Botanical Arts in School Gardens

This booklet introduces a variety of colourmaking methods and creative activities for educators and facilitators, showing them different ideas and methods for engaging students in the garden and introducing ecological art processes into the school curriculum.

This was originally designed for a School Gardens Network workshop, where the day was structured to have 2 groups of 15 participants, each rotating activities. As such, quantities of equipment and materials are laid out for a group of 15 and you may want to double up if you're not also dividing your class.

Likewise, the original plan was for 2 sessions, each 1hr 45. In case you'd like to deliver the activities in a different structure, I've added loose timings to each description so you can create your own plan.

I believe we learn best by doing, so I have designed all of the activities to be interactive and have included notes and potential adaptations for making the activities more accessible or relevant to young people and children. Ultimately though each teacher knows what will work best for their group, so I invite anyone using these plans to take what works and leave the rest.

If you use Instagram, please do connect with me and let me know how your creations go.

Happy colourmaking!

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Ink & Pigment Making, 1hr 45

There are 3 different colour making techniques to introduce participants to in this session, along with some supporting activities, such as foraging and colour testing. I've suggested how to order these below, based on my own experience and how I think the time would best be used. However, you may need to adapt this for the specifics of your group or space, so I have written everything out as separate modular activities that can be tweaked and reordered as you see fit.

I've kept the materials lists attached to each activity, rather than compile them all in one long list, in case you decide to cut out any of the activities.

Suggested timings

10:00-10:30 Pigment making
10:30-10:45 Garden: Foraging/harvesting
10:45-11:30 Ink Making:
1. Heat extraction/evaporation method
2. Cold extraction/soda ash method (whilst the above is cooking on the stove)

11:30-11:45 Colour testing / Group reflection

Eco-printing & Drawing, 1hr 45

In this session, participants are taken through some simple drawing exercises, which will model to them how they can use these same activities in/with their respective school gardens to encourage creativity & expression. There's also an opportunity for eco-printing, also known as 'hapa zome', which I recommend running alongside the drawing exercises as people may want to move in and out of it (it's very fun but quite noisy!). Again, I've suggested a structure but do amend/adapt as required.

Suggested timings

10:00-10:15 Garden: Foraging/harvesting
10:15-10:35 Eco-printing
10:35-11:00 Daily Drawings
11:00-11:30 Mark making & free drawing
11:30-11:45 Eco-printing reveal / Group reflection

Pigment Making (30mins)

Equipment

6 pestles & mortars
6 flour sieves (flour sieves are best as they'll create a finer pigment)
6 small jugs/water containers
20 small pots/containers (you can recycle old yogurt pots or use small tupperware if you want lids)
20 small stirrers (school glue spatulas are good, these are just for stirring paints so you could use spoons or improvise)
16 face masks & gloves
Scrap paper (at least 6 sheets)
Masking tape & pen for labelling
Teaspoons for the honey and gum arabic
Art paper (150-250gsm ideal, I like 250gsm mixed media paper)
Paintbrushes

Health & Safety

When working with pigments it's important to wear a mask to protect your nose and mouth. Grinding the pigments creates fine dust-like particles that can be harmful when inhaled or ingested in large quantities so it's best to exercise caution.
I also take along a box of medical gloves to workshops for participants who have sensory sensitivity and/or don't want to get their hands dirty.

Materials

Charcoal*
Soft rock / soil / earth minerals / eggshells**
Honey
Gum arabic***
Water (sink access or large water container)

*This could be charred wood from a fire you've had, or an old firepit you might find outdoors. Any wood can be used but, for those who are interested, yes you can get very specific about what shades of black/blue/grey you get from different charred materials!

**You only need a small amount - a handful of soil or clay, a few small rocks - but it needs to be something you can grind in a pestle and mortar. Red sandstone is particularly good if you find any, but otherwise try any soft rock you might find out walking. You can test by rubbing it against a larger rock and, if it leaves a colour mark, it's probably good for pigment. If you can't find any soft rocks, just experiment with egg shells (washed and dried) and charcoal.

***You can buy as a pre-made liquid from art supply stores or as a powder which you mix with hot water to make your own solution, there are plenty of videos on youtube.

Instructions

Split the group into groups of 3.
Give each group an ingredient to work with, e.g. charcoal / eggshells / soil / etc. If you could only source one ingredient, for example charcoal, then it's fine to have everyone work with that same ingredient. Just make sure you have enough for each group of 3 to have a small handful of it.
Make sure each group has the following: 1 pestle & mortar, 1 sieve, 1 piece of paper, 2 containers, 1 jug of water, 2 stirrers, a piece of art paper and a brush for testing.
Groups will need to share the honey, gum arabic, masking tape and pen for labelling.

Take them through the following steps (see notes):

1. Grind the ingredient in the pestle & mortar. Take it in turns, grinding it as finely as you can.
2. Fold a piece of scrap paper in half so it has a crease along the middle, then unfold it. Place it flat on your work surface.
3. Holding the sieve just above the piece of paper (if you hold it too high, you'll lose a lot of your pigment!), tip the ground ingredient into the sieve a little at a time. Very gently nudge the sieve back and forth. Your pigment should settle on the piece of paper like flour. Whatever is left in the sieve can be returned to the pestle & mortar and ground down some more.
4. Carefully lift up the sides of the paper so it folds in the middle, easing the pigment into the crease. Use this to funnel the pigment into one of the containers.
5. Repeat steps 1-4 as necessary, until you've used up most of your original material. If there are bits of it that won't break down, that's fine, just throw them away. Divide your fine pigment powder between the two containers so that you have at least a few teaspoons worth of fine pigment.
6. Use the stirrer to make a small well in the middle of each heap of pigment in the containers. Add a few drops of gum arabic and a drop of honey to each one.
7. Add a tiny bit of water to each container and mix it all together. This is a bit like making a hot chocolate, you want to keep stirring and add the liquid a tiny bit at a time, otherwise it'll go lumpy.
8. Use the art paper and brushes to test the colour and consistency. Keep stirring and adjusting the quantities until you have a paint the consistency that you want.
9. Use the masking tape and pen to label your containers with the name of the pigment.
10. Enjoy your paint!

Notes / Adaptations

It usually makes sense to only introduce one step at a time, particularly if you're working with children, otherwise participants may forget the instructions.
Demo each step yourself first, at the front of the class, then have participants complete it in their small groups. When everyone has done so, repeat with the next step.
When running this session with children, it can be interesting to tease out the differences between equipment and materials, and to ask them to come up with the health and safety guidelines, before checking as a class.

Foraging / Harvesting (15-30mins)

Equipment

Bowls/tubs/bags for collecting materials
Scissors or secateurs (share amongst group)
Gardening gloves in case participants want them

Materials

If in season, you can gather flowerheads or berries from any of the following plants:
Alcea rosea, black hollyhock
Coreopsis tinctoria, coreopsis
Cosmos spp., cosmos (orange ones particularly good)
Dahlia spp., dahlia (darker ones particularly good)
Sambucus, elderberry
Solidago velutina, Californian goldenrod
Tagetes spp., marigold

Instructions

Lead participants out into the garden, making sure you've prepped them with any necessary information on poisonous plants or hazards.
Invite them to walk around the space and explore for themselves.
What do they see that they think could be used for colour?
Introduce the plants from the list above and, if in season, participants can respectfully harvest a small amount (see notes below).
At this stage I would encourage exploration and experimentation - it's always worth seeing what colours do or don't come from other plants, so if someone is curious as to something not on the list, let them try it.
Participants could also collect any interesting items for drawing later, such as leaves, seedheads, snail shells (empty of course!) or things they could use for mark making and drawing with, such as twigs, sticks, feathers, etc.
Return to the classroom with your treats.

Notes / Adaptations

Harvesting is such a rich topic to explore in a workshop, particularly with young people and children.
What is the difference between harvesting and foraging?
What does respectful harvesting look like?
How can we show the land we care for it and are grateful for these offerings?
Is there anything we can offer in exchange for the harvest?
How can we hold ourselves when we go out into nature? Are there modes of attention / behaviour / communication that are more or less appropriate? Why?
Who has access to nature and to acts such as foraging? How do you feel about this?

A comment on other dyes: There are some infamous dye plants in this garden - hopi sunflower, madder, indigo. However, we're not using them in this session as they all involve slightly more complicated processes, using seeds, roots and/or a much more technical colour extraction method. I really encourage you to explore them in your own time though or, if you feel keen to bring them into this workshop, please do!

Ink Making: Heat extraction / evaporation method (15mins set up, 30-60mins cooking)

Equipment

Cooking burner
Saucepan with lid
Silicone spoon/stirrer (or a wooden one you don't mind getting stained)
Sieve
Jug
4 jars or pots
Paper strips for testing the colour
Masking tape & pen for labelling
Art paper (150-250gsm ideal, I like 250gsm mixed media paper)

Materials

Dye plant: I suggest using onion skins as they're food waste, they're accessible all year round and across most economic backgrounds, and they easily give a satisfying colour. I like the colour from red onion skins best, but you can use red or white. You can obtain colour from the dried papery skins of just 3 or 4 onions, though the more plant material, the stronger the colour.
Salt (a pinch for each ink made)
Cloves (1 per jar of ink)
Gum arabic (5ml for each ink made)
Water

Health & Safety

Obviously you'll need to take care working around a stove and having a pot (or two) of hot liquid simmering away, particularly once these methods are being shared in schools. As a visiting artist, I would conduct a site visit at each school and work out with the teacher the safest set up for the stoves: ideally under a window for ventilation, with at least a metre empty space in front and cables and plugs safely out of reach.

Instructions

Invite all the participants to gather round the stove, taking care to make sure you have enough space. I like to set up all my equipment and materials on a table next to the stove and have the participants stand the other side of it, a bit like a cooking show!

Demonstrate the following steps:

1. Put your onion skins in the saucepan and add water till the skins are just covered.
2. Put the lid on and bring it to the boil.
3. Once the contents start to boil, turn the heat down to a simmer and set a timer for 10 minutes.
4. Whilst you're waiting, cut a piece of art paper into roughly 2x8cm strips. These will be for testing your colour.
5. After 10 minutes, test the colour with a paper strip. Write the name of the ink, the time it's been cooking and any other notes on the strip for your records.
6. Do this every 10 minutes until you have the colour you want. Cooking for longer will lead to a darker colour. I usually cook onion skins for 20-30 minutes.
7. Once you're happy with the colour (it often changes as it dries so allow for this with your testing), pour the contents through a sieve, collecting the liquid in the jug and disposing of the onion skins (good for the compost!).
8. If you wish to intensify the colour further or thicken the ink, you can pour the liquid back into the saucepan and simmer it on the stove a little longer to reduce it. Just watch it closely as it can reduce down very quickly leaving you with a sticky ink! If that does happen, just add a little water to loosen it again. You can also add a teaspoon or two of gum arabic to help glide on the page.
9. Add a pinch of salt to help preserve your ink, then let the liquid cool before distributing it between your 4 jars and labelling them.
10. You can add a clove to each jar to help prevent mould. If you're keeping the inks for a while, it's best to keep them in the fridge.
11. Enjoy your ink!

Notes / Adaptations

The above recipe is actually very simple and can be set up fairly quickly, leaving your group with not much to do whilst they wait for it to come to the boil and then for the colour to emerge. Hence why I recommend setting them up with their own cold extraction inks to make in small groups. You can then keep an eye on the ink bubbling away in the background, or ask one of them to!

If you want to produce a finer ink, you can pour the coloured liquid through a muslin cloth or coffee filter before adding your gum arabic/salt/clove. However, for working in schools I don't think this is necessary and I like the added texture that comes from a slightly grainier ink.

Ink Making: Cold extraction / soda ash method (15-30mins)

Equipment

5 mixing bowls
5 large spoons
5 teaspoons
5 sieves
5 jugs
10 jars or pots
5 mask & gloves sets
Masking tape & pen for labelling
Art paper (150-250gsm ideal, I like 250gsm mixed media paper)
Paintbrushes

Health & Safety

Wear a mask & gloves when handling the soda ash & making the solution (see Mordants & Modifiers).

Materials

Dye plant material: this would be perfect for coreopsis/dahlia/tagetes/goldenrod flower heads from the garden, you could also try with elderberries or blackberries
Boiling hot water
Soda ash (sodium carbonate, also known as washing soda or soda crystals)
Cloves (1 per jar of ink)

Instructions

Split the group into groups of 3.
Give each group an ingredient to work with, e.g. tagetes flowers / dahlia flowers / etc. It's fine if everyone works with the same ingredient but more interesting if there's some variety.
Each group of 3 will need a small handful.
Make sure each group has the following: 1 mixing bowl, 1 large spoon, 1 teaspoon, 1 sieve, 2 jars, 1 jug, some art paper and brushes for testing.
Groups will need to share the soda ash, boiling water, masking tape and pen for labelling.

Take them through the following steps (see notes):

1. Make a soda ash solution in one of the jars by dissolving 1 teaspoon of soda ash (5g) in 250ml of boiling hot water.
2. Place a handful of flowers in the mixing bowl and pour over just enough of the soda ash solution to cover them.
3. Use the spoon to stir, mix and mash the flowers into the liquid for about 10-15 minutes. You should see the liquid start to change colour as you do, and you can test the colour on the art paper.

4. Strain the liquid through the sieve into the jug.
5. Repeat steps 1-4 until you've used all your dye material.
6. Pour your final product into the jar, add a clove and label it.

Notes / Adaptations

This method works because soda ash is a strong alkaline and therefore will make the ink alkaline. You can then turn the ink back towards an acid by adding a modifier such as vinegar or lemon juice (see Mordants & Modifiers). This will have lesser/greater effects depending on the plant and can lead on to some great science-based discussions on acids and alkalines.

Colour testing (15-30mins)

At the end of the session, give each participant a sheet of paper and ask them to make a colour testing sheet for themselves, documenting all the colours made in the session.
This may require them to swap inks with other groups and/or to explain the recipe they used. It can also prompt a nice reflective activity about the different ways people document information - some will be very neat and scientific, others will be very loose and expressive!

Mordants & Modifiers

Mordants help fix the colour of your ink and are usually chemicals used in the dying process to help natural colour affix to fabric. They're helpful in ink making as they help your colour attach (mordant, from the latin *mordere* , to bite) to your page. The most commonly used mordant is alum (aluminium sulphate)*. You can easily buy a small bag online and experiment with how it affects your ink. I find it helpful for making colours 'pop' and have a bigger impact on the page.

*Alum is a naturally occurring chemical and is commonly used as an additive for food products and drinking water, so is generally considered safe. However, when dissolved in water it forms a very weak sulfuric acid so if you're adding it to an ink recipe that will be simmering away on the stove, make sure you leave the lid on and cook in a well ventilated space. It should also be handled with gloves on as it can be a mild irritant to skin, although I have never had any problems with this. To be on the safe side, I prefer to add alum to my ink recipes right at the end.

Modi ers change the colour of your ink, particularly those that are pH sensitive. Some modifiers are acidic, some are alkaline. Depending on the material you've made your ink with, some will have more impact than others. As always, I encourage experimentation.

Some you can try are:
Vinegar
Lemon juice
Oxalic acid (from cooked rhubarb leaves)
Iron oxide*
Baking soda (add to your ink once it's on the page rather than in the saucepan or bottle)
Soda ash (sodium carbonate)**

*You can make this at home by putting some rusty nails in an open jar, covering them in ½ vinegar, ½ water and leaving for 2-3 weeks. You'll end up with a rusty coloured liquid, which you'll only need a few drops of to see instant effects.

**Sodium carbonate is generally considered safe and non-toxic, particularly in the very small amounts used in ink making. However, it can irritate eyes or skin upon contact and should not be ingested. I've never had any problems using it but I would recommend wearing gloves and a mask whilst mixing up a soda ash solution.

Eco-printing - ‘hapa zome’ (20-40mins)

Equipment

Shallow tray for soaking paper in
Mallets (1 per person or 1 per pair)

Health & Safety

Take care when using the mallets - fingers are precious!
When delivering this activity in school settings it may be helpful to use masking tape to stick the papers down to the desk.

Materials

Flower heads, leaves & stems of dye plants (see Foraging/Harvesting list)
Water
Optional extra: homemade iron oxide (see Mordants & Modifiers)

Instructions

Lay out a shallow tray full of water at the front of the room, with the paper stacked on one side of it and your selection of plant materials on the other side.
Ask participants to come up and, one-by-one, soak their piece of paper in the water and select a small handful of plant materials. The paper should be wet through but they can shake off any drips over the tray.

Back at their desks, ask participants to lay out an arrangement of flowers and plant materials on one side of the paper. This will be the shape and form of their print.
Ask them to fold their paper in half so that the flowers and plant materials are held neatly inside.
Participants can then use the mallets to pound the folded paper, bashing the colour from the plant material onto the wet paper.
Gently peel the paper open to reveal the marks made on the inside.
Repeat the activity but with dry paper, then compare and contrast.

At the end of the workshop, lay out everyone’s prints and take some time to go round looking at them all. Which ones worked best? Why?

Notes / Adaptations

Zome is the word for dye in Japanese and this technique has been known as both *hapa-zome* (leaf dye) and *tataki-zome* (plant dye). It's great for working with young students as it's very simple and has instant effects, and it can be done with fabric or paper.

It can be very noisy so you may want to think about how to manage this activity with students or participants with sensory sensitivities. I sometimes offer it in workshops alongside another activity (such as the drawing exercises) so participants can choose which they prefer to do.

Leaves work as well as flowers, particularly those with well defined veins. Even plants that don't work so well for dye can still produce really interesting effects.

Think about composition. Encourage participants to play with form and layout:
How does it change the outcome if they use just a single plant or many?
Do they prefer everything in straight lines or something looser?
How do plants stand alongside each other in nature? Can they mimic this in their print?

You can try dipping the plant material in your iron oxide solution to see what difference this makes on the page.

Eco-printing - cooking method (15mins set up, 45-60mins cooking time)

Equipment

Cooking burner
Large saucepan with lid
Tongs
Shallow tray for soaking paper in
Jug
Elastic bands
Rubber gloves

Health & Safety

I have sometimes had my papers stick to the bottom of the pan or had the pan dry out due to water evaporation, causing burning, so keep an eye on your pan whilst running your other activities.

It's best if you can let the stack cool before opening it, but I often don't have time for this within a workshop, so use the tongs and/or gloves to handle everything carefully.
See Ink Making H&S for other relevant recommendations.

Materials

Art paper (120-250gsm), cut into strips a little smaller than the width of the saucepan (see notes)
2 pieces of thick card cut to size (see notes)
Flower heads, leaves & stems of dye plants (see Foraging/Harvesting list)
Water
Optional extra: homemade iron oxide / alum (see Mordants & Modifiers)

Instructions

Lay out a shallow tray full of water at the front of the room, with the paper strips stacked on one side of it and your selection of plant materials on the other side.
Ask participants to come up and, one-by-one, soak their piece of paper in the water and select a small handful of the plant materials. The paper should be wet through but they can shake off any drips over the tray.

Back at their desks, ask participants to lay out an arrangement of flowers and plant materials on one side of the paper. This will be the shape and form of their print.
Ask them to fold their paper in half so that the flowers and plant materials are tightly sandwiched inside.
Collect in everyone's folded prints and stack them all together, holding it tightly so nothing falls out.

Use the 2 pieces of card as bookends either side of the stack, then use the elastic bands to hold and bind the whole stack together.
Place the bound stack in the saucepan, pour water over the top so it's entirely covered and set it to simmer for an hour (or as close to an hour as you can get).

* Move onto another activity whilst you wait *

After an hour has passed, take the saucepan off the heat and, using the tongs, carefully remove the stack from the pan.
Wearing the rubber gloves to protect your hands, carefully remove all the elastic bands and separate the folded prints.
Participants can then gently tease away the plant material and should see their plant print underneath.

Notes / Adaptations

Each participant will need a strip of paper to work with. These will be folded before going into the saucepan, so the width will need to be slightly smaller than the width of the saucepan, and the length twice this figure. E.g. If your saucepan is 20cm across, your strips will want to be no more than 17cm wide and 34cm long (2x17). This way once they're folded and stacked, they will all fit neatly in the saucepan. The 2 pieces of card will go either end of this stack, so they'll need to be cut to the same size as one of the folded strips (e.g. 17x17cm for a 20cm saucepan).

There are many different ways of doing eco-printing: on fabric, on paper, wrapped round tin cans, with/without mordant, with different dye plants. I find the above method to be most accessible for school settings, though it will create a loose bleed effect, with colours and shapes running into one another. Each method will produce different results and you can certainly get more technical if you want crisp, detailed prints, so do explore and see what works best for you.

Daily Drawings (variable timings)

Materials

Paper (any paper will do, I think scrap paper is best so there's no preciousness about making mistakes)
Pens (any will do, thick markers are good to encourage bold marks)*
Objects for drawing, enough for 1 each (ideally including some collected from the garden, such as leaves or seedheads)

*If available, mini whiteboards and whiteboard markers are great for these exercises - students tend to worry less about the marks they make when they know it'll soon be rubbed out. Schools often have these supplies already and it makes a great discussion point to contrast these materials with the handmade natural ones.

Instructions

Introduce the following drawing exercises to participants, demonstrating each one first (you may need a volunteer for some of them). I like to run through them fairly quickly, spending no more than 3-5 minutes on each one, as it warms people up for the mark making.

1. My little line

Draw a line on a piece of paper and hold it up to the group. Ask, if this line was a feeling, what feeling would it be?
Draw another line, this time make it squigglier or curvier or more jagged.
Hold it up and again ask, if this line was a feeling, what feeling would it be?
Elicit a few different responses.
Invite everyone to draw a few lines of their own, then to label them with what feelings they might represent.
Through doing this you're encouraging not only experimentation with line but also the development of a visual vocabulary that can then be used to create abstract work and/or to communicate non-verbally when needed.

2. Continuous line

Ask each participant to choose an object to draw and place it in front of them on the desk, then draw the object without taking their pen off the page.
They can pause to look at the object but they cannot lift their pen off the page.
They should focus on the lines and contours of the object and just keep drawing.
They can shade in if they want but the whole drawing should be one continuous line.

3. Don't look

Ask participants to swap objects with each other so they each have something different to draw.
This time they are going to draw it without looking at the page. I find this easier without lifting my pen off the page but that's up to each individual.
The only rule is, don't look at the page!
It may feel frustrating but this is an excellent quick exercise for developing hand-eye coordination and helping us learn how to really look.

4. Describe & draw

Put participants into pairs and have them sit back to back. Give an object to Person A (without their partner seeing!) and a paper and pen to Person B.
Ask A to describe the object to B so that B can draw it. Can B guess what the object is?
Only once the description/drawing is complete can they look at it together.
Swap and repeat.

5. Take your line for a walk

This is very similar to the continuous line drawing but, instead of your line following the route your eye is tracing along an object, your line is going to follow the route your body takes through space.
Ask everyone to stand up, with a pen and paper in hand.
Ask them to mark a dot on their page. That is where their body is now.
Ask them to take 2 steps forward. How do they show this on the page? Do they draw a line moving out of the dot? Or do they draw 2 small dashes?
Or something else entirely?
Now ask them to move around the space freely, tracking their movement on the page as they go.
What happens when they jump? Or cross paths with someone else?
How do they show this with their marks?
If there's time, have everyone come together and compare drawings. Can they guess how someone else was moving by the marks they made?

Notes / Adaptations

This is not about creating perfect representations of things! These exercises are for play and to better train our eyes and senses for drawing. Some participants may be reticent or say 'I can't draw'. Remind them that's actually a great thing to be aware of as it will help them better connect with and support their students who also feel this hesitation.

Though these exercises may not obviously link to the garden, there are so many ways they can be used to help students engage in the outdoors, even if it's just by taking students outside to do them. Ask participants to think how else they could be incorporated into the garden.

Whilst used in this workshop as a block, these exercises are really great as little daily interventions in classroom settings. For example, they could be run one a day at the start of class, Monday to Friday, or delivered adhoc to shift energy between other more academic activities. They also work well as a form of creative/therapeutic support for students who are struggling or need a break.

Mark Making (20-60mins)

Materials

Inks made in the earlier session or at home, 2 or 3 different colours should be plenty but more are always good
(I recommend: elderberry / blackberry / red cabbage inks for pH sensitivity leading to blues, pinks, greys,
greens and purples, red onion skin inks for greens, browns and ochres, charcoal for blacks and greys)
Modifers (see Mordants & Modifiers)
Art paper (120-250gsm)
Brushes of different shapes and sizes
Sticks, twigs, leaves, feathers - anything you want to try making a mark with
I also really recommend pipettes and straws for creative expression!

Instructions

Now participants have explored different ways of working with line, invite them to play with this further through the inks:
How many different types of mark can you make on the page?
What happens when you drop some of one ink onto another?
What happens when you use modifiers on the page?
How can you use line, mark, splat and splodge to reflect how you feel?
How does making different types of mark feel in your body?
Let participants play until you need to move on.
If there's time, invite everyone to look at the pieces made and pick out areas, marks or shapes that interest them. What else can they see in the imagery?

Notes / Adaptations

This is such a lovely free (messy!) activity to do with the inks, as much for adults as for children. If you have time to extend it within a longer session, you could try:

- Putting on different pieces of music and seeing how this affects the marks made
- Working on one huge collaborative piece as a group
- Exploring the movement of natural elements, e.g. what kind of marks would a river make, or a bee, or a cloud?
- Drawing on top of the mark making sheets once they're dry or using them for collage (see video resources)

Reflections

How did you find these activities?
Which did you prefer and why?
What parts of your school curriculum could you tie these into? How / why?
How does this differ from what you would normally do in class?
Which students do you think these activities would appeal to most? And how could you support those who may be less interested?
What values do you think might come up when sharing these methods?
How do they connect to other subjects?
Once they're made, how might you use these inks with your class?

Group reflections

These activities can be a catalyst for many discussions on art, creativity, science, nature, climate and craft. They can also work well alongside creative writing or collaborative projects. Bringing the whole class together to reflect on their work is a lovely way to end the day, though you can also ask questions and prompt conversation whilst students work.

How are these materials different to the usual art materials you/we work with?
Where do other art materials come from?
Which part of these activities did you enjoy the most/least? Why?
Why do people not always make their own art materials?
Would you ever repeat this at home? What would make that easier/harder?
How is this different to what you/we normally do in school?

Values

Experimentation

You can certainly be very scientific about colour making, and in the books I recommend below you'll find many recipes with precise quantities. Colourmaking is chemistry and there are many, many variables. My approach, in order to make it as accessible as possible, is to experiment and see what happens. Don't worry about exact amounts at this stage. The type of water you use, the freshness of your plant material, the exact heat you cook things at, all these will affect your final colour, including the paper you draw on! So you may as well free yourself up by playing, letting go of perfection and seeing what comes.

Accessibility

Some of the materials and/or methods I describe may sound a bit basic. Why use plastic glue spatulas and old yogurt pots when you could use high quality paint pots and stirrers? Why fold a bit of scrap paper when you could use a suitable bowl? It's because I want these activities to be accessible for all schools, teachers and students. Having delivered these sessions myself in primary and secondary schools in the UK, I know it can be a lot to ask of teachers to have the time or budget to locate a lot of specialist equipment. So, where possible, I have kept things as simple and as secondhand as possible!

Responsive, Respectful, Reciprocity

I use food waste and waste stream products as much as possible, I encourage only ever harvesting a small amount and never when there aren't more than a few plants available already. Wherever possible I will ask participants to think about the relationships between ourselves, the plants we're working with and the land we all belong to: what can we offer back to the land in exchange for these gifts?

All of these processes have been shared by other generous makers and artists, and most of these recipes will have been passed down for generation after generation. Humans have been making colours from soils, charcoals and natural elements from as long as 40,000 years ago, and continue doing so now. By engaging in these ancient alchemical processes we're connecting with all the lives and ecologies who have previously been a part of this practice, and that is no small thing.

References & Resources

Easy ink recipes

How to make onion skin ink
How to make red cabbage ink
Eco-printing ‘hapa-zome’ style

Drawing exercises

Continuous line drawing
Blind contour drawing (aka Don’t look drawing)

Things to do with your ink

Mark making with natural ink
Collaged creatures with natural ink
How to make ink creatures

Books

Make Ink, Jason Logan
The Organic Artist & The Organic Artist for Kids, Nick Neddo
Braiding Sweetgrass, Robin Wall Kimmerer

Instagram accounts

@talu.earth
@plantsandcolour
@studioslowlane
@anniehogg_thewildinkhedgeco

Optional extras

Listening

Time: 10min
Intention: grounding, welcoming participants to the space, bringing them back to their bodies
Prep: none required

Ask participants to stand in a circle, ideally in an outdoor space.

This is a moment to orient ourselves to the space, and see what else is going on that we might not immediately notice. Close your eyes if you'd like, or lower your gaze, or you could look up at the sky, but let your eyes relax and tune in to your ears instead. We're going to listen and see how many different sounds we can hear, let them come and go: can you tell which direction they're coming from? Let your ears tune in to this place and this moment.

Spend 1-3 minutes in deep listening.
After this time is up, ask everyone to open their eyes / bring their attention back to the group.
Share feedback as a group.

What could you hear? Were there any sounds that surprised you? Were there any unknown sounds?

Notes / Adaptations

It may be helpful to take a few deep grounding breaths at the start of this exercise to settle everyone's attention.

You can shorten/lengthen this depending on the energy levels and attention of the group. If you're working with children who find it hard to be still, invite them to silently point in the direction of where they think the sounds are coming from.

See how much is happening in any one moment, when we start to listen for it. Or perhaps there was very little sound, in which case you could ask people to listen for silence: can they really hear complete silence? For how long?

This reminds me

Time: 15-30mins
Intention: hearing everyone's names & voices, introducing the more-than-human
Prep: bring with you a natural sensory object that can be passed around,
e.g. a scented herb / a spiky seedhead / a soft feather / etc

Remain gathered in a circle, sitting if it feels more comfortable, indoors or outdoors.
Pass around the object, inviting everyone to say their name and something the object reminds them of.
Start by introducing yourself and giving an example:
Hello, my name is Ione, and the smell of this rosemary reminds me of drinking tea in the sunshine at the farm where I used to work.
Continue until everyone has spoken, with an option to pass for anyone who doesn't feel like talking.

Notes/Adaptations

You can also add in any other questions if you'd like to expand the activity, e.g.
What brings you to the workshop today?
What kind of art do you like to make?
Which colours bring you the most joy?
Which help you feel calm?