

Supporting children's development

Fine motor skills

Angela Owens discusses the importance of fine motor skills to children's overall development and outlines practical ideas for supporting these in every day experiences.

The development of children's fine motor skills is an important foundation for the attainment of other important skills in the future such as writing, drawing and self-help. As with all areas of development, child care professionals play an important role in providing experiences, resources and guidance that will assist children to develop their fine motor skills through everyday play experiences and routines.

Adopting an individualised approach that is based on children's interests will help to ensure that experiences and activities are enjoyable and meaningful, and therefore more likely to promote positive learning outcomes for children. This is particularly important for children who experience difficulties with fine motor skills, or who are not intrinsically interested in the types of activities that are often considered to be 'fine motor activities' such as drawing, art/craft or playdough experiences.

What are fine motor skills?

The term 'fine motor' means 'small muscles'. Fine motor skills involve the use of the small muscles in the fingers, hand and arm to manipulate, control and use tools and materials. Hand-eye coordination, where a person uses their vision to control the movements and actions of their small muscles, is also an important component of fine motor skill development.

Why are fine motor skills important?

Fine motor abilities form the basis for many of the skills that children will develop and enhance as they move through childhood. For infants and young children, their fine motor skills facilitate their interactions with their world, and therefore their learning. As they develop, children's fine motor skills are essential precursors to the development of early literacy, numeracy and self-help skills such as independent dressing and toileting. As children move through their preschool and into their school years, their fine motor skills assist them to continue to develop their literacy and numeracy skills, as well as to participate in a range of more complex activities such as art/craft experiences,

This article relates to:

FDCQA Principles: 2.2, 3.1, 3.2 and 3.5

OSHCQA Principles: 4.2, 4.3, 5.1 and 5.2

QIAS Principles: 3.2, 3.3, 4.1 and 4.6

board games, construction activities using blocks and commercial construction kits, using computers and playing musical instruments.

Children who have difficulty with fine motor activities may experience frustration and poor self-esteem because they are unable to perform everyday tasks such as drawing or cutting with scissors as competently as their peers. Many children who find fine motor tasks challenging will avoid participating in these tasks due to the resulting frustration, fatigue, or fear of failure. This produces a negative cycle as these children will then have fewer opportunities to practice and improve their fine motor skills.

Fine motor development

As for all areas of development, each child will develop their fine motor skills at their own pace, and they will demonstrate different strengths and abilities, depending on their interests and personal make up. However, there is a general pattern that children's fine motor development follows and there are milestones that are 'typical' of particular age ranges. Some of the characteristic fine motor milestones that children may reach by certain stages of development include:

For younger babies

Very young babies have little control over their bodies. As they develop they begin to understand that their hands, fingers, feet and toes are attached to their bodies and by five months can reach out for and hold objects for brief periods of time.

For older babies

By six to nine months babies can hold and shake objects such as keys, rattles and small toys, and by nine months they can transfer objects from one hand to the other. They develop the ability

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to pick up quite small objects using a thumb and forefinger pincer grip. Children at this age tend to put everything in their mouths, so eliminating choking hazards is very important. By around 16 months they can carry out simple tasks such as turning the pages of a board book, completing simple peg puzzles and using knobs and buttons.

For toddlers

From 16 months to three years, toddlers continue to refine their fine motor skills and use these to explore their world and to gain independence. During this time they begin to feed themselves using utensils and they can stack blocks and connect larger construction materials, such as large interlocking bricks. They also begin to make marks with drawing implements though the pencil grip they use may initially be quite clumsy, for example, they may use a 'fist grip'.

For preschool age children

Children aged between three and five years begin to gain proficient control over their small muscle movements, and start to master tasks such as doing up buttons and using scissors. They also begin to refine their drawing and writing skills, and can copy letters, numbers and shapes, and often produce quite complex drawings. From about three, most children establish their left or right hand preference.

For school age children

As children reach school age, they continue to enhance their fine motor skills, and their drawing, writing, colouring and scissor skills become more fluid and adept. As their fine motor muscles strengthen they also find these activities less

taxing, and they often engage in these more spontaneously.

Fine motor activities

Because children learn most effectively when they are genuinely interested in what they are doing, it is important that child care professionals get to know individual children's interests and abilities, and use these as a basis for planning.

When thinking about fine motor activities, many people tend to focus on 'traditional' experiences such as threading, drawing, painting, gluing, cutting with scissors or using playdough with rollers and shape cutters. However, many other daily activities and play experiences in which children engage offer valuable opportunities to support fine motor development. These are particularly beneficial for children who are not interested in conventional fine motor experiences, or who are self-conscious about their fine motor abilities.

The following ideas can assist child care professionals to use a child's area of interest or particular strength as a basis for promoting their fine motor development:

In dramatic play areas provide:

- dress up clothes and shoes with different types of fasteners such as press studs, large and small buttons, zippers and velcro
- writing materials such as pens, pencils, chalk, paper and chalk boards in themed areas such as offices, school rooms, restaurants or shops
- tubs for washing and drying dolls, doll's clothes and other toys, and pegs and lines or air dryers for pegging clothes out.

In sand play areas provide:

- utensils and cutlery such as tongs, spoons, spatulas, cups, cookie cutters and baking trays
- differently sized toy vehicles, including very small ones
- natural materials such as bark, sticks, pebbles and vegetation.

It is helpful to include water with sand play to encourage children to manipulate and mould it. To minimise water usage, a container with a controlled tap/water release can be used instead of a hose.

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For playdough activities provide:

- assorted props such as toy animal figures, cooking utensils and cutlery, scissors, straws, popsticks and matchsticks and number and letter shapes
- for older children, interesting objects, such as marbles or small figures that can be hidden in the dough. A game can be made of squishing the dough to find the 'mystery' object
- materials such as rice or fine gravel to add to the playdough to create interesting textures.

For manipulative activities provide:

- tongs or large tweezers for sorting items
- magnets for children to experiment with and to explore how they attract, resist and can be used to move metal objects around
- 'feely' bags containing interesting objects for children to manipulate and identify by touch
- a range of construction materials, including commercial materials such as Mobilo and Lego, as well as carpentry equipment and household materials such as boxes, paper, fabric and sticky tape
- 'messy' play experiences such as 'slime', wet sand, mud or clay.

For music and movement activities:

- do finger plays and rhymes
- introduce an element of fine motor activity to gross motor focused experiences, for example, include fine motor movements in 'copy the leader' games such as Punchinello and Simon Says, or include fine motor activities as part of gross motor obstacle courses.

Supporting children experiencing fine motor difficulties

Child care professionals play an important role in supporting children who are experiencing delays or challenges in the development of their fine motor skills. When a child experiences ongoing difficulties in this area child care professionals may need to work with other professionals such as an occupational therapist to implement specialised strategies for promoting the child's fine motor development. In this situation, it may be necessary to consider how specific therapy activities can be integrated in the daily program in ways that meet the child's interests, as well as providing opportunities for other children to engage in the experiences.

Conclusion

Fine motor skills form an important foundation for the acquisition of many other skills, including literacy, numeracy, self-help and the ability to perform many everyday tasks. Child care professionals can support children's development in this area by becoming familiar with individual children's interests and strengths and using this knowledge as a basis for planning fine motor experiences. Spontaneous play experiences also offer opportunities for child care professionals to encourage children to practice and develop their fine motor skills in non-threatening and meaningful ways ■

References and further reading

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