

QUESTION TIME



NDNA's lead early years adviser, **Jo Baranek**, explains why, and how, we should be championing maths in early years settings...

Q: Why is maths an important part of early years education?

A Maths is an important part of the EYFS Framework, and an essential life skill for children. As well as developing numeracy, it supports skills such as problem solving, understanding and using shapes and measure, and improves children's spatial awareness. It also helps them to recognise, create and describe patterns, which is essential for early problem-solving skills.

In short, introducing maths to children from an early age helps to develop their understanding of all elements of maths, problem solving and reasoning in a broad range of contexts. Practitioners need to be able to provide opportunities for children to practise their developing skills and knowledge so they improve their competence and confidence in using them.



Q: What does a nursery need to provide to help children learn maths through play?

A To give children the best opportunities to learn and develop mathematical skills settings should pay particular attention to four, familiar themes: a unique child, positive relationships, enabling environments, and learning and development. All children can be successful with maths provided they are given the opportunities to understand it in a way that makes sense to them. Using the Characteristics of Effective Learning to ensure children are engaged, motivated and thinking critically for themselves is vital. For example, encouraging children to problem solve by asking, "How many spoons do we need for everyone in this group to have one each? How many have we got? How many more do we need?"

From birth children have a keen interest in the world around them, but to have the confidence to explore it, they need the support from adults around them. Positive relationships help give children the confidence to discover and develop their mathematical skills. Enabling environments help children to discover maths through indoor and outdoor play. Outdoors, children can spot shapes and numbers naturally, explore and investigate and build dens, which can help them discover shape, space and measure using equipment like boxes, crates and building blocks. Indoors, numbers and shape, space and measure can be integrated into all activities and areas of learning, e.g. using measure to mix paint and cooking activities that help children learn about quantities and measures.

Learning and development is about providing a range of activities and resources that support children's individual needs focusing on maths such as looking at shape, space and measure with imaginative play and developing an understanding of maths through stories, songs and games.

find out more

If you are interested in the Maths Champions project starting again in April 2014, please email jo.baranek@ndna.org.uk. For more information on the project or other maths courses, visit ndna.org.uk

Q: What can practitioners do to help children develop their skills?

A To help children develop their maths skills, practitioners also need to have confidence in their own abilities. NDNA is currently working with the DfE to promote maths through the Maths Champions project. The DfE recognises the importance of maths in building essential life skills and wants to help practitioners be confident enough to develop children's abilities in this area. To this end, the project aims to ensure practitioners have the skills and resources they need to provide the best possible mathematical opportunities for children in their care. The project works with EYPs to support staff in improving their own skills, and then in turn to help children learn about maths through play. We share free resources and ideas with online audit tools, activity resources, highlighting opportunities to develop maths through play, and support tools and online training for improving practitioners' own maths skills. We also provide opportunities to talk to others, to share ideas and good practice.

But it is not just through the Maths Champions project that NDNA supports mathematical development. We also run online maths courses, which help practitioners develop their skills and suggest ways to incorporate behaviours such as integrating schemas, and children's individual needs and interests, into mathematical learning. An understanding of the brain and cognitive development of a young child and how it relates to mathematical development is also provided, to help develop the skills practitioners need to support maths skills in very young children.

Finally, as well as learning practical ways to help children in nursery it is helpful for mathematical learning to be carried through at home, and these courses also support you to understand the importance of this.

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