

Why wood works



Providing children in nursery and Reception with hammers, nails and saws, and the freedom to use them, will yield outstanding development in all areas of learning, says **Anna Ephgrave...**

In previous articles, I have talked about deep-level involvement as an indicator of brain activity and learning. We see this happening all the time at the woodwork benches in our classes at Carterhatch Infant School – children deeply engrossed in the challenge, making rapid progress. The girl in picture 1 is three years old and she has spent over half an hour working to complete her model. If we analysed the learning that took place, it would be vast – including many aspects of physical and mathematical development as well as understanding of materials and creativity.

However, more than anything else, it is personal, social and emotional development (the key to all learning) that is enhanced with this type of activity: children are taking risks, persevering, following rules and boundaries, assessing risk, keeping safe and feeling proud. It is often noticeable that children who normally will not persevere at a task are prepared to try for far longer at woodwork, perhaps because they

realise it is something truly challenging but also 'real'. Children will return to unfinished work the following day if necessary. They learn to share and take turns, negotiating and discussing routines and rules. They learn how to keep themselves and others safe. They realise that a real hammer can do serious harm, and they do treat the tools with respect. They learn to follow agreed rules. Children who find it difficult to conform are often so keen to participate that they manage to comply with requests and boundaries at the woodwork bench, just so that they get their turn. They take great pride in their achievements and therefore their self-esteem is boosted. For most children, too, woodwork is a new activity, so they are taking a risk just by becoming involved – they take further risks using the equipment

but learn to do this safely and independently.

Adult supervision

Visitors to Carterhatch are often surprised that we do not have an adult supervising the work bench, and yet we have had no serious accidents. However, our induction period is carefully structured and this is crucial to a safe woodworking area. When the children first start in our classes, woodwork is available immediately and we have an adult beside the bench at all times. Parents stay with their children for varying periods and we encourage them to help ensure that the children adhere to the very simple rules: two children at each bench, two hands on the saw. There is zero tolerance of any dangerous behaviour, and the children quickly learn to behave appropriately if they want to be involved. The woodwork is part of our continuous, outstanding provision – it is always available and, therefore, we don't have 'mad rushes' of children eager to have a turn.

After the induction period, adults keep an eye on the woodwork area, but an adult is not always stationed there. When appropriate, an adult will join children at the work bench to 'teach' in the moment – modelling a new skill or technique, providing vocabulary, making suggestions or giving encouragement. As a staff team, we have produced a detailed

benefit/risk assessment, which demonstrates clearly how the benefits outweigh the minor risks (you'll find a link to the benefit/risk assessment at freedomtolearn.co.uk/links)

What you need

Work bench: As with any valuable activity, woodwork takes time, commitment, organisation and some money to set up, though once it is established the costs are minimal. The workbench is the biggest expense – I would advise a search of the

When children engage in woodwork, they are displaying all the Characteristics of Effective Learning



boiler rooms and basements to see if a bench has been hidden away decades ago! Alternatively, the bench in the main picture is purpose-built, very sturdy and perfect for nursery and Reception children – it's priced at £175 and is available from creativecascade.co.uk.

Equipment: I would recommend small claw hammers (often sold in the shops where everything costs £1), smooth fine nails (a 25kg box from an ironmonger or online, priced at around £40, should last over a year) and adult-size hacksaws. Hacksaws are easier for young children to use as the teeth are fine and do not get stuck in the wood, but junior hacksaws are too small. It is worth paying a little more for the blades, and make sure they are very taut in the saw frame to avoid them snapping.

Limitless learning

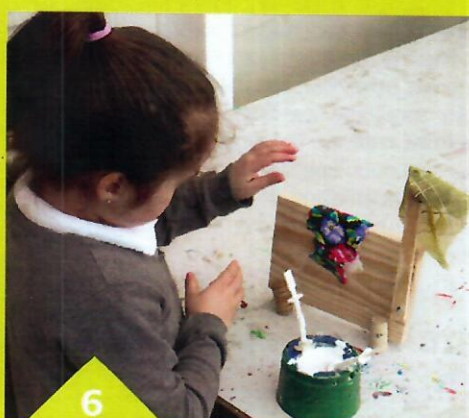
The Characteristics of Effective Learning are:

- **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; and
- **Creating and thinking critically** - children have and develop their own ideas, make links between ideas, and develop strategies for doing things.

As stated, woodwork is part of our continuous provision and, as I've explained in previous articles, we plan 'in the moment'. Therefore, we don't tell the children what to make or when to make it. In this way, when children engage in woodwork, they are displaying all the Characteristics of Effective Learning! In particular, they are creating and thinking critically: developing their own ideas, making links between ideas and developing strategies for doing things. The 'horse' that is shown in picture 6 is a perfect example of this.

However, it's not all about the finished product. With woodwork, as with many activities undertaken by young children, the process is often more important than the product. Indeed, we often find pieces of wood that have been sawn, or which have many nails hammered into them. The children do not want to keep them - they have enjoyed, and learnt from, the experience and may well use their skills to make a more defined model another day. Such pieces of wood are recycled, with the nails removed, and used again.

Woodwork leads to deep learning and outstanding progress in all areas of development. Children are attracted to the challenges it brings and fascinated by the possibilities. Adults can be anxious about this activity, but I would urge settings to have a go - the resulting engagement and learning will amaze and delight adults and children alike.



Make sure all the adults have a go at the hammering and sawing, so that they can give useful tips when the children are learning. One of the biggest mistakes is to press too hard with a saw - adults and children need to learn how to exert just enough pressure for the teeth to cut into the wood without it getting stuck. With hammering, hammer gently while holding the nail in place between finger and thumb, and then once the nail is able to stay in place on its own, move fingers away and bang much harder!

Additional resources: We add a variety of resources for children to fix to the wood such as milk bottle tops, elastic bands, fabric, corex, corks, string, etc. The Ikea rail, shown in picture 4, is a great way to store these

items on the end of the work bench. Paint, felt pens and pencils are available to decorate models as well.

Wood: Wood is too expensive to buy. The best option is to find a local timber merchant who offers a 'cutting service' for customers. They are usually happy to keep off-cuts for use in school - we have taken a large bin to the timber yard which they fill up and we collect every few weeks. Avoid using balsa wood as it does not provide any challenge - the nails can be pushed into the wood by hand. Although children struggle to achieve a good hammering technique, once they have mastered it they can make far more interesting models with harder wood, and they are developing their hand and arm muscles at the same time.

about the author

Anna Ephgrave is assistant headteacher for early years at Carterhatch Infant School, graded as 'outstanding' in November 2013. She is author of *The Reception Year in Action* and also works as an independent consultant with her colleague Ruth Moore at Freedom To Learn Network Ltd. Visit freedomtolearn.co.uk