

“Getting in a Mud-dle at Forest School” – earth-based learning and dirt under your fingernails!”

*“Mud is very nice to feel
All squishy-squashy between the toes.
I’d rather wade in wiggly mud,
Than smell a yellow rose.
Nobody else
but the rosebud knows
How nice it feels
Between the toes.” – J. Smith*

Mud is undoubtedly one of the primary media for explorative and creative play in an outdoor environment: from jumping in muddy puddles to making mud pies; from sliding down a bank to building with cob, getting dirty is a fundamental part of a child’s development. As a well-known washing powder manufacturer recently (and only slightly patronizingly) reminded us: “Dirt is Good!”

As practitioners, we know that Forest School can provide a world that is, as E.E. Cummings once put it, both “**mud-luscious**” and “**puddle-wonderful**” We also understand the vital importance of **play** and how natural materials can help us to support a child’s learning. Some of our best days involve the children finding a muddy patch and we just step back and watch. Sometimes though, it can be useful to have a few extra **ideas up our sleeves** and good old-fashioned dirt gives them to us in spades (...buckets, cups, trowels, hands...).

In this short article I want to have a look at some great mud-based ideas that are brim-full of **creative ‘sparks’**, but before we get our hands dirty, so to speak, it is worth considering the breadth of learning opportunities that mud can provide.

At its most fundamental level, mud, or more specifically clay, is believed to have formed the basis of the primordial soup whence we first evolved. As Robert W. Service said in his poem, Mud:

In the raw, red womb of Time; Man evolved from cosmic slime; And our thaumaturgic day; Had its source in ooze and clay.

So as well as being the medium for nearly all land-based growth on earth, mud could also be seen as the very **origins of life** itself.

Mud has also provided humans with one of our earliest building materials: from **mud huts** in Africa; adobe dwellings in South America; to cob and thatch farmhouses here in the UK, mud is both abundant and, if maintained well, long-lasting.



So that is all very noble and earnest but what about **playing with mud**? It's obviously very tactile, inviting us to mould, squish, ply, poke, slap, squeeze, form. But it also engages our other senses: colour, texture, smell, temperature, sound, even taste (how many of us put mud in our mouths as young children to find out what it tasted like?). All of these engage our senses at the same time jiggling our brains into a **frenzy of neural activity**. Mud is an infinitely malleable material which means it can be formed into an endless variety of shapes which means it works well as a medium for creativity. It is also very difficult to 'fail' with mud: if the head falls off your mud monster you just stick it back on again! (A good tip with mud monsters is to poke a bit of stick into the body of your monster wherever you want to add an appendage, say a head, and place that appendage on the bit of stick that is left protruding. This acts as an internal dowel which strengthens the join and stops your head, or dragon's wing, or diplodocus' tail, or vampire's fang, or gruffalo's ear from falling off in the first place!).

If you are working with children of Primary age, then the opportunities for linking their play to areas of the **curriculum** are rich and varied. Learning about the building methods of our ancestors for instance, or using mud as the focus for descriptive language; learning about soil, what is it made up of, what are different types of soil, what are the rock types that influence the resulting soil type? And of course all of this leads on from the very practical aspects of playing with mud. A good starting point is to do some test digs (basic surveying techniques) to establish different types of soil within your site – is the soil at the woodland edge different to the soil deep in the shade of the woodland? What about between the higher dry areas and the wetter low-lying parts of your site?



A good exercise is to do the '**jar test**': this involves placing a handful of soil from the different locations into a large glass or see-through jar and adding water. Shake the jar (with the lid on!) for about a minute until it's good and slushy then leave to settle. You might want to put a label under each one indicating where it was from. It will settle out (best if you can leave it until the next week's FS session) into clearly visible layers with sand/grit as the bottom layer (heaviest); silt as the middle layer; clay is the next layer up, often remaining in suspension in the water; finally any organic matter will float and settle out as the top layer. This will give you an indication of the make-up of your soil with regard to the proportion of sand/silt/clay.

If you have at least 20% clay to 80% silt and sand combined, then you are good to start **building with mud**. Building on a small scale with cob, a mixture of clay, sand, silt and straw, opens up an exciting new dimension to playing with mud.

Project ideas:

Mud lends itself to a whole array of project ideas – **mud pies** are a good starting point that everyone is familiar with, but why not 'bake' your pies by allowing them

to air dry? **Mud prints** are great to do with hands and feet, or leaves on wooden planks, rough canvas or paper, then hung up in split-hazel picture rails. **Mud monsters** work really well if you use 'woodland treasure' for decoration (beech mast makes great spines for a stegosaurus-type monster). You can stick **mud faces** flat onto trees and decorate in a similar fashion (have a look at the one on our website – on the FS Ethos page). **Mud painting** using natural paintbrushes and mixing in natural paints (blackberry squish) and charcoal works particularly well. And how about creating your own **fossil imprints** in mud, or coating plastic farm animals in mud and letting them dry hard. Then be your own archaeologist and chip them open with a small rock hammer. You could integrate this with a hiding and finding game where you get to '**dig up**' each others fossils!

My favourite though has to be **cob building**, for the variety, the longevity and also the link it gives us back to our ancestors. Here's how I have used it.

Once you have mixed your cob (see below for how to do this), you can start shaping and building straight away. If your structure is low and wide then the cob should be self-supporting. What about if you wanted to try traditional **wattle and daub** to create, say a model celtic roundhouse? What you then need is some internal structure to stop the cob falling into a big heap on the floor. If you place some upright willow sticks (preferably green) in the ground or in a base-board drilled with holes, then weave thinner green stick in and out of these in layers, you get a wattle wall. You can then trim this with secateurs if you need to. Then apply your cob squishing it into the weave of your wattle wall. Once this has dried, preferably outdoors but under cover and out of direct sunlight, then your cob should have set.



Here are some model roundhouses we built with a Year 2 group at Forest School – we used circular base-boards and daubed our cob mix onto the outside of these, then tied small bundles of straw and used these to 'thatch' the roofs.

These were finished off by placing a nightlight candle in the centre to simulate the fire.

(As an aside, the headteacher was so impressed with these, he asked the children to 'recreate' one of the roundhouses in front of the whole school in assembly, mud and all!).

The Recipe:

So how do you actually make cob then? This is the best bit where things get really **squishy-squashy!**

You need to mix up sand (or sandy soil), clay and some chopped-up straw with water until it forms a dough-type mixture. If your soil looks like it already has clay in it (which you will have seen from your jar test), then some straw and a little water should be all you need. If not, then you can mix clay with your soil and add straw and water. You will need an old tarpaulin, a watering can plus buckets with your different ingredients. Place two measures of the soil (or sand) onto the tarp, plus one measure of clay. Sprinkle with water and some dry, chopped straw (pet shops sell bags of this) and start to mix. Oh, and you'll need to mix it **with your feet!** The best method involves getting as many pairs of bare feet on the tarp as will fit, play some music or clap out some **funky rhythms** and get the feet to 'dance' on the mixture. It's likely that you'll have so much fun at this stage that everyone will forget about building anything and just enjoy getting their feet muddy (wear old clothes for this one...). A slightly more civilized variation on this is to add the mix as above, lift the edges of the tarp and fold towards the middle without letting go of the edge, then tread on the mix through the tarp (with your shoes on if you like). If you are using one of the cheap woven polypropylene tarps it will be plenty strong enough to withstand some enthusiastic treading. Keep rolling the mix back onto itself using the tarp edges and corners, then treading flat again through the tarp. Keep adding just enough water to get the mixture to a soft doughy texture. To check the consistency, you need to do the '**splat test**': grab a handful of the cob and roll it into a ball about the size of a bread roll. From a standing position, drop the ball onto the tarp. If it goes 'splat' then it is a bit too wet. If it breaks open on impact then it is too dry. If it makes a 'thud' and spreads out a little without breaking apart then it is just right.

You then just need to grab small handfuls and start building! Allow whatever you build to dry out slowly and steadily and don't let the rain get to it. If some of the cob barns around the South-West are anything to go by, then it could still be here in **hundreds of years** time!

If you start really getting into cob building then you might want to consider a cob oven for baking bread and pizzas at Forest School – but that will have to be another whole article!

Happy cobbing!

References:

Photo of mud house and soil sampling from Google Images.

Photo of mini roundhouses from FSTC.