



A muddy puddle in the park attracts the attention of Tristan, as he pokes in the mud, scoops some on to his finger and makes marks on the ground.

He shows his mother what he is doing and checks that it is acceptable, then goes back to investigating the mud puddle further.

PRACTICE IN PICTURES

Mud, mud...

The sensory experience of messy play has far-reaching benefits for brain development, creativity and risk-taking, says *Anne O'Connor*

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Tristan is in the park with his mother. He steps into a muddy puddle and squats down to investigate it further. He uses a finger to gently poke at the mud. After a while, he scoops some on his finger, steps out of the puddle and carefully makes marks on the ground with it. He checks with his mother before he goes back into the mud and does it again.

How many of us remember the joys of playing in the mud? Getting mucky and building mud pies often features prominently when adults are asked about their memories of play.

It is an activity loaded with sensory experiences. Sticking his finger into the unknown is a risky business for Tristan and he proceeds cautiously, but with intent. It is the sense of touch that is most prominent as he begins his explorations – and for babies and young children, touching things will lead to powerful brain-building.

Sensory experiences help build connections in a young child's brain, by sending electro-chemical messages across the synapses between the neurons in the brain. These messages strengthen the synapses and the connections in the brain pathways. This helps the child to make sense of their repeated experiences by enabling the brain to build a powerful 'image' of the way the world around them works. Connections are made through repeated sensory experiences which shoot tiny bursts of electricity across the



gaps, wiring the neurons into well-connected circuits. Getting messy in the mud isn't just about fun – it's hugely important in building our brains!

2 As well as helping a child make connections with their previous experience, playing with 'messy' materials also confuses their brains in a very useful way. Piaget's concept of cognitive disequilibrium describes how thinking has to change in order to incorporate new information.

Bernadette Duffy, in 'All About... Messy Play' (*Nursery World*, 4 December 2004) suggests there is a strong link between this concept and the processes involved in messy play: 'Children's interpretation of the world is challenged when they take on new information and find that they now have two contradictory views of the same event.'

The mud in Tristan's puddle looks as if it might be solid but when he pokes his finger into it the sensation is very different. 'The creative process,' as Duffy notes, 'is characterised by risk-taking, trying things out and experimenting, and an insight often occurs at the very moment we are confused and have to look deeper.'

3 Tristan chooses to experiment with the mud by taking it out of the puddle on his finger and then making marks with it on the dry path.

His concentration is intense as he carefully marks the ground with his muddy finger. Mud is a perfect material for triggering and supporting emergent mark-making and writing. Moulding, shaping, splodging and poking gives children immediate satisfaction as well as a sense of control over the material. Scraping, dabbing and daubing, with fingers or tools, gives positive, but not permanent, feedback, which offers a pressure-free experience in which to explore making marks.

Messy play, in general, rarely has a finished product or outcome – and this is a very valuable feature of this kind of play. It is all about the direct experience unique to each child, although it is worth recording the process with photographs and children's comments as they play.

4 Although being cautious, Tristan clearly enjoys messing about in the mud. But some children who are touch-sensitive, or 'tactile defensive', are much less inclined to experiment with mud or engage in messy activities of any kind.

Although it is true that some children learn to be wary of getting dirty or messy, because of the negative reactions from the adults around them, some children may have a sensory processing or modulation disorder. This means that they have a heightened sensitivity to touch and tactile experiences and can be easily overwhelmed by sensation.

Touching something that feels pleasant to others might actually cause real pain or discomfort for them. The brain processes this as a threat. This may sometimes be linked to other conditions, such as Fragile X or autistic spectrum disorders, so seek expert advice if you have concerns. No child should ever be forced or pressured to touch something that alarms them or that they are wary of, but it is possible to find gentle ways to de-sensitise and build confidence with messy activities.

- Reassure them that it is all right to just observe and not have to take part until they are ready.
- Help them to feel in control and know they can stop as soon as they want to.
- Allow them to wear gloves; to put their hand on your hand as you touch something; to use tools rather than fingers; to use dolls as substitutes for themselves – for example, for face painting and playing in mud.
- Warming up the dough, paint, mud or whatever with warm water can be helpful in de-sensitising and making the experience less threatening.
- Ensure that all children have the opportunity to protect their clothes, but be particularly aware of children who are anxious about their parents' reaction to dirt. Be sensitive to this without making a big deal of it and make sure they get to cover up or even change out of home clothes for a particularly messy session.

REFERENCES AND FURTHER READING

- *Playing and Learning Outdoors - Making provision for high quality experiences in the outdoors* by Jan White (Routledge/ *Nursery World*, 2008)
- *Making My Own Mark - Play and writing* by Helen Bromley (Early Education, 2006)
- *Sensory Integration and the Child* by A Jean Ayres (Western Psychological Services, 2005)
- 'All About... Messy Play' by Bernadette Duffy (*Nursery World*, 4 December 2004)

FURTHER INFORMATION

The stills are taken from Siren Films' 'Two Year Olds Outdoors - Play, Learning & Development'. For more information, visit Siren Films at www.sirenfilms.co.uk or call 0191 232 7900

5 As practitioners, we may have our own sensory or emotional issues around dirt or messy activities. Sadly, this can sometimes lead to a reluctance to make these activities available – and, of course, there are the organisational issues of all that mess to clean up afterwards!

Naturally, the outdoors is the perfect place to encourage messy play and where you can usually rely on the weather to help in mud production. In her book, *Playing and Learning Outdoors*, Jan White gives useful advice on making the most of sand and soil outside for digging areas.

She suggests buying high-quality loam topsoil from garden centres or builders' merchants and advises that peat-based compost is environmentally unsound and shouldn't be used.

Take care to cover up skin cuts with plasters or gloves, and think about how you can make handwashing afterwards as accessible as possible. Encourage reluctant practitioners to experiment and play with messy materials alongside the children – and remind them that we are never too old for a bit more brain-building! ■



LINKS TO THE EYFS

- **UC 1.1** Child Development
- **EE 3.3** The Learning Environment
- **L&D 4.1** Play and exploration
- **L&D CREATIVE** Development