# **PLAYDOUGH**

# Why it is so important



**Deborah Udakis Consultancy Ltd** 

# Playdough

When a child moulds with playdough, the experience is always positive. There is no right or wrong way to do it so they always feel success with their creations.

Squishing, rolling, sculpting, molding . . . young children love to play with playdough. Add some props and playdough play becomes a powerful way to support the child's learning. Playdough lets children use their imaginations and strengthen the small muscles in their fingers - the same muscles they need to use to hold a pencil and write. Making and playing with playdough supports children's social skills such as sharing, taking turns, and enjoying being with other people. Playdough also encourages children's language and literacy, science, and math skills — all at the same time!



#### Playdough - Intent, Implementation and Impact

#### Intent

#### Social and emotional development

Creating with playdough helps develop children's confidence and selfesteem ("I'm good at rolling the dough") and proud of their accomplishments ("Hey, I made a dog"). Pounding, flattening, and squeezing are healthy and safe outlets for extra energy and can help children cope with strong feelings.

#### Creativity and imagination

With playdough, young children express their ideas through art and make-believe play. At the same time, they learn symbolic thinking by pretending that the playdough is something else ("That thing with the antlers is a deer").

Older preschoolers often make detailed playdough creations. With one or more friends, they may imagine themselves to be construction workers building a castle, walking with dinosaurs, or pastry chefs baking and selling cookies, cupcakes, and bread at a bakery. You can join in their pretend play too!

#### Language and literacy

Through playdough play, children practice listening to and talking with their friends and adults. Materials like playdough help children build their vocabulary as they explain what they are doing. For example, when a child exclaims, "Chop!" as they bring down the plastic knife, they use just the right word to describe their action.

Children use language to invent stories about their playdough creations. They may use facts or ideas from familiar stories, books and rhymes. Children also refer to things they did or saw in their everyday lives ("This is an apple / orange like we had at snack").

When the children make a batch of playdough, they learn about recipes and that print carries meaning. Following the recipe helps children to

connect written and spoken words and learn that writing can be used for different purposes. In this case, the writing explains how to make playdough.

These types of experiences help children learn new words and communicate their thoughts and ideas effectively — skills they need to learn to become successful learners.



#### Science

Young children learn about science through hands-on experiences. They learn by observing, thinking, and talking about how materials feel and how they change. We can encourage scientific thinking through Playdough making. For instance, you could provide additional ingredients – such as sawdust or sand to add to the playdough and then talk about how this new kind of dough looks and feels.

Introduce children to words like 'texture', 'grainy', 'smooth', and 'lumpy'.

#### Mathematics

Children learn about measurement and numbers as they weigh ingredients, use measuring cups and spoons; compare size and weight.

Children note changes in shape and size as they comment on, compare, and contrast the objects they make ("I made a triangle" and "Mine is a tiny ball and yours is big"). Others notice who has more or less playdough. Ask

the children to count how many pieces of Playdough they are making or to arrange their creations by size or colour. Encourage mathematical thinking by asking, "What shape is that?" "Which snake is longer?" or "How many pieces do you have now?"

These play experiences encourage children to practice counting, learn about shapes and how they relate to each other (spatial sense), and practice sorting and classifying. Such mathematical ways of thinking prepare children for learning more complex concepts in the coming years.

### Physical development

While poking, rolling, moulding, manipulating and squishing playdough, children develop the small muscles in their fingers and hands. They use hands, fingers, and tools to pound, push, poke, shape, flatten, roll, cut, and scrape. Through these manipulations, children develop their eye-hand coordination, the ability to match hand movement with eye movement. They also gain strength and improve dexterity in their hands and fingers, critical areas of physical development for writing, drawing, and other purposes.

Playdough is a powerful learning tool for many reasons; and most importantly - it is hugely enjoyable!



# **Implementation**

Provide a a tub / container for each type of tool (rollers, cutters, scissors, knives, letters and number shapes) and clearly label them with pictures and words.

Maintain a well-stocked pantry of Playdough making ingredients - replenish when required.

Resources should include - fresh and dried herbs, flowers / petals / leaves / twigs / spices / flavourings / essential oils / colourings - keep the activity interesting by adding resources / provocations 'weighing scales - digital and analogue / measuring cups and spoons / moulding and cutting tools.

Make sure the resources are available and accessible to the children. Enable the children to make individual batches of Playdough - when they want to - and independently of an adult.

Provide recipes - with visual prompts and written text and help children to follow a recipe / methodology for Playdough making.

Support and encourage children to measure and count out ingredients.

Tasks like rolling lend themselves well to a standing position so remove chairs. Young children don't have much upper body strength and they usually end up standing or kneeling when they play with playdough even if chairs are provided because this position allows them a better angle at which to roll and manipulate the dough.

Add small objects such as beads or buttons as these can provide a great opportunity to learn about number concepts, as well as activities such as using a biscuit cutter to make multiple shapes out of the playdough. Playdough is also the perfect medium for moulding letters and numbers.

Encourage the children to roll snakes and use them to form letters. Discuss action words like pound / slice / mould / squash, and descriptive words like mushy, squidgy and sticky.

Introduce new vocabulary such as the name of herbs and spices, ingredients, recipe etc.

Encourage children to explore different textures, smells, and mixes when making Playdough. A child might say, "I'm making this flat!" as they push down on playdough with the palm of their hand. Or they may say, "I'm making it soft," as they add water or oil to dry playdough to make it more pliable.

Encourage the child's investigations by asking open ended questions such as, "What do you think would happen if we added too much water?" In this way, you are helping them to understand the scientific concept of cause and effect.

### **Impact**

Children develop their finger and hand muscles. They strengthen their hands and fingers which is essential so they can learn to use writing materials and form letters, shapes and numbers.

As children work on their creations they form new ideas and concepts. They learn new words such as roll, squeeze, flatten etc, as well as words describing what they are making. Children increase their vocabulary as they talk with their friends and (when appropriate) with the support of the adult they verbalise what they are doing as they play.

Children develop their creativity as they mould from an image they hold mentally. Even when they try to reproduce something they have already seen, theirs will always look different and will be unique to their imagination.

Children develop their understanding of mathematics and numeracy as they learn about measurement. They also learn about reading information for meaning, as they follow recipe instructions.

Playdough is a quiet activity and one that children can become fully immersed. Making and playing with Playdough is a wonderful sensory experience where the child becomes highly engaged and involved for extended periods of time. This is great for lengthening a child's concentration span over time.

The more involved they are in what they are making, the longer they will push themselves to stay focused. As children develop a sense of perseverance they will also concentrate until their creation looks the way they want it to look, making changes until it is just right.

Through playdough, children get an introduction to science concepts such as how materials can be manipulated and changed. The texture of playdough can be changed by experimenting with varying the ingredients or adding water to make it harder, softer, more watery, etc. Other substances such as sand and water can also be mixed and experimented with in a similar way.

The activity is relaxing and highly therapeutic. It can reduce stress and is a wonderful medium for an anxious child. Playdough can be perfect for calming down a child and transitioning them from noisy play to some quiet time and relaxation.

#### Playdough recipes

On-Cloud-9-Dough What you need:

- 1 cup water
- food colouring
- 6 cups flour
- 1 cup vegetable oil
- measuring cups
- mixing bowl
- wooden spoon

#### Directions:

- 1. Mix water and food coloring in bowl
- 2. Add flour and oil
- 3. Stir
- 4. Knead until smooth

#### Variation:

For the first step, children can drop the food colouring in the water and watch the colour spread and notice changes – colour mixing.

# Bouncy Playdough

## What you need:

- 2 cups baking soda
- $1\frac{1}{2}$  cups water
- 1 cup cornflour
- measuring cups
- medium mixing bowls
- forks
- medium saucepan
- wooden spoon

#### Directions:

- 1. Place ingredients in bowl
- 2. Mix with fork
- 3. Place mixture in saucepan
- 4. Bring to boil on medium heat
- 5. Cook, stirring constantly with spoon, until thick
- 6. Let cool

#### Note:

Only the supervising adult should cook the Playdough and test the dough's temperature.