Sculpting with clay

Clay is an incredibly versatile material, and has been used to create everything from vases to Venus’. It is used to create crafts, make miniatures for doll houses and small sets, and to design and make props and characters in the film industry.

In this workshop we will explore clay as a medium, getting to know it’s properties and variations. We will look at tools and textures, make miniatures and learn how to create characters from the base armature through to fully fleshed out sculpts.
Types of clay

There are many varieties of clay which all have their own characteristics, making them better for using in certain projects.

The prices and availability of different types of clay vary greatly. Some are used professionally for creating character sculpts or ceramics and so have higher price tags. The kinds of clays that are most readily available are childrens dough clays, but you can find a good range of craft-clays at hobby stores.

You also need to pay attention to whether you want an air drying, oven drying or non-drying clay. They all have their pros and cons, but the main factor in which you use will be what you envision your final outcome to be. Do you want something permanently moveable? Are you making a doll or statuette? Or are you just looking to experiment and explore?
Dough Clay

It’s up to you which type of clay you decide to use, depending on your budget and access to materials, but all of the exercises in this workshop can be done using basic childrens’ dough clay or modelling clay.

Dough clay is a soft and pliable coloured clay and is the best for starting out with as it is cheap and easy to get a hold of. It can come in pots or strips and stays workable for a long time. They tend to harden or dry out when exposed to air for prolonged periods and are prone to cracking when they do.

Popular brands include:

- Play Doh.
Oil Based Clay (Plasticine)

Oil based clays (or plasticine) are very versatile, easy to use and most popular amongst animators as the clay does not harden or dry out in air, so any characters or sculptures created from them stay moveable and workable. They come in both coloured and uncoloured (brown and grey) varieties and can be used to create very detailed sculptures.

They cannot be oven baked or hardened in any way, and oil based clays are more expensive than many other types of clays. They have significantly more longevity to them since they don’t dry and can be reused many times over, however, and so are a good step up from using dough clay.

Popular brands include:

- Newplast.
Air Dry Clay

Air dry clay is a commonly used craft clay that dries when it comes into contact with air. It is easy to use, cheap and, because of its fast drying time, is perfect for use in many craft projects. It comes in coloured and uncoloured (white) varieties and can be painted easily when dry.

Air dry clay is unsuitable for fine detailing as it tends to be too springy, and when it dries it often shrinks slightly. It dries too quickly for longer projects, but is a good clay for quick work and crafts such as stamping.

Popular brands include:

- DAS.
**Polymer Clay**

Polymer clay is possibly the most versatile, easy to use and most cost effective clays you can buy which will allow you to achieve as much detail as you want with a professional grade finish. It does not dry in air and stays workable for as long as you like, but once cured (in a conventional home oven) it becomes completely solid, perfectly retaining its’ shape and any details.

Polymer clay comes coloured and uncoloured (white) and once dry can be sanded, glued and painted, making it perfect for a whole array of projects including crafts, jewellery making, miniatures and model/doll making.

**Popular brands include:**
- Fimo.
Pottery Clay

Pottery clay refers mainly to earthenware or stoneware clays. Commercially they are usually grey or brown (terracotta) and come in large quantities, but can be found naturally in a range of different colours. These types of clay need water and working over, but once pliable and soft are very easy to use and mould, allowing fine and professional grade details to be achieved on products such as crockery, vases and other decorative items.

Pottery clay requires a kiln (a large, insulated oven which can exceed temperatures of 1000 degrees centigrade) to cure it, and therefore is unsuitable for home use if curing is desired. It is, however, a good reusable clay if left unfired, and so can be used in character design and concept art.
Sculpting tools

When you start out sculpting you may be tempted to buy yourself a large and expensive set of clay tools to work with, but it isn’t a requirement, and in fact you may find that if you do just that you may end up favouring only a couple and leaving all the rest untouched!

The best sculpting tools, first and foremost, are your hands. Even if they are all you have you will be amazed at how much care and detail you can put into a sculpture with just bare hands.

The best and most useful collections of sculpting tools are collected over time and trials. Anything can be a sculpting tool in some sense, and it is up to your personal preference as to what kinds of tools you collect and how you use them. Your best sculpting tool may turn out to be a hand tool, a piece of cutlery or even just a toothpick.
Creating textures

Texturing clay is equal parts technique and material. What you use is important, but how you use it is even more so.

When we create textures in clay we may be looking to imitate a texture we see in real life, such as fur, hair or leather, or we may be looking to explore the pattern of a tool by stamping or drawing with it. Exploring the textures of an object or material is an excellent way to begin building a collection of sculpting tools, and the more versatile the tool (i.e. the more different textures you can make with a single tool) then the more useful that tool will be to have in your arsenal.

It’s also important to bear in mind that a sculpting tool doesn’t just refer to something with a shaped end or a holdable shaft. Materials such as tin-foil, wire mesh and burlap are also very viable mark-makers.

Think about what will be of most use to you. Practically speaking, you will at least need tools for smoothing, creating sharp, fine lines and detailing.
**Exercise: Building a Collection**

Keeping in mind what you have just read about sculptural tools and creating textures, you will now collect a range of tools to use in your clay sculpting and experiment with all of the different textures that you can get from each one.

Roll out several small ‘tiles’ of clay (5 cm square, 0.5cm deep will work well for this) and use each one to explore the marks and textures you can make from each of your tools. Keep to one tool per tile, and for each one, take a photo of the tile with the tool beside it, and then reuse that clay to explore another tool.

Keep exploring until you’ve got a good idea of what you can do with each tool and keep those that you prefer or think will be of most use.

You have now started your rag-tag collection of sculptural tools. Use them well!
Example: Building a Collection
Observation

Learning to sculpt, like learning to draw, is about repetition, practice and exploration. The first way we learn to draw is by observing the things (or subjects) we see around us, copying them and repeating the process until we gain skills and confidence to move on further. Sculpting is no different.

Observing a subject doesn’t just mean looking at it briefly. You need to take in all of the information it is offering to you. Pay attention to its size and shape, the ratio of one part to another, how things affix to each other and the empty spaces it contains. There may be measuring to do or sketches might help you to properly explore the subject. Whatever you do be sure to put proper thought into observation.
Sculpting Styles

That said, don’t get too bogged down with the idea that your sculpture of a subject has to be a perfect replica. There are many styles of sculpting, as there are many styles of drawing, and there isn’t really a ‘right’ or ‘wrong’.

Although some of the greatest sculptors have focused on realism and replication (usually of the human form) many more have developed their own styles of sculpting that are equally as breathtaking.

**Exploration Task.**

Google Image search the following terms and explore and compare the different styles they use.

- Realistic Sculpture.
- Surrealist Sculpture.
- Modernist Sculpture.
**Exercise: Making a miniature**

Now you will put your new tool collection to the test and make your first sculpture.

**Choose a simple subject to replicate.** It could be anything from a stuffed toy to a miniature cactus.

**Use your choice of clay and your tools to create a miniature sculpture of your subject.** You can repeat this as many times as you like (practice makes perfect!)

Note: Whatever subject you choose, try to pick something that doesn’t have any thin, protruding parts (like plants) as this is difficult to sculpt without creating an armature (which we will do later on). Also, bear in mind what you have just learnt about styles and observation (perhaps you have found a sculptor whose style you’d like to try out.)
Example: Making a miniature
Exercise: Copy a Character

Now that you’ve sculpted some objects, it’s time to switch subjects to something with a bit more character.

Pick a character to sculpt. This character could be from tv, film, a cartoon or animation, a mascot or an illustrated book. The character you choose doesn’t have to be human, or even humanoid. They could be an animal or sentient object.

Create a small sculpture, no bigger than your fist, of your chosen character.

Again, this doesn’t have to be a perfect replica. You may decide to explore the character in a different style to how they are usually portrayed.

You can repeat this as many times as you like with different characters.
Example: Copy a Character
INSPIRATION

Inspiration can be found everywhere, it is simply up to you as to what, and how much, you pay attention to. Nature, film, novels, galleries and the internet are all sources of inspiration to artists.

We can all learn from each other as well. Online collections, galleries and art-based social websites are excellent places to exchange tips, share resources and gain inspiration.

For an easy to use and portable source of inspiration, OCA recommends the app Pinterest.

Pinterest is a discovery app that features everything from recipes to home improvement, and it is a never ending resource for creatives. It is free to use and can be personalised and tailored to your interests.
**Exercise: Making a Monster**

In this exercise you will create a monster character using an everyday object as inspiration for its design.

**Pick a subject (object) from your home or garden to base your character on.** This could be anything from a fork to a flower.

**Now create a monster character using your chosen subject.** You may decide to base the whole shape of the character on the object or just part of it, and you may also find that it looks more interesting if you bend the sculpture of the object out of shape and work from there.

Don’t forget to add a mouth full of teeth, eyes (as many as you like) and some way for your monster to move around.

**Stick to a small sculpture, no bigger than your fist.**
Example: Making a Monster

Subject: Teacup
**Exercise: Create a Character**

You will now create a ‘bits-in-a-bag’ character/creature using a random generator. The essence of the ‘bits-in-a-bag’ method is that it is random. You get given a selection of prompts and you must design a creature from them.

Follow this link to a specially designed random wheel which contains a large selection of prompts. [https://wheeldecide.com/index.php?id=436107](https://wheeldecide.com/index.php?id=436107)

Spin the wheel five times, and note down each prompt it lands on.

Now, use those prompts to sketch out some character designs for your creature. Explore a couple of different versions of it, experimenting with how you interpret the prompts.

Once you’ve decided which design to go for, draw it on paper to scale (so it is the exact size that you will be sculpting it). Don’t go any bigger than A4, but no smaller than your hand.
Example: Create a Character
ARMATURES

An armature refers to a structure that is created to build a sculpture around to give it shape, stability and also to fill out the internals so that you don’t need to waste clay. Armatures, by doing this, also make the sculpture a little lighter, which makes them more manageable and less likely to fall apart.

You can use a variety of materials to build armatures. In stop-motion animation armatures that go inside clay characters and puppets usually look more like skeletons, in that they have joints, fixed metal rods and may even contain complex mechanical parts. For the sake of our sculptures, however, we will be creating something much simpler.

You can make a basic armature using just kitchen tin-foil, but if you have more available you can also use aluminium (or armature) wire, Polystyrene balls and masking tape.
**Exercise: Armature**

Using the scale sketch that you have made of your character you will now create an armature to build your sculpture onto.

Using any of the materials listed previously you will now create a ‘skeletal’ structure for inside the sculpture. If you are using tin foil you will need to squeeze it into firm shapes that fit inside your outline. You could do this as one piece, or several pieces. If there are several pieces you will need to connect them in some way, using either sticks or aluminium wire.

If you are using polystyrene balls use these in the same way as the tin foil, to fill out large spaces, and connect them with aluminium wire. Don’t ‘overfill’ the outline, as you will still need a decent thickness clay layer on top of the armature.

**Tip:** If you have masking tape available, wrap the armature in a layer. This will give the clay something better to stick to.
Example: Armature
Build up and flesh out

By now you should have an idea about how you work best with clay and the way you prefer to sculpt.

As we’ve said before, there is no right or wrong way to sculpt, and it is entirely up to your own preferences as to how you build up clay onto your armature. There are, however, some tips that will help you build up a shape quickly and get to the detailing of your character sculpt.

1. Use lumps and large layers of basic shaped clay to start filling out your sculpture.
2. Don’t start adding details too early. Get the shape right and then start shaping, adding and removing clay to slowly build the features.
3. When you are happy with the basic shape you can start to smooth out and detail your creature.
Final Project: Character Sculpt

Using your armature and sketches to guide you, you can now sculpt your creature.

Don’t feel like you need to stick exactly to your sketch. If something isn’t working or you have a better idea part way through something then go ahead and change it (without removing any essences of your 5 prompts though!).

Tip: It’s important not to get frustrated or give up on your creation. Keep working at it, and if you don’t like something about it then you can just resculpt or slightly change that part of it. That’s the wonderful thing about clay!

Above all, be sure to enjoy yourself and let your personality shine through your creature creation!
Example: Final Sculpt
Reflections

We hope you have enjoyed learning the basics of clay sculpting with us. You can now take what you’ve learned and develop it further. The only limit is your imagination.

It is important to remember to constantly self-evaluate your work as you go along. Keep reworking or redesigning your sculptures and learn from any mistakes. It takes a lot of patience, hard work and time to create good sculptures, so whatever you create you should be proud of!
The OCA would love to see what you’ve created. Share your sculptures and creatures with us by tagging us in them on Facebook, Instagram and Twitter.

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