficulties, an element of purposeful control which supports resilience;



**Enjoying achieving what they set out to do** refers to the reward of meeting one's own goals, building on the intrinsic motivation which supports long-term success, rather than relying on the approval of others



## Active learning

### Children will be learning to:

Participate in routines, such as going to their cot or mat when they want to sleep.

Begin to predict sequences because they know routines. For example, they may anticipate lunch when they see the table being set, or get their coat when the door to the outdoor area opens.

Show goal-directed behaviour. For example, babies may pull themselves up by using the edges of a low table to reach for a toy on top of the table. Toddlers might turn a storage box upside down so they can stand on it and reach up for an object.

Begin to correct their mistakes themselves. For example, instead of using increasing force to push a puzzle piece into the slot, they try another piece to see if it will fit.

### Examples of how to support this:

Help babies, toddlers and young children feel safe, secure and treasured as individuals.

The key person approach gives children a secure base of care and affection, together with supportive routines. That can help them to explore and play confidently.

Provide furniture and boxes at the right height to encourage reach for objects.

Opportunities to play and explore freely, indoors and outside, to help toddlers and young children to develop their self-regulation and sometimes talk about what they are doing.

Help young children to develop by accepting the pace of their learning and giving them time to make connections and repeat activities.

### Children will be learning to:

Keep on trying when things are difficult.

### Examples of how to support this:

Help children to think about what will support them most, taking care not to offer help too soon. The following strategies will help children at different times, depending on their confidence, how much previous experience they've had with an activity, and how motivated, or distracted, they are:

- repeating something hard on their own; learning through trial and error.
- asking a friend or an adult for help.
- watching an adult or another child, modelling what to do, or listening to their guidance.

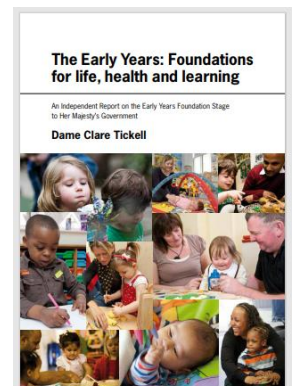
At times, children respond well to open-ended activities which they choose. Other times, they benefit from a supportive structure established by an adult. It is important to provide both kinds of opportunities.

Adults can teach children to use self-calming to help them deal with intense emotions. For example, you could introduce a 'calming jar'. Or you could introduce 'zones of regulation'. These can help children to become more aware of their emotions and think about how to calm themselves.



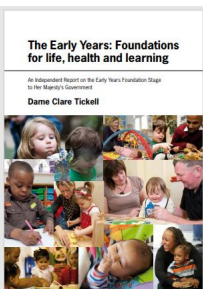
# Creating and thinking critically – thinking

Babies and children are thinkers who make sense of their experiences through perceiving patterns and developing concepts. As they engage in activities they actively think about the meaning of what they encounter, and over time begin to develop more awareness of their own thinking (metacognition). Awareness of oneself as a thinker and learner is a key aspect of success in learning (Whitebread and Pasternak, 2010).

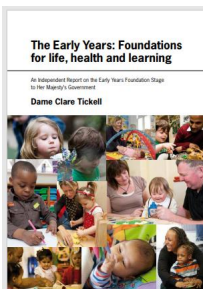




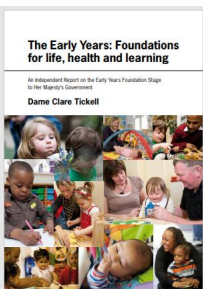
**Having their own ideas** covers the critical area of creativity – of generating new ideas and approaches in all areas of endeavour. Being inventive allows children to find new problems as they seek challenge, and to explore ways of solving these;



**Using what they already know to learn new things** begins in infancy as babies organise their sensory information to assess patterns and make predictions, with brains generating rules based on small datasets (Evangelou, 2009: p5). Thinking becomes more conscious as concepts are developed and linked together, finding meaning in sequence, in cause and effect, and in intentions of others through both narrative and scientific modes of thought;



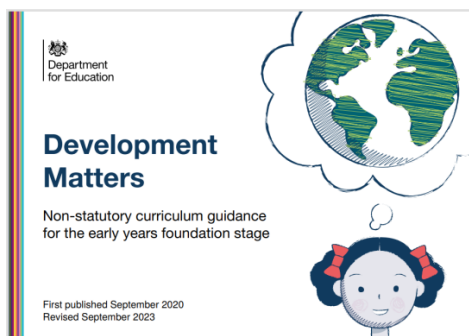
**Choosing ways to do things and finding new ways** involves approaching goal-directed activity in organised ways, making choices and decisions about how to approach tasks, planning and monitoring what to do, and being able to change strategies. Siegler and colleagues (2005) describe toddlers and young children learning in ‘overlapping waves’ as they choose from older or newer strategies to suit the demands of the task. Recent research identifies that children giving explanations about how they solve a problem learn more than when simply given positive feedback and explaining errors leads to greater learning than explaining why something is correct – suggesting that understanding the processes of how problems are solved is more important than the right answer (Evangelou, 2009: pp51, 79).



## Creating and thinking critically

Children will be learning to	Examples of how to support this:
<p>Take part in simple pretend play. For example, they might use an object like a brush to pretend to brush their hair, or 'drink' from a pretend cup.</p> <p>Sort materials. For example, at tidy-up time, children know how to put different construction materials in separate baskets.</p>	<p>Help babies, toddlers and young children to find their own ideas by providing open-ended resources that can be used in many ways.</p> <p>Encourage, support and enjoy children's creative thinking as they find new ways to do things.</p> <p>Children need consistent routines and plenty of time so that play is not constantly interrupted. It is important to be reflective and flexible.</p>
<p>Review their progress as they try to achieve a goal. Check how well they are doing.</p> <p>Solve real problems: for example, to share nine strawberries between three friends, they might put one in front of each, then a second, and finally a third. Finally, they might check at the end that everyone has the same number of strawberries.</p>	<p>Help children to reflect on and talk about their learning through using photographs and learning journeys. Share in children's pride about their achievements and their enjoyment of special memories.</p> <p>Suggestion: you could prompt a conversation with questions like: "Do you remember when...?", "How would you do that now?" or "I wonder..."</p>

Children will be learning to	Examples of how to support this:
<p>Use pretend play to think beyond the 'here and now' and to understand another perspective. For example, a child role-playing the billy goats gruff might suggest that "Maybe the troll is lonely and hungry? That's why he is fierce."</p>	<p>Help children to extend their ideas through sustained discussion that goes beyond what they, and you, have noticed. Consider 'how' and 'why' things happen, and 'what might happen next.'</p>
<p>Know more, so feel confident about coming up with their own ideas.</p> <p>Make more links between those ideas.</p>	<p>Help children to come up with their own ideas and explanations.</p> <p>Suggestion: you could look together at woodlice and caterpillars outdoors with the magnifying app on a tablet. You could ask: "What's similar about caterpillars and other insects?" You could use and explain terms like 'antennae' and 'thorax'.</p>
<p>Concentrate on achieving something that's important to them. They are increasingly able to control their attention and ignore distractions.</p>	<p>Offer children many different experiences and opportunities to play freely and to explore and investigate. Make time and space for children to become deeply involved in imaginative play, indoors and outside.</p>











#thisisme #mirror  
#selfawareness







**Join the conversation, shape the future  
direction for early years.**

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