



This pamphlet has been produced by the Froebel Trust as part of a series focussing on various themes closely associated with Froebelian practice today. The pamphlets are an accessible e-resource for those supporting children 0-8.





Introduction

Children are naturally drawn to malleable materials and clay is a wonderful resource with lots of potential. This pamphlet introduces you to exploring clay with young children. It explains how three-dimensional investigation with clay supports young children's holistic development, provides practical advice on how to set up a clay area in your setting, and suggests how to develop children's clay skills and interests.

Froebel and clay



Fig. 1

Clay is a natural material, and has been an important resource for society for thousands of years. It is one of the oldest building materials and is widely used for utilitarian and decorative pottery. Clay tablets were the first medium used for writing. Clay also has a distinguished history as a resource in early years' education. Friedrich Froebel (1782 – 1852) was the first pioneer of early education to devise

key pedagogical principles for young children and he put them into practice in his kindergarten. His educational approach included specially created 'Gifts and Occupations' to support children's play and self-activity. The gifts introduced solid, tangible objects, while the occupations introduced malleable materials such as clay and sand. Froebel saw these activities as interconnecting and part of a whole approach. He believed it was important that children had access to a wide range of media, exploring and representing their ideas through three forms – knowledge, beauty and life. (See figs. 2, 3 and 4 for examples of forms).

The materials were carefully chosen to help develop the child's understanding of two-and three-dimensional form, for developing problem-solving skills, supporting physical development, creative expression and for communicating and representing ideas. Froebel hoped that through connecting with these carefully chosen natural materials they would gain a greater understanding of their connection to nature and life as a whole.

The value of clay

Clay is open-ended and natural, making it an ideal material for young children to explore. Its open-ended nature means it can be anything the child wants it to be. It provides endless possibilities, and through merely squeezing, squashing or twisting it can change, encouraging ideas to flow. Clay is unique in that it is malleable, but can be fired if required to produce a permanent hard object. It provides children with a natural solid material to explore, giving them a greater understanding of three-dimensional form.

Children need to have the opportunity to express their thoughts, feelings and experiences in both two and three- dimensions. From a Froebelian perspective, clay is an important material for children to have access to which does not just support their creative development, but contributes to all areas of learning. The photographs on the right show some of the learning opportunities children can engage in when using clay.



Fig. 2:This child is exploring a form of knowledge and developing her writing skills as she writes her name.



Fig. 3: The child has explored both two- and three-dimensional form, as she rolled the clay into a ball then used a rolling pin to make it flat. Through this, she has explored forms of knowledge as she has experienced volume, quantity and size. She plays imaginatively, turning her flat piece of clay into a 'birthday cake.' By representing something real, she produces a form of life. She explores mathematical concepts through cutting it up and dividing it into four and then placing a 'candle' (a stone) onto each piece. Through decorating her 'cake' and exploring its aesthetic qualities, she produces a form of beauty.



Exploring clay

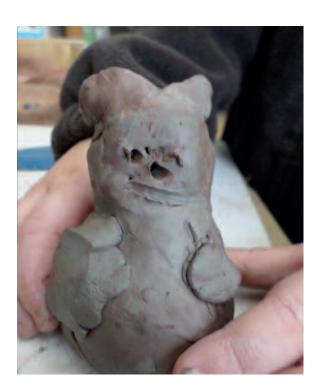


Fig. 4: Following an interest in the book 'Going on a bear hunt', this child decides to make her own three- dimensional representation of the bear. Through carefully modelling the clay to represent her bear, she creates both a form of life and of beauty. She uses the bear to retell the story.

In a Froebelian setting, core activities such as blockplay, water, sand, paint and clay are offered daily. It is important that children have daily access to clay so they can develop their ideas with increasing complexity as they gain more experience and understanding (Tovey 2013). Like all materials, children need time and space to explore. This exploratory stage is important to give the children freedom to move in their own direction so they can become familiar with the clay, really engage with it and find out what it can do.

Tools and additional objects are not always necessary. Provide large chunks of clay to explore, perhaps even a whole bag. With younger children, putting the clay in a large tray and placing it on the floor will enable them to access it more easily. Provide water so they can explore how this changes the clay's texture. These exploratory sessions provide many opportunities for the children to find out what the clay can do, and develop understandings of cause and effect. Froebel saw his activities as part of a whole approach that provided children with opportunities to explore opposites. Exploratory sessions with clay will allow children to explore many of these opposites, such as wet and dry, smooth and rough, hard and soft and round and flat.



Fig. 5: Exploring water's effect on clay.

These sessions will get messy but old clothes or good aprons will help with this. Some children do not enjoy messy activities, or are maybe initially cautious. If this is the case perhaps offer smaller pieces and a selection of tools to make marks with.

Clay as a symbolic language



Fig. 6

'As the play material becomes less tangible so there is a greater advance in creative expression' (Froebel in Lilley 1967:113)

Clay provides children with rich opportunities to engage in imaginative play and the ease with which the clay can be transformed allows for a rapid exploration of ideas. Figs 6 and 7, showing children experiencing clay outdoors, demonstrate how clay and other natural, open-ended materials can support imaginative and creative play. The children spontaneously gathered flowers, grass, seeds and berries and these objects were then transformed through the children's play; flowers became treasure, berries became crocodile eyes and seeds became sugar. The children were making new connections and exploring their ideas (Parker 2006). Jane Whinnett emphasises that 'children need opportunities to show what they know through open ended experiences and equipment' (2012:134). Offering children a wide range of materials allows them to represent their ideas in many different ways and create their own symbolic language. Through offering materials that are not pre-formed children can apply their own creative ideas, supporting Froebel's belief that 'as the play material becomes less tangible so there is a greater advance in creative expression' (Froebel in Lilley 1967:113).



Fig. 7

The role of the adult

Froebel placed great emphasis on adults observing children's play. The skill of the practitioner is to know when to carefully observe and when to support and guide. As children explore and play with clay, the adult may need to observe, comment, play alongside, extend or introduce new skills and techniques. Stella Brown emphasises that the key is 'ensuring that the child is at the centre and leading the curriculum rather than the curriculum leading the child' (2012:30). Through observing and documenting children's learning the adult will know how to support and extend.

Stella Brown emphasises that the key is 'ensuring that the child is at the centre and leading the curriculum rather than the curriculum leading the child' (2012:30).





Developing children's interests



Fig. 9

Helping children to develop their interests and make connections is an important part of their learning process. Below are some examples of how clay has been used to support children's thinking, ideas and play.

It is autumn and the children have been busy exploring pumpkins. They have been hollowing them, exploring the fleshy insides and cooking with them. A selection of pumpkins is placed at the clay table. Evie chooses a piece of clay. She rolls it into a ball and then using a wooden tool, scrapes round the sides to model it. She draws a face on it and then says 'the light needs to go inside'. Evie represents her ideas and understanding of pumpkins using clay, making connections with her experiences. Having had the real experience of exploring pumpkins, she is able to skillfully represent in three —dimension.

A number of children have been interested in dinosaurs. We hunt for dinosaurs in the garden and make dinosaur habitats in the sand.

After collecting natural objects from outside, the dinosaurs and clay are laid out for the children to explore. They create dinosaur worlds with the natural materials. Sticks become trees and stones become mountains. Clay is carefully rolled, to make 'dinosaur eggs' and previous knowledge of making pinch pots is used to create bowl shapes that become 'dinosaur nests'.



Fig. 10

Having had many previous opportunities to explore clay, the children are able to use a range of techniques skillfully to extend their ideas.

These examples represent some important Froebelian principles:

Respect – Children are viewed as powerful learners, who are curious about the world.

Connectedness – Learning is meaningful and connected to the children's interests and experiences.

Play and first-hand experiences – Play and first-hand experiences, with open-ended, natural resources are essential.

Creativity – children are given the opportunity to play, developing imagination and symbolic representation. They are able to make connections and explore ideas, thoughts and feelings.

Freedom and Guidance – Free-choice and selfactivity are important, with guidance from the adult.

(Adapted from Tovey 2013:2)



Fig. 11:A well-organised clay area with interesting, accessible resources.

Setting up a clay area

It is simple and inexpensive to set up a clay table. It is also less messy than you may think!

You will need:

Clay – for playing and exploration use firing clay (not air-drying clay as this does not have an appealing texture and dries quickly). I like the red/terracotta clay as I think this looks more inviting. A large bag is under £10 and if stored properly will last a few months.

Airtight bin/container – roll the clay into balls and make a small well in each ball and fill with water. Wrap in a damp cloth and put in an airtight bin/container and the clay will keep moist.

Clay table – cover the table in hessian and clay boards. To avoid lots of clay dust gathering, clean the resources regularly and use a damp cloth to wipe up pieces of dry clay.

Natural objects – provide shells, stones, sticks, conkers etc. for children to explore and add to the clay if they wish. These can reflect seasonal changes and children's interests.

A range of tools – as well as traditional clay tools, think about providing anything interesting that might make a mark eg. knives, forks, a potato masher.



Developing children's knowledge of clay

As children become more skilled in using clay, try introducing them to key tools and techniques. For example, in these photos the child has been shown how to join clay together. This is done by cross-hatching the area which is to be joined, and adding some 'slip' clay and water that acts as a glue to secure the pieces together. She has also learned how to use a rubber kidney-shaped tool to smooth and join the clay.



Fig. 12



Fig. 13



Fig. 14

One of the unique aspects of clay is the potential to mould it into something that then becomes a permanent object. It's important that children experience this process and it is really exciting to be able to make something that can be kept. Objects such as pinch pots and coil pots, tiles, candleholders and simple figures are all easy to make.

When planning for these activities remember to keep Froebelian principles in mind. Allow children to plan what they would like to make and follow their interests and ideas. Ensure their individuality and creativity is respected, avoid producing 30 pinch pots that all look the same! Using the work of artists can be useful for providing an inspiring stimulus for the start of a project.



Fig 14 is an example of figurative models produced by 4 and 5 year olds based on Antony Gormley's work. The children's individual figures were put together to create a group piece – reflecting the Froebelian principle of community.

Froebel saw modelling as a key activity that should be provided for all children. From the early years right through to older ages it is an exciting material that will support children's holistic development.

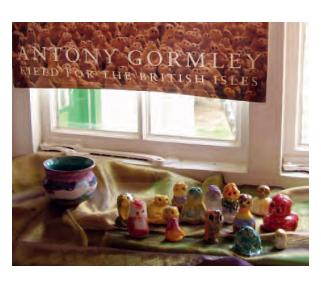


Fig. 16

Fig. 15

Clay Top Tips

- Clay has unique characteristics and through using clay, children can explore all areas of learning.
- Offer children the opportunity to access clay daily, so they can use it in increasingly more complex and imaginative ways.
- Closely observe the child, so as to know how to extend and develop their interests and skills.
- Consider how clay fits into the other provision in your setting.
 Do children have other natural, open-ended materials to access?

References:

Brown, S. (2012) The Changing of the seasons in the Child Garden. In Bruce, T. (ed) *Early Childhood Practice: Froebel Today*, London: Sage

Lilley, I. (1967) Friedrich Froebel: A Selection from his Writings, Cambridge: Cambridge University Press

Parker, L. (2006) Exploring Clay: A guide for early years practitioners. Unpublished MA Early Childhood Studies research project, University of Roehampton, London

Tovey, H. (2013) Bringing the Froebel Approach to your Early Years Practice, London: Routledge

Whinnett, J. (2012) Gifts and Occupations: Froebel's Gifts (wooden block play) and Occupations (construction and workshop experiences) today. In Bruce, T. (ed) *Early Childhood Practice: Froebel Today*, London: Sage

Further reading:

Smith, D. & J. Goldhaber (2004) *Poking, Pinching and Pretending, Minnesota*: Redleaf Press This book documents Toddlers' explorations with clay, so would be particularly useful for practitioners working with two year olds.

Pacini – Ketchabaw.V., S, Kind and L, Kocher (2016), Encounters with materials in early childhood education New York: Routledge

Utley, C. & M, Magson (2007), *Exploring Clay* with Children, London: A & C Black
This book provides useful information on clay techniques and skills and how to develop projects.

Photo credits

Cover photo / Fig. 8 – Yellow Dot Nursery

Figs. 1, 6, 7, 14 – Lucy Parker

Figs. 2, 3, 4, 5, 9, 10, 11, 12, 13, 15 – Ludwick Nursery School

The author

Lucy Parker trained as a teacher at Froebel College, University of Roehampton and has recently completed a PhD. Her interest in clay developed when she decided to make it the focus for her MA dissertation. Lucy has taught early years in various settings and currently teaches at Ludwick Nursery School in Hertfordshire.

