Learning with wild clay

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"Millie's Garden" is an early childhood setting based in the garden of my family home. Along with a small team of adults, I provide care and education for young children outdoors. The garden benefits from a small classroom, an outdoor kitchen and a dedicated art studio. But importantly, it is very much a garden. There are flowers, fruit trees and hedges, vegetable beds and chickens; there are wild areas and a broad range of visiting wildlife. It is situated on a residential road in an area of aboveaverage deprivation in Bristol. Like all good gardens, it aims to be a place of sanctuary and beauty for its visitors, both human and more-than-human. The "garden-ness" of the garden has always been central to our work with and alongside the children.

This article outlines a small-scale research project during which the "intra-actions" (see p9 Redcliffe Nursery School's article for an explanation of this term) of children, adults, materials and land prompted a significant pedagogical shift in our setting. Fundamentally, the project was a case study about digging wild clay from the land in our garden. What I did not anticipate, was how the children would respond to the liveliness of land and material, and how this would disrupt some of the principles upon which my pedagogy had been built over years.

Creativity and the arts have long been a thread that run through the pedagogy of the garden. Our art studio is located in a large polytunnel. It is always equipped with a range of high-quality materials and open to children for creative meaningmaking. We strive to nurture children's multimodality and their ability to construct knowledge and share thinking through a broad range of media and modes other than oral language, such as drawing, movement, song and sculpting. We recognise that children need repeated opportunities to encounter materials in order to understand deeply their affordances and possibilities. However, this research project made me consider a potentially more complex relationship between child, material and land, in which the hierarchies between them (with child as the most important, "acting upon" material and "using" resources from the land) were unsettled.

What is wild clay?

Clay has long been a key material in our garden art studio. It is a substance the children have encountered again and again during their time here. We buy it wrapped in plastic from local art suppliers and we gratefully receive donations of unwanted clay scraps from local ceramic artists. At the beginning of this project, we adults asked the children if they knew where clay came from. One child responded, "I know! It comes from the dustbin", pointing to the large metal storage bin where we stored the bags of clay. We realised that despite being familiar with the affordances of this material in our art studio, the children had no sense of it as being a material dug up from the ground and of the land.

Clay is formed over millions of years from the slow weathering of rocks. As rocks weather, many of their components are removed (for example, washed away by rain) but alumina and silica remain. Alumina, silica and water are chemically combined in the formula Al₂O₃. 2SiO₂•2H₂O. Clay can be seen as a material of "deep time", holding records of Earth's story within its matter (MacFarlane, 2020:15). It is a "slow" material, with slow processes for extracting, art-making and enduring (Kind, 2020, cited in Clark, 2023:68).

Humans and clay have been entwined through history. 30,000 years ago, our ancestors found that clay could be changed by fire and since then it has been used to make buildings and infrastructure, homeware, ovens and lamps; clay has even been used in agriculture, energy production, health and beauty. As such, clay is a material of enduring significance to humankind.

Wild clay is what ceramicists call clay that has been dug up from the ground and used with minimal processing, retaining its natural qualities. I had often lamented the difficulty of having clay-heavy soil in the garden (fellow food growers will understand!) but when we unearthed huge clumps of golden clay, I began to wonder if we might use this material like the plastic-wrapped clay we were paying for. With the support of a ceramicist, the children and adults of the garden began learning how to extract and process wild clay for art-making.



Figure 2.1 Child offers the clay pit a drink of water, showing an ethic of care toward the land

Learning with wild clay: a project

We began by creating a clay pit in the garden – a small area where we would dig deep enough to reach the clay which lay a foot or so beneath the soil. When we first showed this to the children, they were incredulous at the sight of clay, asking, "But who put it there?" It was unfathomable to them that the clay had not been somehow the product of human design.

As children and adults learnt about and with the clay, the children quickly began making sense of the deep time held within this material they were understanding anew. They hypothesised about the possibility of finding dinosaur fossils within or alongside the clay, and what else might have existed there "a long time ago". Thus, the children were making sense of the histories and geographies of our garden.

After extracting the clay, we washed it to remove grit and other debris, strained it through a fine mesh, then dried and wedged it to work it into the right consistency. This process took a couple of weeks and the children were involved throughout. Eventually, we were left with a familiar material with which to use in our garden studio.



Figure 2.2 Child sieves the clay

As a practitioner-researcher, I wanted to know how the children's understanding of clay had changed with the discovery and processing of wild clay and whether their relationship with the garden had altered too. By scrutinising the notes I had kept throughout the process and having had follow-up discussions with the children, I was able to gain valuable insights into knowledge about the clay. I also came to understand how they felt about the garden in relationship to the clay they had dug up and processed and used as a material of expression.

Insights into children's knowledge and understanding of wild clay and the garden

I was struck by how readily the children acknowledged the soil, clay and other artefacts they dug up as lively and agentic; I also asked the children whether the garden minded us extracting its clay? As an adult, I had spent many years being socialised into the Western position that natural materials are there as resources for human exploitation and consumption. However, the children, aged 2 to 4 years, readily imagined how the land might feel and speak back to us. For example, one child said, "The garden, it say, no thank you. Because it think, that's my clay!" Other children addressed the garden directly: "Thank you for sharing your clay."



Figure 2.3 Child works with wild clay

These findings demonstrated that the children held a "grammar of animacy", which Kimmerer (2013) describes as a way of seeing the world around us in so much more depth than the spoken words can capture alone. Kimmerer considers how human language does

(or does not) take account of the more-than-human world (animals, plants, land, material) as animate, vibrant and lively. In recognising the material as animate, the children were provoked to respond to its generosity through their gratitude, reciprocity and ecological empathy.

Pacini-Ketchabaw and Boucher (2019) describe a shift in perspective from viewing clay as a resource to viewing clay as a gift from the land and thus, how children and educators might show care for clay during arts-based encounters with it. The children certainly did show care and respect and responded to the gift of clay in our follow-up discussions. For example, one child suggested reciprocating with a gift in kind, while another considered how we might restore the land following our digging by planting new flowers there. Another child revealed their ecological empathy by noticing that, "It's very dry here", and choosing to bring water to the land to remedy that. Receiving a gift established a relationship between the gift giver (child) and gift receiver (the land) and began an ongoing reciprocal exchange between the two (Kimmerer, 2013).

The children also shared their sense of empathy and duty toward the clay and land; for example, a child shared her knowledge about only harvesting as much as we needed and leaving the rest untouched. Another two children shared their gratitude for the gift of clay by noticing the other ways in which the garden needed their human care, by suggesting that the large oak tree near the clay pit wanted and needed to be pruned, thus acknowledging the interconnectedness of everything within the garden. Reciprocity and responsibility were evident too, in children's assertations that, "This is our garden and so we have to look after it." Thus, it became evident that not only had the children acted upon the clay, but the clay had also suggested things back to the children.

Implications for pedagogy and practice

In thinking about the use of natural materials such as clay, or pinecones, shells or stones, there are ethical as well as practical implications for both pedagogy and practice.

- Consider the implications of using natural materials in your setting. It is wonderful to bring materials like pinecones into your play and art provision, but if you collect these from nature, do ensure you leave plenty for the wildlife that depends on them.
- Equally, it is important for children to encounter items like stones and shells, especially children who

- may live in urban areas and not go on holidays. But this needs to be balanced with the important role these materials play in the ecological systems of beaches. In England, the Coast Protection Act makes it unlawful to remove such materials from beaches.
- Model your ecological empathy to children. For example, we have lilac growing above our mud kitchen and as this is a non-toxic plant, I provide the flowers for mud kitchen play in spring. I think aloud so the children can hear me: "Hmm... there aren't many flowers yet... I think the plant can only tolerate me taking three for your play today."
- ▶ When you do use natural materials in your provision, take time to learn about their origins and express your gratitude for the gift of materials. For example, we have creative woodworking in our art studio. After learning about where wood comes from, I observed a child carefully sweep up the sawdust they had produced while sawing, then take it to the sawdust bin in our compost toilet so it could be returned to the earth and feed our garden.
- ▶ Reflect on the impact art materials you use might have on your local environment. As an outdoor setting, we have decided to not use plastic-based materials such as plastic tape, stickers, felt-tip pens, glitter and clay containing microfibres. This decision was made in sensitivity to the wildlife we share our setting with. We have successfully replaced felt-tip pens with charcoal and high-quality wooden pencils and swapped plastic tape with paper tape, for example.

Millie Colwey is the founder and leader of Millie's Garden, a small garden-based nursery in Bristol, UK

References

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