

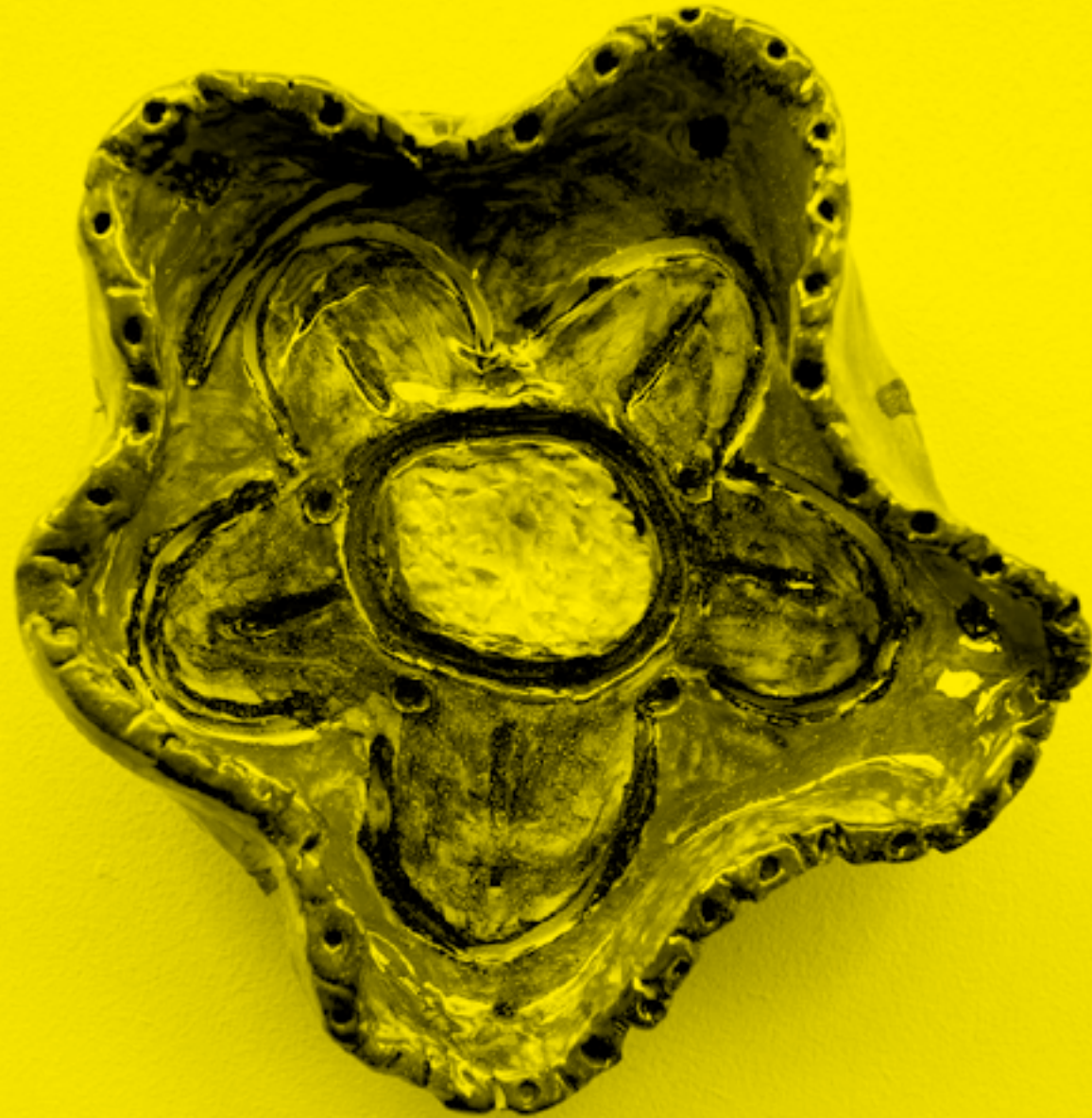
# Transferer Toolkit

Using clay to build oracy and critical thinking skills in schools

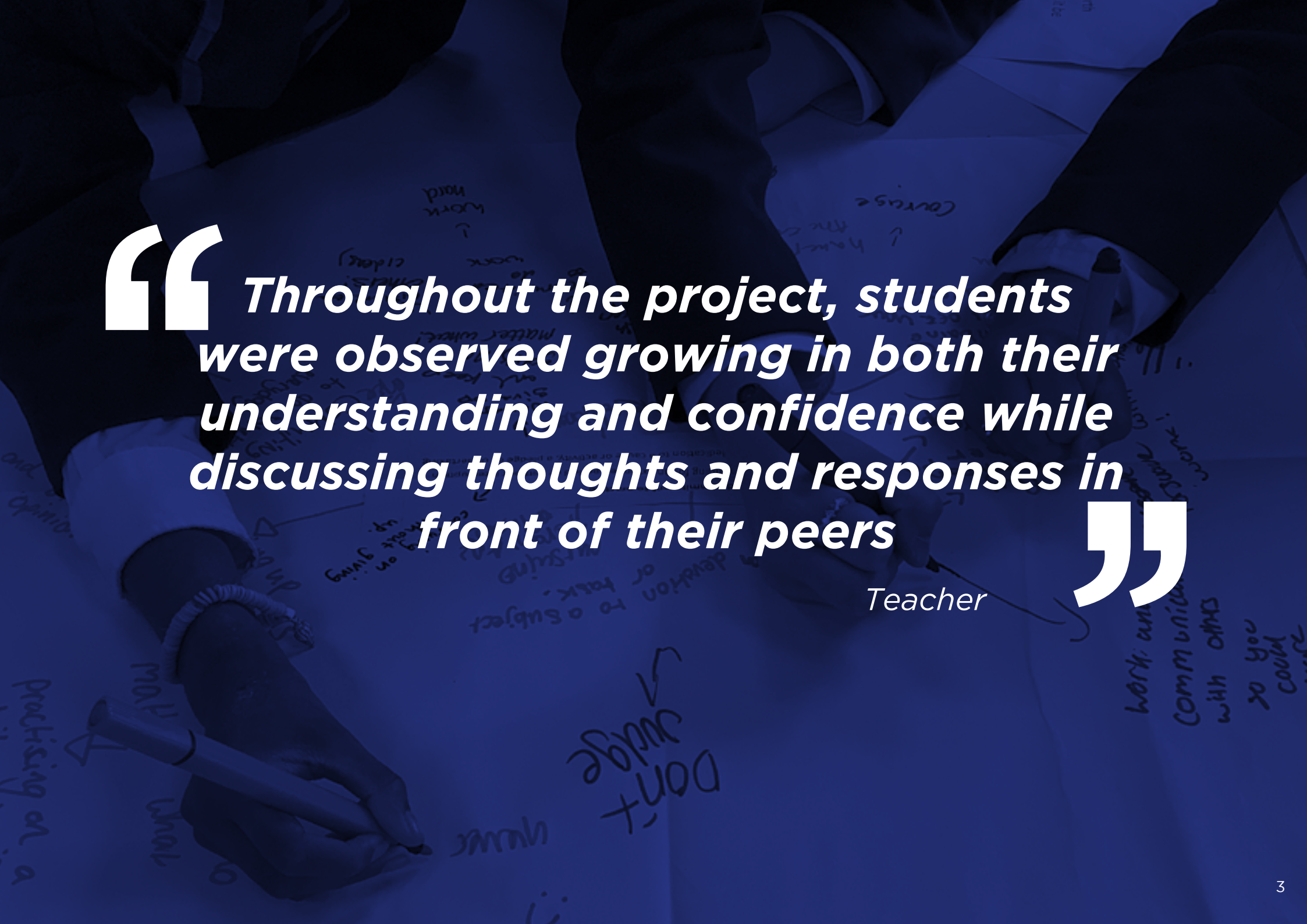


# Contents

Introduction	4
Context	5
About	6
Impact	8
How the activities were developed	9
How to use the toolkit	10
Activities	
<b>Creating context</b>	
Handling Objects	12
<b>30 minutes and under</b>	
Skills Chains	16
Blindfolded Clay	17
Clay Evaluation	18
Noughts and Crosses	19
Fortune Cookies	20
<b>Full length lessons</b>	
Body Parts	22
Co-building with Slabs	23
Map Making	25
Sgraffito Storytelling	26
Paper Resist	28
Collaborative Coiling	30
<b>Safety Notes</b>	
Clay dust	31
Kiln safety	31
<b>Technical Notes</b>	
How to join clay	32
How to roll a slab	32
Reclaiming and re-using clay (including making slurry and wedging)	32
States of clay	33
Air bubbles in clay	33
Glazing	33
Firing	34
<b>Glossary - defined by the students</b>	<b>35</b>
<b>Acknowledgements</b>	<b>35</b>







***“ Throughout the project, students were observed growing in both their understanding and confidence while discussing thoughts and responses in front of their peers ”***

Teacher



# Introduction

British Ceramics Biennial (BCB) is an arts organisation based in Stoke-on-Trent with a vision of making change through clay.

BCB explores bold and significant ways of working through its year-round programme addressing local priorities and needs. Wellbeing and empowerment are key aims, reflecting BCB's values of inclusivity, connection, collaboration and accountability.

BCB delivers the British Ceramics Biennial - the UK's largest contemporary ceramics event attracting thousands of visitors to Stoke-on-Trent to engage in new and innovative clay and ceramics practice.

BCB has a strong track record of incorporating youth voice into its programme, enabling young people to gain confidence, oracy skills and a sense of agency. Paul Hamlyn Foundation supported BCB via the Arts-based Learning Fund to deliver the Transferer project. This fund enables pupils in formal education settings, particularly those experiencing systemic inequality or disadvantage, to thrive through engagement with high quality, arts-based learning.



# Context

Transferer was adapted from a BCB pilot in 2021 that worked with a secondary school on a work experience project which gave young people the opportunity to select artworks for an exhibition. The students, BCB team and teachers involved noted an improvement in confidence, communication and discussion skills by the students taking part. This spurred research into how the approaches taken supported this development and what could be done to take this further.

Oracy refers to speaking and listening skills and was first coined by Andrew Wilkinson in 1965.[1] The Bullock Report, A Language for Life (1975), identified a key priority for schools should be a 'commitment to the speech needs of their pupils and a serious study of the role of oral language in learning.'[2] Despite this, further education reports show that oracy education needs remain unmet.

Studies show that better language abilities are linked with improved GCSE grades in core subjects such as Maths and English.[3] The 2019 Speak for Change inquiry sought to explore why there were still disparities in quality and access to oracy education within UK

schools. It found that lower oracy skills do not just impact grades but also significantly impact self-esteem, behaviour and a child's future prospects. The inquiry drew upon research that suggested the transition between primary and secondary school can negatively impact pupils' oracy development due to the increase in academic vocabulary. The level of socio-economic advantage/disadvantage of children also has an impact on oracy, with gaps in language development widening as they progress through school.[4]

The pandemic has also impacted oracy in recent years. In polling of teachers in March 2021, 66% of primary and 44% of secondary teachers said that school closures had a negative impact on spoken language development for their pupils. Young people polled as part of research by The Centre for Education and Youth and the University of Oxford stated that oracy was of high importance to them (75%) while only 32% said that their school/education setting prioritised it.[5]

Given this evidence, oracy is becoming a priority within the curriculum and for schools. Voice 21 is a national charity that

supports schools to build speaking and listening into the curriculum. Launched in 2015, Voice 21 worked with the Education Endowment Fund and Cambridge University to develop, research and evaluate ways of working that promoted oracy within schools.

Voice 21's work looked at oral language interventions, metacognition and self-regulation, and collaborative learning as integral aspects of oracy learning. Oral language interventions emphasise the importance of spoken language and verbal interactions, and research has shown that one of the most effective ways of building vocabulary in the classroom is through facilitated, structured and purposeful talk.[6]

Metacognition and self-regulation focuses on developing pupils' abilities in relation to specific strategies for planning, monitoring, and evaluating their learning. While collaborative learning involves developing approaches to working with others.

This research formed the basis for the development of the Transferer programme and the activities in this toolkit. As this toolkit was being developed the report of the Commission on the Future of Oracy Education in England (We need to talk, October 2024) was published, providing further evidence and recommendations.

Further information on oracy:

Voice 21: [voice21.org](https://www.voice21.org)

We need to talk 2024: [oracyeducationcommission.co.uk](https://www.oracyeducationcommission.co.uk)

[1] Wilkinson, A. (1968) 'Oracy in English Teaching', Elementary English, 45 (6), 743- 747 (744)

[2] The Bullock Report (1975), A Language for Life, The Stationary Change

[3] Spencer, S., Clegg, J., Stackhouse, J. and Rush R. (2017) 'Contribution of spoken language and socio-economic background to adolescents' educational achievement at age 16 years', International Journal of Language and Communication Disorders, 52(2), pp. 184-196, [https://eprints.whiterose.ac.uk/98306/9/WRRO\\_98306.pdf](https://eprints.whiterose.ac.uk/98306/9/WRRO_98306.pdf)

[4] The Communication Trust (2013) A generation adrift: The case for speech, language and communication to take a central role in schools' policy and practice [https://www.thecommunicationtrust.org.uk/media/31961/tct\\_genadrift.pdf](https://www.thecommunicationtrust.org.uk/media/31961/tct_genadrift.pdf)

[5] CfEY & University of Oxford (2021) Oracy after the Pandemic: What Ofsted, teachers and young people think about oracy, CfEY, available at: <https://cfey.org/reports/2021/04/oracy-after-the-pandemic>

[6] Beck et al. (2002), Bringing Words to life: Robust vocabulary instruction, Second edition



**“ A quality work is  
something that  
makes you feel you  
belong in the world ”**  
*Transferer student*

## About

Transferer was a groundbreaking project exploring cross-curricular approaches to art-based learning. A Project Co-ordinator worked with two BCB Associate Artists to design and deliver a two-year programme with early secondary students to develop greater oracy and critical thinking skills. Through explorations of clay and ceramics students built new relationships, learnt how to structure and communicate their ideas, increased their vocabularies and learnt about arts careers.

The project worked with two Stoke-on-Trent secondary schools which had a high percentage of students eligible for Pupil Premium. Both schools reported that these students were more likely to enter secondary school with below average literacy skills which impacts progress in other subject areas. Participating students reported a positive change in their confidence and ability to communicate with others. They also developed their ability to formulate ideas, critique artwork and engage in critical discussions with their peers and adults. Transferer comprised the following elements.

## Assessment and analysis

Transferer students selected artworks submitted for exhibition at the 2023 British Ceramics Biennial. Through a series of workshops, the students reviewed images from artist proposals and were encouraged to express their opinions about the artworks. Initial responses were discussed before digging deeper: reviewing artist statements and learning about the artists' practice, approaches and interests to see how this impacted the students' opinions. The group then took part in the professional panel selection process having space to contribute their voices and inform the final 25 selected works. Drawing upon their newly developed artistic assessment skills, the students also set criteria and selected an artist from the Biennial to win a residency.

## Interpretation and engagement

Transferer students created interpretation texts which were included in the 2023 British Ceramics Biennial. Written in the students' own words, their interpretation panels offered personal reflections and alternative understanding of the work on display. Talking Tins (record/playback devices) enabled participating students to create

family-friendly oracy activities for the Biennial. The students recorded red Talking Tins to pose thoughts and questions to encourage visitors to think about artworks in new ways. Yellow Talking Tins invited visitor responses either by answering the posed questions or by asking their own. Questions included:

- 🗣️ **If the artworks were edible, which would you eat?**
- 🗣️ **If you were at a fairground, which would you like to take a ride on?**

## Exploration

Transferer students undertook trips to the V&A Wedgwood Collection in Stoke-on-Trent and V&A South Kensington in London, which introduced ceramics and art on a national and global scale.

## In-school collaboration

Transferer included weekly in-school sessions designed to promote oracy skills and confidence whilst introducing a range of ceramics skills. Alongside workshop activities, students had visits from guest artists to develop understanding of wider ceramics practices and build confidence critiquing artworks. The in-school sessions were informal and student-led, ranging from under thirty minutes to two hours in length.

Workshops explored and celebrated individuality, group identity and mutual goals through creative challenges. The workshops centred clay technique development, artist practice and ceramic works. These clay techniques enabled a range of oracy activity through collaborative working and discussion, word association and idea generation, which increased structured talk. The students developed their proficiency in active listening and responding appropriately, building on views of others, turn taking, tackling resistance to group work and expanding vocabulary to build confidence and ownership. The workshops shifted focus in the final six months towards the students producing their own artwork for exhibition.

## Exhibition development

Through generating their own exhibition, the students built on their reflection and critical thinking skills. This involved concept development, planning, designing and making their work. The Ceramic Minds exhibition took place in July 2024 with the Transferer students working together to decide a name and theme, make and select the work, and create their own exhibition interpretation and marketing

materials. The group dynamic was well established by this point and there was a sense of shared purpose and identity developed through collaborative activities and collective conversation.



# Impact

Transferer centred the voices of young people within BCB, building their confidence in expressing themselves and their ideas. Working with young people in Stoke-on-Trent has always been central to BCB's work, which recognises the vital role arts engagement plays for young people to expand their cultural horizons and develop transferable skills.

Evaluation data from Transferer found that participants improved confidence in cognition, oracy and critical thinking skills which benefited all areas of their education and that teachers and education settings increasingly value the benefits of oracy-based work on academic progression and wellbeing.

**“ One of the biggest benefits was groups of young people who don't normally work together interacting. Seeing different relationships evolve has been lovely. ”**

*Helen Morgan, Teacher*



# How the activities were developed

The team working on Transferer used previous work by Voice 21 and other oracy research as the basis to develop the workshops that were delivered. Focus was placed on centring student voice and encouraging conversation that allowed them to express their opinions. Sessions were structured to enable discussions, self-reflection and evaluation both individually and collaboratively.

Facilitated discussions were a key part of the sessions. Emphasis was placed on open questions that encouraged students to reflect and challenged them to communicate in different ways to express their ideas and opinions. Conversations were encouraged to be exploratory and there were no right or wrong answers being sought.

Working with clay and ceramics became a good leveller for the groups as it was something they had a similar level of knowledge about. This meant that questions and enquiries were met with curiosity and the groups worked at a similar pace.

The evaluation of activities centred the feedback of the students. At each session they were encouraged to reflect on how well the activity had gone and what they had learnt. This information was vital to further understanding and development of future workshops. The students were consulted to refine and select the activities.

The selected activities presented in this toolkit are designed to give students the opportunity to:

- Develop vocabulary
- Critically examine ideas and views
- Improve listening and response skills
- Improve confidence in speaking

**“ You can have freedom in creativity in whatever you do. There are no limits to what you can choose to do. ”**

*Transferer student*

# How to use the toolkit

The workshops in this toolkit are divided into '30-minutes and under' activities and 'full lessons'. This allows you to flexibly use the workshops depending on your preference. Please note that this does not include the preparation time which can be found at the top of the individual activity.

There is no order to the toolkit, however the 'Handling Objects' workshop was a significant part of this oracy project. It is suggested that this workshop is the first one that you use to help create context and underpin the foundation of the skills used throughout the toolkit. The workshops were delivered within secondary schools, however the tasks can be used across all age groups.

It is important to note the health and safety considerations around clay dust on page 31.

At the top of the page there are suggestions for group size which you can adapt depending on the class number. All activities are designed to allow you to recycle the clay with the option to fire. Follow the instructions regarding firing on page 34.

Curriculum links and adaptations are provided. BCB found that the

workshops improve oracy skills in all subject areas, not just within art.

Clay terminology is used throughout the toolkit which may be unfamiliar. A glossary of words has been created on page 35.

Short technique videos accompany this toolkit.

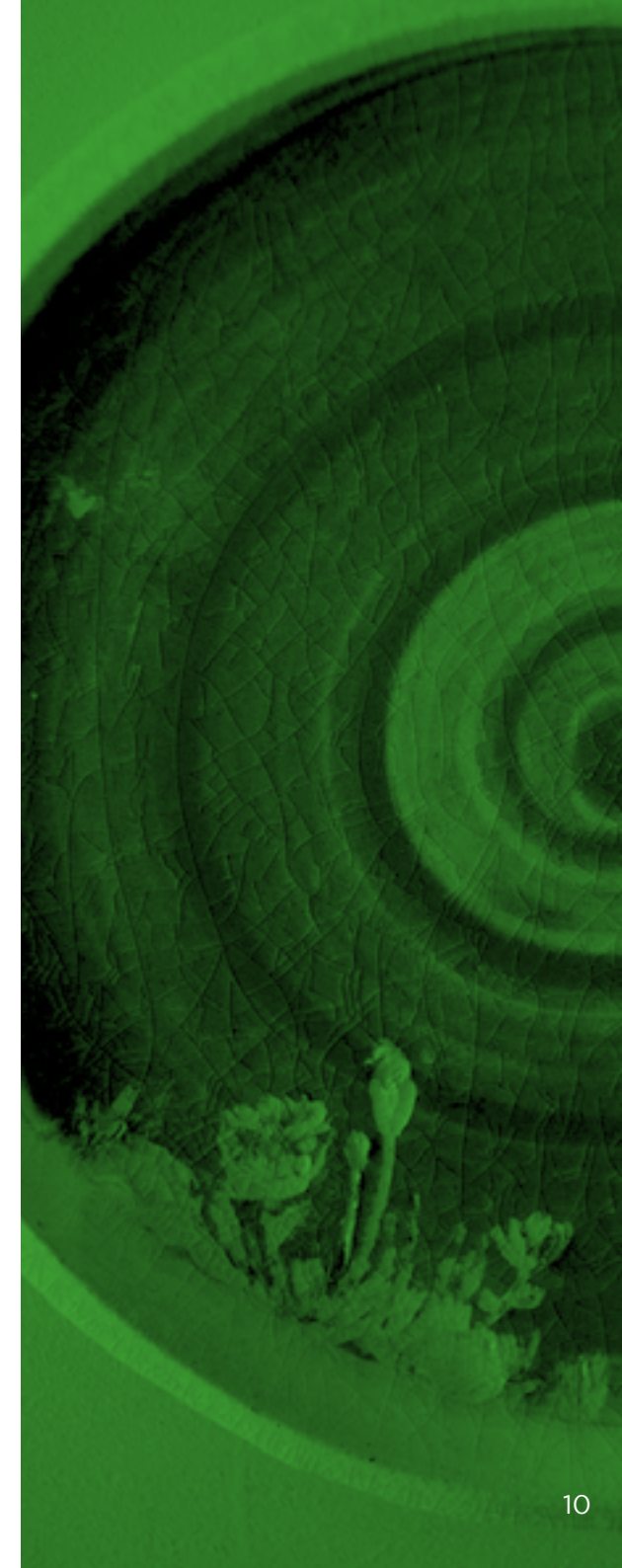
The techniques modelled are:

- Joining clay
- Slab rolling
- Coiling
- Paper resist
- Sgraffito

These can be accessed at [britishceramicsbiennial.com](http://britishceramicsbiennial.com)

Clay is the main medium throughout the workshops. Clay may not be suitable for those who are sensitive to temperature and texture. Adaptations can include using gloves, wrapping the clay in cling film or alternative materials such as air-dried clay or plasticine. Most workshops can be adapted by using alternate art materials. Students who may struggle with the control of finer tools can be provided tools that have a wider grip. For students who feel uncomfortable in group tasks, pre-exposure to what the tasks are may help and considering smaller group sizes to reduce noise and strain.

Developing oracy involves students having conversations that explore opinions and navigate the process of self-expression. Conversations are open ended and may raise sensitive topics or reveal vulnerabilities. Please be mindful during any workshop and follow the safeguarding procedures in your school or setting.





# Activity for creating context



# Handling Objects

Groups of 4 students

Preparation time - 30 minutes to 1 hour

Workshop timing - 50 minutes for each part (100 minutes total)

## Materials

- Ceramics objects to handle
- Sticky notes
- String or felt tips
- 60 tokens, made of card or similar
- Print-outs or digital presentation with descriptive word/s on each slide, with a scale of least to most e.g. unique, beautiful, functional, difficult to make
- Photos of each handling object. One set per group.

## Overview

This activity is based on the work students did to select artworks for an exhibition. It is divided into two parts that build upon exploration, vocabulary building, group discussion and developing strategies for consensus decision making. The workshop helps students to identify and communicate their opinions about the objects being discussed and creates space for safely challenging ideas and enabling debate. It is a good place to start oracy learning

within the classroom and offers a foundational basis for all of the other workshops in this toolkit.

## Outcomes

Using vocabulary, asking questions, articulating views, making comparisons, reasoning, making links and fostering curiosity

Building a consensus after applying a criteria, discussing opposing views and reasoning own views

Creating personal connections and reaching agreement

## Curriculum links

Art: Discuss ideas, observations and insights relevant to intention

English: Competence in speaking and listening and participating in debate

## Preparation for teacher

Assemble a collection of ceramic objects. This could be student work or household objects. Ensure a range of items, including artwork and functional ware. If you have a local museum or gallery, they may have handling kits available for loan that could be used for this activity.

Prepare resources (paper or digital) with a range of descriptive words

or phrases. These could include unique, beautiful, functional, difficult to make, intriguing, special, unusual, interesting, boring, familiar or unexpected.

## Instructions

### Part 1: Object exploration and discussion

1. Lay out a variety of ceramic objects around the room. Invite students to have a look at the objects and select a piece they feel immediately connected to.

2. In small groups ask the students to explore the objects they have chosen and discuss why they were drawn to that item.

Ask for an initial reaction:

❓ Do you like or dislike the object?

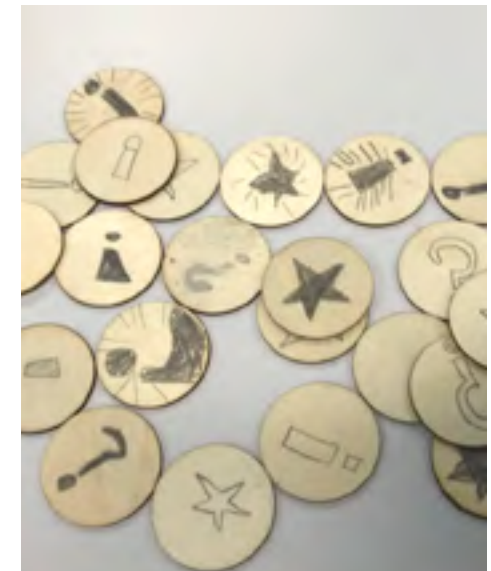
❓ What is it you like or dislike about the object?

This can be reflected on individually and then as a group, giving opportunity to compare similarities and differences in responses.

3. Ask the students to identify and discuss the characteristics and qualities of the items they have chosen within their groups, using sticky notes to record their responses.

❓ What is the item made of? How is it made?

❓ Can you describe the object's appearance? Is it rough or smooth, hard or soft?





# Handling Objects (continued)

❓ **What does the object feel like? Does the feel match the visual appearance of the object?**

❓ **What do you think the purpose of the object is?**

4. Ask the students to think about and discuss the items in ways that encourage more reflection on their initial choices. Questions for this part of the session can include:

❓ **Does the object remind you of anything?**

❓ **What does the object make you feel? Is it a good or bad feeling?**

❓ **What do you think the story behind this object is?**

❓ **Who do you think made the object and why did they make it?**

Students should be encouraged to explore their answers and discuss within their groups. Do they agree or disagree with one another about certain objects? Can they identify where these points of difference are? For example, one student might be drawn to a very brightly coloured object while another may dislike it because they prefer more muted colours. This can help the group start to identify their individual preferences and learn about others.

5. Ask the students to reflect with the whole class about how their group's discussions have developed.

Questions to consider include:

❓ **What have you learnt about your objects?**

❓ **What did you agree or disagree on within your group?**

❓ **What did you learn about your own and each other's likes and dislikes?**

## Part 2: Choosing criteria and building consensus

1. Assemble small collections of the ceramic objects on each table, between 5-6 objects per group of students.

2. Using the prepared descriptive word resources, give each group a word (beautiful, functional, unusual, etc.). Ask the students to use their word and order the objects on their table from most to least representative of that word. The objective is for the students to use discussion and reasoning skills to agree an order for the objects.

3. Once each group has completed their ordering, ask them to reflect on the process.

❓ **Was it easy to agree on their order?**

❓ **What did they agree or disagree on?**

4. Give each group a different word. This time before they order their objects, ask each group to reflect on what that word means to them.

Do they agree or disagree on its meaning and how to define their word? When they have done this, ask them to order the objects again from most to least in relation to their new word.

5. Once each group has completed their ordering of objects, ask them to reflect on the process. Use the questions from item 3 again and ask them to reflect on whether discussing the word beforehand made it any easier to categorise the objects. Repeat this categorising exercise for the number of words that you have so that each group has considered each word if time allows.

6. This activity can be developed to explore the question:

❓ **What makes a good artwork?**

Ask the students to think about and discuss what they think makes a good artwork. They should consider their individual answers then come together to discuss with each other. Again, ask them to look at the similarities and differences in their answers. Here are some key things to focus on:

- Whether students are talking about similar things in different ways and how that could be expressed in an idea that everyone is happy with.
- How do their personal tastes and preferences impact their answers.



# Handling Objects (continued)

7. Each group should write down their answers on sticky notes or paper. Ask them if they can come to an agreement as a group about what their top three answers would be. These should be the answers that the group agree on as key characteristics of a good artwork.

8. The group can be introduced to the term criteria i.e. 'a principle or standard by which something may be judged or decided'. The answers they have developed in their groups are their own criteria for what makes a good artwork.

9. For each of their criteria, ask them to choose a symbol, such as a star, circle or square. Give out the blank tokens and ask them to draw one of their symbols on each token several times. This should ideally result in each group having around 5 tokens representing each symbol.

10. Ask the students to go around each table, looking at objects they haven't worked with in this session, and to place their tokens next to the objects they think best represents the criteria of their token.

11. Once they have finished assigning tokens, discuss as a class what choices have been made. Students can be asked to explain their criteria and the choices they made when placing their tokens. As a final question, ask the students to reflect on this activity:

❓ Have they learnt anything today about how to make group decisions?

❓ Is there anything they would do differently next time?

## Adaptations

For students familiar with this way of working, they could be asked to think of their own descriptive words to use in part 2.





# Activities of 30 minutes and under

# Skills Chains

Groups of 5 students

Preparation timing - 10 minutes

Workshop timing - 25 minutes

Recycle clay afterwards

## Materials

- 1 bag of clay
- Cloths or boards
- Letter stamps and tools

## Overview

A fun and mindful team-building session for exploring clay whilst working with peers to identify individual skills, strengths, differences and similarities. Using coils of clay and letter stamps to press words into the clay then joining them together to create a chain. This task is a collaborative approach to expand vocabulary whilst allowing every student to participate and discuss at the end of the task.

## Outcomes

Promoting wellbeing by finding commonality, exchanging experiences, forging connections and expressing each other's qualities and differences

Working collaboratively to expand vocabulary

## Curriculum links

Art: Discuss ideas, observations and insights relevant to intention

English: Build competence in speaking and listening, making formal presentations, demonstrating to others and participating in debate

## Preparation for teacher

Collect a selection of letter stamps or tools for writing words in the clay.

Cut up small balls of clay and divide them between the groups, enough for a couple each.

## Instructions

1. Split the students into groups
2. Ask the students to create a sausage of clay, then stamp or write a word into the clay that tells the class something about themselves e.g. loud, carefree, athletic or reserved.
3. Attach the sausages of clay together into a chain attaching it to the next person's link.
4. Keep going around the group adding links. When they have finished, let the groups look at the words and see what other students have put. Identify where students have written the same thing.

❓ Are there any synonyms or words that have been repeated?

❓ Are students able to identify who wrote each of the words from the group?

## Adaptations

The task can be a subject specific lesson word bank, based on a topic or a theme.

It can be used to consolidate knowledge on a topic or a theme.

See 'Co-building with Slabs' to show how this can be adapted.





# Blindfolded Clay

Pairs  
 Preparation timing - 15 minutes  
 Workshop timing - 25 minutes  
 Recycle clay afterwards

## Materials

- Blindfolds
- Cloths or boards
- Clay
- Cutting wire
- 30 different objects or pictures of objects

## Overview

This task develops communication through imagination as the student needs to rely on active listening and interpreting what the object may look like without actually seeing it. The focus is on how students can have different understanding of visual language, listening and interpretation skills.

## Outcomes

Using a broad range of vocabulary and giving clear instructions  
 Listening to and carrying out instructions

## Curriculum links

Art: Build confidence in taking risks and learn from experience when exploring and experimenting with ideas, processes, media, materials and techniques

English: Communicate clearly, accurately and coherently, adapting language and style in and for a range of contexts, purposes and audiences

## Preparation for teacher

Cut up small balls of clay, enough for two each.

Distribute blindfolds and cloths/boards. This can also be done without blindfolds with the students facing away from each other.

Prepare set of printed pictures or collection of objects for students to describe.

## Instructions

1. One student is blindfolded and will be doing clay modelling. The other will need the object or picture of an object to describe. They are not allowed to directly describe the object. e.g. if it is a teapot, they can't use the words 'teapot', 'spout', or 'handle' to describe it. They could say: 'It has a big round hollow body, with a curved tube attached to the right hand side'.

2. Once they have finished, they can remove the blindfold to see how they have done and discuss how well they think their classmate described the object. They can now swap roles and describe a different object.

## Adaptations

This could be done as a sketching activity, where one student describes and the other draws the description.



# Clay Evaluation

Whole class

Preparation timing - 15 minutes

Workshop timing - 10 minutes

Recycle clay afterwards

## Materials

- Clay (scrap clay can be used)
- Golf tees, small BBQ sticks or similar
- Flip chart paper or similar

## Overview

This is an evaluation activity we used throughout the project. It can be used at the beginning of a session as a starter activity to recall previous learning or at the end of sessions to consolidate learning. This is also a useful method to assess the impact of oracy skills. This can be used as a baseline evaluation tool, to track progress or as a group planning tool. It can also be used to anonymously cast votes. Groups can work together to interpret the results and determine next steps.

## Outcomes

Building critical thinking skills by examining ideas and summarising

Building consensus and recognising similarities and differences, making links and reasoning

Promotes connection and articulation with each other by recognising differences and reaching agreement

Metacognitive skills to understand how learning is achieved

## Curriculum links

Analysing, reflecting and evaluating are adaptable through the whole curriculum.

## Preparation for teacher

Create mounds of clay and place them next to evaluative statements, e.g. 'I feel confident expressing my views in class' or 'I struggle to express my views in class'.

## Instructions

1. Lay clay out with each evaluative statement and add a value scale (e.g. always, sometimes, never) next to each mound.
2. Students select the statement that relates to them and insert a golf tee in the clay.
3. Once everyone has participated, the group can discuss trends and differences within their responses and attempt to articulate why they or the group responded in the ways they did.

## Adaptations

Students can create their own evaluative statements in relation to the learning task. Statements to consider:

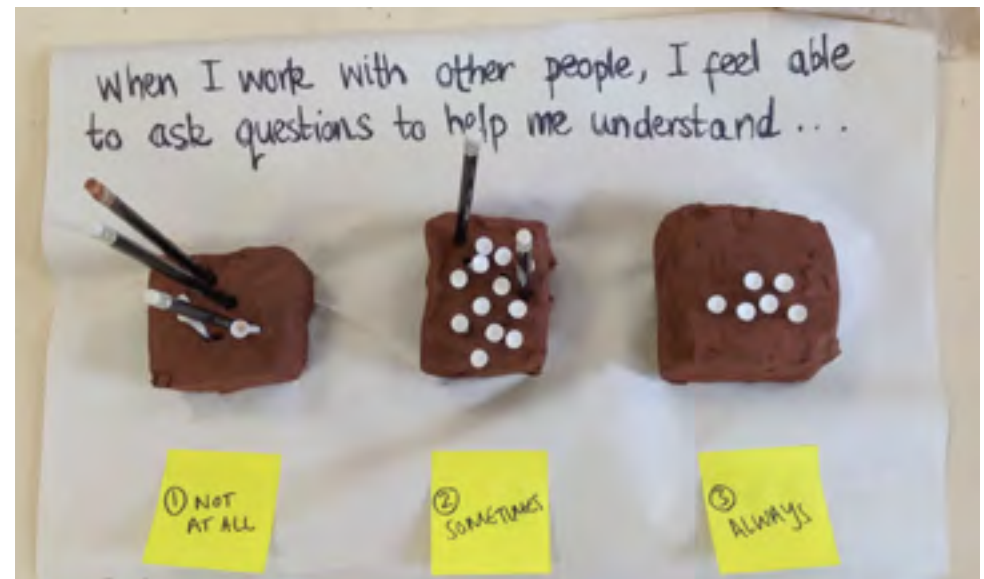
When we work as a group I find it easy to listen to other people.

When we work as a group I feel confident expressing my opinion.

I feel confident asking questions when I am not sure of the answer.

I am able to work as a team to problem solve and collaborate.

The tasks can then be rated by agree/disagree/sometimes. You can ask the students to expand on these statements.





# Noughts and Crosses

2 groups

Preparation timing - 10 minutes

Workshop timing - 15-30 minutes (depending on number of rounds)

Recycle clay afterwards

## Materials

- 1 bag of clay
- Masking tape or a noughts and crosses grid on paper
- List of questions relating to a theme or task. This is up to you; it can be used to test what students remember from a session or to test previously gained knowledge.

## Overview

Noughts and Crosses is useful as a starter or consolidating activity. The familiarity of the game allows students to take part in generating ideas or consolidating tasks.

## Outcomes

Informally testing knowledge

Drawing on knowledge to write well-structured questions

## Curriculum links

This game is transferable across the whole curriculum.

## Preparation for teacher

Prepare some questions for the students based on a topic or theme you are learning about. Alternatively you can encourage students to create their own questions.

Cut up some small chunks of clay for the students to use for the noughts and crosses.

If you use this game regularly, print out a grid on A3 sheets of paper and laminate them.

## Instructions

1. Split the class into teams and model some clay noughts and crosses. Tape out a grid on the table using masking tape or use a piece of paper.
2. Read out the questions to the group, e.g. 'What's the oven that we fire clay in called'. If they get the right answer they can place a playing piece.
3. You can play a few rounds and start to invite the students to come up with questions for the opposing teams.

## Adaptations

Different types of games could be used in the same scenario to test knowledge in any curriculum subject. e.g. Snakes and Ladders.

This can be done in smaller groups or pairs.



# Fortune Cookies

Groups of 5 students

Preparation timing - 25 minutes

Workshop timing - 30 minutes

Recycle clay afterwards

## Materials

- 1 bag of clay
- Paper with modelling prompts on them
- Cloths or boards
- Clay tools
- Cutting wire

## Overview

This activity is designed to encourage students to express themselves and their ideas in an imaginative way, using a range of different prompts. It can also be used to support improvisation skills as the students react to each prompt or instruction after completing the previous one. This activity explores how imagery can be used to convey a message.

## Outcomes

Developing self-reflection, articulating ideas and listening to peers

Promoting wellbeing via familiarisation and building new relationships

## Curriculum links

Art: Develop creative, imaginative and intuitive capabilities when exploring and making images, artefacts and products

English: Use discussion to learn, elaborate and clearly explain understanding and ideas

## Preparation for teacher

Make small balls of clay enough for one per student.

Press your thumb into each of the balls of clay to make a pocket for the scroll.

Write a list in pencil or crayon of written prompts for them to respond to, e.g. 'Something I'd like you to know about me'. Use pencils or crayons, as ink may run depending on how long the scrolls are left in the clay.

Cut each prompt into a strip and roll it up. Place it into the clay pocket and seal the top.

Hand out a cloth/board each and a tool per student.

## Instructions

1. Hand out a ball of clay each with a paper scroll buried inside.
2. Ask the students to excavate their scroll and use the clay to model a response to the written prompt.
3. Afterwards ask the students to discuss what they have made in groups and why they came up with that particular response.

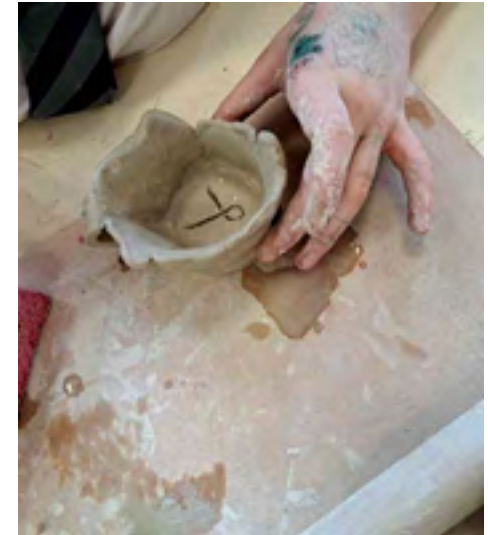
## Adaptations

Write prompts with instructions for making a group sculpture, at least enough for one each, e.g. 'make a pinch pot', 'decorate with stripes', 'add on a handle', and 'now swap your sculpture with the neighbouring group'.

Place the prompts in the clay.

Split the class into groups.

1. Divide the balls of clay between the groups and place them in a pile in the center of their table.
2. They can each take turns to follow an instruction and use the clay to start making a group sculpture. The other members in the group can make suggestions and support with making the sculpture.





# Activities for full length lessons



# Body Parts

Groups of 6 students

Preparation timing - 20 minutes

Workshop timing - 50 minutes

Recycle clay afterwards

## Materials

- 2 bags of clay
- Clay tools
- Cloths or boards
- Coloured cards (6 shades)
- Slurry pot for each table
- Paintbrushes for slurry

## Overview

This is a fun activity that encourages students to consider how their own personal contributions can be put towards a collaborative outcome. The activity starts with the student sculpting their own assigned body part and then working in a group to create an abstract person or creature. The collaborative approach will help aid communication in problem solving, listening and communicating their own ideas. The students then share their outcomes, building confidence in self-expression and the ability to listen to others.

## Outcomes

Co-creating with peers

Learning ceramic skills in building, sculpting and joining

Talking about process, working collaboratively and problem solving

## Curriculum links

Art: Develop creative, imaginative and intuitive capabilities when exploring and making images, artefacts and products

English: Build competence in speaking and listening, making formal presentations, demonstrating to others and participating in debate

## Preparation for teacher

Write the words body, head, legs, arms, wings and tail on different coloured cards, so when you group the colours together, each person has a different body part to make an abstract human or creature.

Cut a block of clay for each student.

Prepare slurry pot for each table.

## Instructions

1. Each student receives a colour coded slip of card with a body part written on it.

2. Set window of time for students to create a response to their prompt.

3. All those of the same colour card are then challenged to gather and construct a creature, solving problems around scale, joining and weight distribution to make a free-standing form.

4. Discuss their creations and compare across the class. Discuss problem solving, negotiation and collaborative skills.

## Adaptations

This can be done with themes such as landscapes, buildings or other themes linked to desired curriculum.

Multiple bodies could be made in one session in each group and then could be reviewed:

- ❓ **What went well?**
- ❓ **What was improved?**
- ❓ **What did we learn from the previous one?**

Clay can be recycled for each round.



# Co-building with Slabs

Groups of 5 students

Preparation timing - 10 to 30 minutes

Workshop timing - 1 hour

Recycle clay afterwards

## Materials

- Pre-rolled slabs of clay, leather hard (2 bags)
- 2 guides and a rolling pin
- Clay tools
- Slurry pot for each group
- Paint brushes 2 per group
- Cloths or boards
- A5 Card
- Scissors
- Rulers
- Cutting wire

## Overview

In this session, students consider one of their inner qualities and how it can be represented through clay. Each student will cut a shape out of a slab of clay that represents this quality and work collaboratively to bring these shapes together in one sculpture. The abstract nature of this method is to consider how a contextual or personal quality of themselves can be represented in

the physical. This aims to support visual and tactile language as well as supporting self-expression.

## Outcomes

Interpreting words into physical outcomes and analysing others' interpretations

Fostering self reflection and evaluation

Finding commonality, exchanging experiences and forging connections

Encouraging understanding of words and meanings

## Curriculum links

Art: Develop awareness of the purposes, intentions and functions of art in a variety of contexts and how contextual references are used for personal outcomes

Languages: Speak with increasing confidence, fluency and spontaneity

## Preparation for teacher

Roll out clay into slabs for each student about 1cm thick, at least the size of the A5 card. Allow these to go leather hard. If preparing the day before, loosely cover the clay with a plastic sheet to slow the drying process. Alternatively, you can get

the students to do this themselves to lessen preparation time.

Prepare slurry pot for each group.

Give each student a clay tool, a cloth/board to work on, a piece of card and scissors.

Cut out 2 card shape templates to use for the demo.

## Instructions

1. Ask the students to choose a personal quality of themselves, e.g. quiet, energetic, cheerful, then share this with the group.

2. Students draw a shape they feel represents this quality. Teacher to prompt with questions such as:

❓ **What would energetic look like?**

❓ **Would quiet be circular or tapered?**

3. Students cut out the shapes on the card. Teacher hands out the leather hard clay slab if not already placed on desk.

4. The teacher demonstrates cutting shapes out of leather hard clay using the card cutout as a template. Demonstrate joining slabs together with slurry.

5. Get the students into groups of five and hand out a selection of slabs to each group. Each group cut their shapes out of the clay and join all of them together using





# Co-building with Slabs (continued)

slurry, to create an abstract clay slab sculpture. They can cut out more than one shape if there is enough clay and time.

6. As a group discuss the personal qualities they have in their sculptures with the rest of the class. Give students the opportunity to interpret different groups and reflect on what quality they feel represents certain shapes and why. Are any of them the same? Would people use different words to describe each other? What does the word they picked tell us about them? e.g. If they described themselves as loud, are they a good listener?



## Adaptations

Rather than creating shapes based on personal traits the theme can be adapted to suit a particular topic.

Your session could explore similar themes such as memories, experiences and feelings about a particular event or experience. It could also be used to develop key vocabulary across the curriculum.

See 'Skills Chains' workshop for an alternative approach.



# Map Making

Groups of 5 students

Preparation timing - 25 minutes

Workshop timing - 1 hour

Recycle clay afterwards

## Materials

- 2 bags of clay
- Cloths or boards
- Clay tools
- Cutting wire
- Maps of your local area, showing the outline, and key characteristics printed or on screen
- A3 paper x approx. 20 sheets
- Felt pens
- Ability for students to research online

## Overview

Students gain a shared understanding of the different landmarks in their area. They will discuss places important to them and learn about different arts and heritage venues. This builds on investigative skills and critical observation of contextual resources.

## Outcomes

Gaining broader understanding and interest in the local area and its cultural landmarks

Holding open discussion based on familiar themes to make connections and share insights

## Curriculum links

Art: Understand contextual sources to inspire the development of ideas

Geography: Understand processes that give rise to key physical and human geographical features

## Preparation for teacher

Put two desks together for group tasks, depending on layout of classroom.

Cut clay into fist sized pieces and distribute around the groups including the A3 sheets of paper.

Find birds eye images showing the shape of your area or use a map. Either print a few per group or display them on a whiteboard.

Put a list of landmarks in your area together.

## Instructions

1. Put students into groups for a discussion:

❓ **What would they describe as a landmark?**

❓ **Are there any landmarks in their area that they know of?**

This could be famous buildings, galleries, museums, parks, public art or sculptures. Ask the students to write them down on an A3 sheet, then share with the class.

2. Ask if they know what the towns/ places are in your area.

❓ **Have they been to all the towns?**

❓ **What did they go to see - family, friends, shopping, or an event or venue?**

Again, they can write this down and discuss it as a class after.

3. Introduce the map of the city on a screen or handouts. Using the clay on the table, in groups they need to roll coils of clay, joining them together to make an outline of your area.

4. Allocate each group a town or place and ask them to find out some facts about it. When they have done their research, they need to design and make a clay model to place on their map to represent the town.

5. Share each group's model with the class and discuss results.

## Adaptations

This can be based on any geographical location that is relevant to the curriculum.

Students may work together to create their own landmarks.



# Sgraffito Storytelling

Groups of 5 students

Preparation timing - 20 to 45 minutes

Workshop timing - 1 hour +

Fire work afterwards

## Materials

- Leather hard clay slabs (approx. 2 bags)
- Plain paper for templates and designing
- Coloured slip (2-3 colours if possible)
- Wide paint brushes or sponges
- Clay cutting tools
- Pots for coloured slip
- Etching tools, cocktail sticks or small BBQ sticks
- Other mark making tools
- Newspaper
- Rolling pin
- 2 guides
- Cutting wire
- Hair dryer
- Sponges

## Overview

Students will learn about the decorative technique of sgraffito. They will explore how to use illustration as a tool for self-expression and storytelling. The purpose of this task is to help students communicate visually. This allows them to express themselves in alternative ways that can help build verbal communication by encouraging the student to discuss their approach to the storyboard. Developing into a group task, students build on collaborative skills such as leading, problem solving and active listening.

## Outcomes

Expressing a story through images

Considering line and image composition and how it relates to story

Exploring mark making

Communicating within a group and considering others' ideas

Analysing and evaluating own and others' work

## Curriculum links

English: Use discussion to learn, elaborate and clearly explain understanding and ideas

Art: Visual and tactile language development using formal elements

## Preparation for teacher

Cut out paper templates for the tiles approx. 15cm square.

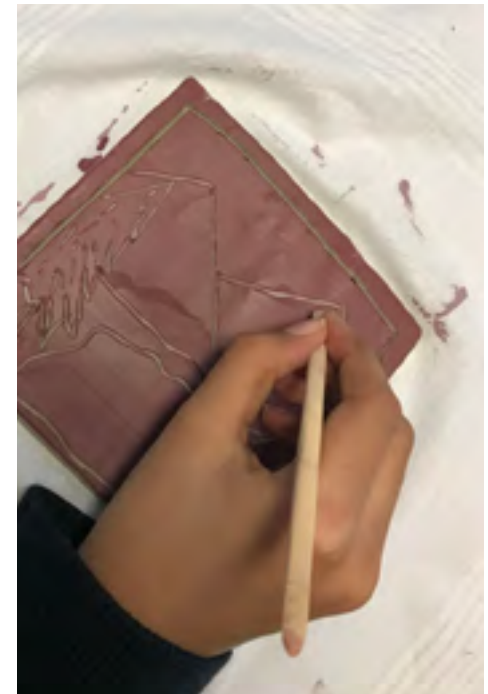
Roll out clay slabs approx. 1cm thick, big enough for the paper templates. Allow them to go leather hard. If preparing the day before loosely cover the clay with a plastic sheet to slow the drying process. Alternatively, students can do this to lessen preparation time.

Pour coloured slip into pots, enough for the class to share.

Hand out a piece of newspaper for each student to work on.

Prepare a demonstration tile with slip painted on.

Option: Show sgraffito artist examples.





# Sgraffito Storytelling (continued)

## Instructions

1. Introduce students to sgraffito technique:

Sgraffito is a decorative technique where layers of coloured slip are applied to the surface of leather hard clay, then designs are etched into the surface of the clay, revealing the colour of the clay underneath.

2. Demonstrate to the group how to cut their tile shapes from the clay slabs using the templates. Students can then cut their own tiles. This is the best stage to add their names to the back of their work if firing the tiles. Then ask the students to apply a thin layer of slip to their tiles using a brush or sponge. When the slip has gone from shiny to matt, paint another thin layer and leave it until it is touch dry. A hairdryer can be used to speed up the slip drying process.

3. Once the students have painted their tiles, place them to one side to begin the design process.

4. Get the students into groups. Each student should decorate a tile which will form a story when joined together.

5. In groups, the students discuss what their story will be and draw the designs for each tile on paper. Encourage students to include as much detail as possible to make the most of the space on the tile. When ready each group should present their ideas to the class. This is a

good opportunity for students to give feedback on each other's ideas and make any changes if needed.

6. Next demonstrate the sgraffito technique by using a tool to score into the slip and reveal the colour of the clay underneath. Make sure to note that the technique is scraping off the layer of slip and not digging too deeply into the tile which can cause them to split. If there are any bits of slip that have been scraped away stuck to the tile wait till it is dry before brushing them off to ensure the design isn't smudged.

7. The students can now apply their designs onto the tile.

8. At the end of the session, see how the students feel about their storyline:

**?** Do they feel the story is easy to understand?

**?** What do they think of their group's mark making techniques?

## Adaptations

Using more tiles you could create a complex story. During the group discussion about their planned stories, they could explore how each group's stories could combine to make a whole class story.

The focus of the subject is open, meaning this can work across the curriculum to build knowledge on any topic the students are studying.



# Paper Resist

Groups of 5 students

Preparation timing - 15 - 35 minutes

Workshop timing - 50 minutes

Fire work afterwards

## Materials

- 1 bag of clay
- Coloured slip
- Pots for slip
- Paper
- Scissors
- Cloths or boards
- Pencils
- Cutting tools
- Cocktail sticks
- Rulers
- Sponges
- 2 guides
- Tile stencils
- Wide paint brushes
- Newspaper

## Overview

This activity explores how simple imagery can be used to convey a message. It encourages students to identify and extract the core

elements of an event and present them in a way that the viewer can understand without text. This strengthens visual and tactile language.

## Outcomes

Expressing an experience or event by extracting the key themes

Expressing a story through images

## Curriculum links

English: Build competence in speaking and listening, making formal presentations, demonstrating to others and participating in debate

Art: Discuss ideas, observations and insights relevant to intention

## Preparation for teacher

Roll out slabs of clay enough for a tile per student. Allow the clay to go leather hard. If preparing the day before, loosely cover the clay with a plastic bag to slow the drying process. Alternatively, the students could do this to lessen preparation time.

Put coloured slip into pots and distribute around the class. The variety of colours is up to you.

Cut out some square (or any other

shape) paper templates, enough for one each.

Hand out a piece of newspaper for each student to work on.

Hand out the slabs of clay, paper templates and cutting tools.

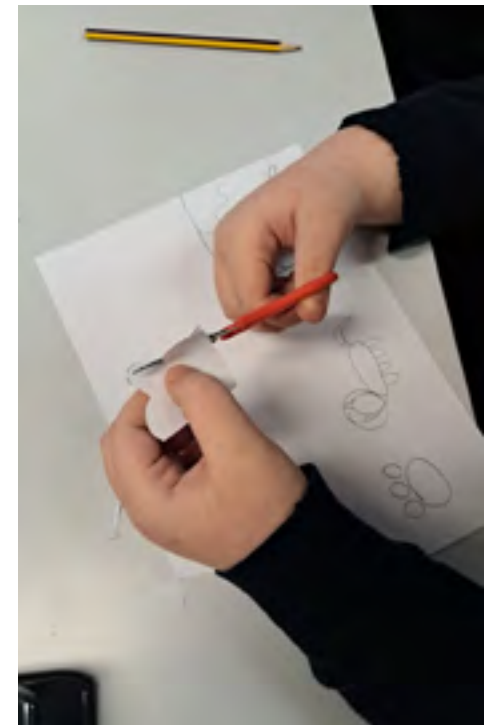
## Instructions

1. Ask the students to use the paper template to cut out a tile from the slab of clay. Wipe around the edge of the tile with a damp sponge to smooth the edges.

2. Using the template or some plain paper, students need to think of an event or personal experience that they can draw for their tile design. The design only needs to be an outline as it will be cut out. Challenge students to think about an experience to be represented in their work. How can they tell a story in a single image? This could be a personal story, something historical, or related to something they are working on in school.

3. Cut out the design and place the pieces on the tile. They need to stick to the surface of the clay, so the coloured slip doesn't run underneath. If the clay is a bit dry, wipe it over with a damp sponge.

4. Once all the pieces are stuck to the tile, paint a layer of slip over the whole tile. Leave it to dry until the slip has gone matt. You can use a hairdryer to speed up this process. If the slip is thin and you can still see





# Paper Resist (continued)

the colour of the clay underneath, you can add another coat of slip.

5. Once the slip goes matt, peel off the paper using a cocktail stick or sharp tool, being careful not to scrape off any of the slip on the tile. This will reveal the design.

6. At the end of the session, invite the students to look at each other's work in groups and see if they can decipher the story they are telling from their work.

**?** Have they been successful in telling their story or would they do something different next time?

## Adaptations

You can use more than one colour on a tile. If you place some of the paper cutouts on the tile, add a coat of coloured slip and allow it to dry till it has gone matt, you can apply the other paper cutouts on top and then paint/sponge on a different coloured slip. When you peel the paper off you will see some areas with the colour of the clay and others with the first colour of slip revealed.

Any theme or topic can be used across the curriculum, such as recounting an historical event for History or RE lessons. This could also be used as an alternative theory lesson within PE to recall a sporting event or strategy.





# Collaborative Coiling

Groups of 5 students

Preparation timing - 15 minutes

Workshop timing - 50 minutes

Recycle clay afterwards

## Materials

- 2 bags of clay
- Cloths or boards
- Cutting wire
- Sticky notes and pens

## Overview

This is a collaborative activity which relies on the students communicating with each other in a variation of the association game. It culminates in the production of a group coiled sculpture. This is a good activity to follow on from the 'Skills Chains' activity.

## Outcomes

Finding commonality, exchanging experiences, forging connections with peers

Promoting group connections and building understanding

## Curriculum links

English: Use discussion to learn, elaborate and clearly explain understanding and ideas

Art: Discuss ideas, observations and insights relevant to intention

## Preparation for teacher

Cut the clay up into small chunks that can be rolled into coils and distribute them between the groups.

Roll one coil on to each board as a starter.

Write one word from a previous session on a sticky note per group to start them off or ask students to come up with their own starting word.

## Instructions

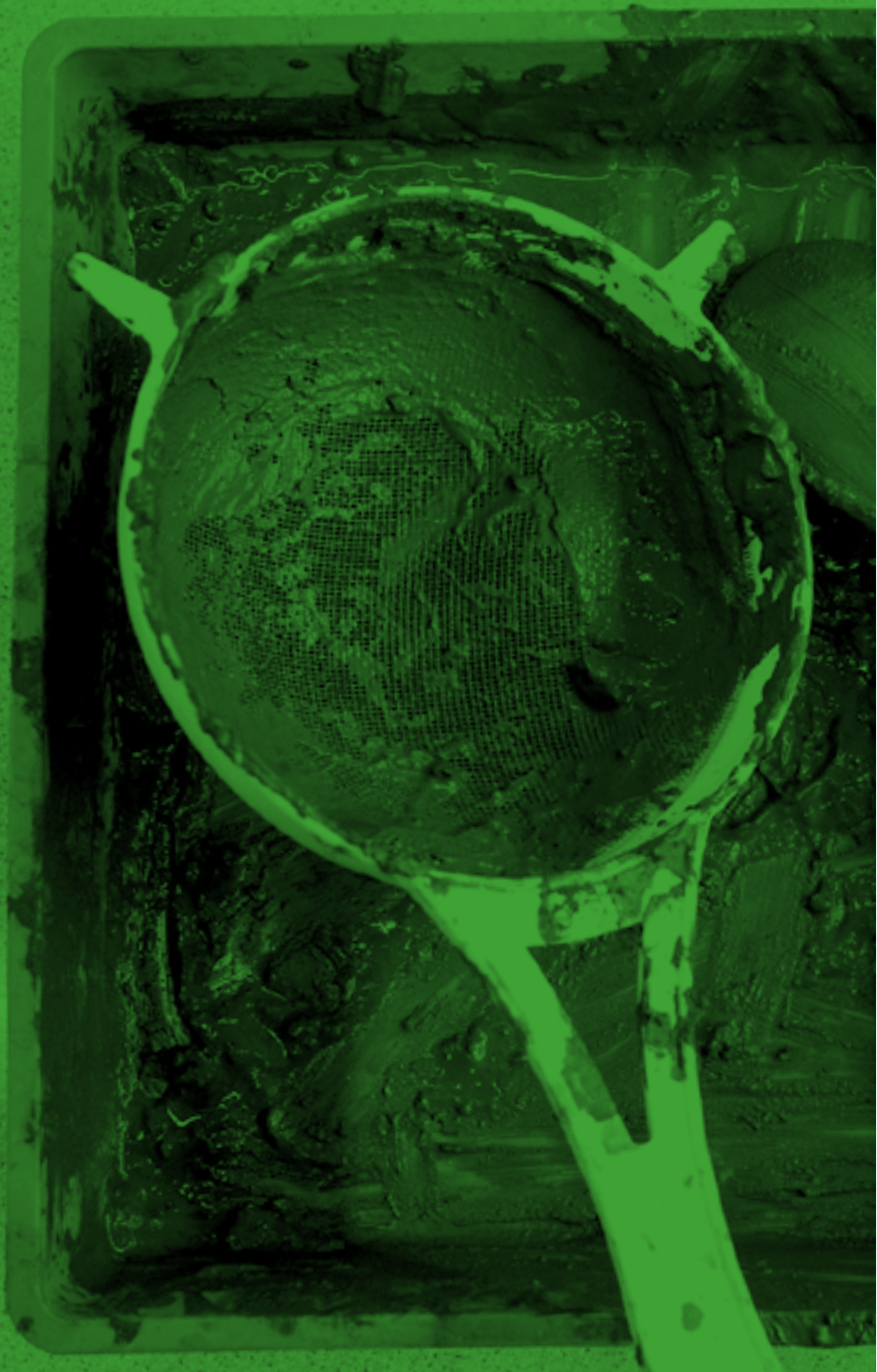
1. Get the class into groups and hand out their starter word and some sticky notes.
2. Using word association, take turns to write down a word on a sticky note and add it to the table. Take a piece of clay and add it to the coil on the board. Continue around the group adding a word and a coil at a time, slowly building a large, coiled sculpture.
3. Once finished, the group can share the words they have used. Encourage discussion of what they think the connections between the words are.
4. At the end they can gather the clay sculptures in a ball to recycle.

## Adaptations

This could also be used in other subject areas, like Geography or History to test knowledge of names of places and landmarks or historical events.

Students could also research a subject area, with each sticky note being filled with a fact or observation and a competition element to have the tallest coil sculpture.





# Safety Notes

## Clay dust

When working with clay it is important to avoid making clay dust. When inhaled it can build up in the lungs and cause respiratory illnesses. The risk of this is minimised by following a few easy measures:

- Do not 'dry clean' with brushes, always use a wet mop or damp sponge to clean.
- Avoid breaking up and handling clay when it is dry.
- Students must not rub their hands together or clap with clay on their hands.
- Clean up whilst the clay is still wet.
- Where dust cannot be avoided wear appropriate Personal Protective Equipment (PPE).

## Kiln safety

Do not open your kiln above 100°C. As well as being hot it can cause damage to the kiln elements and reduce their lifespan.

It is important to get annual kiln maintenance to ensure the kiln is safe.

Kilns are very well insulated but still get hot on the outside. Do not place any combustible materials within 30cm of the kiln.

Avoid large quantities of combustible materials in the kiln. Small amounts of newspaper that may stick to a piece will burn off, but you should always remove as much as possible.

Make sure the area is well ventilated and follow the manufacturer's ventilation instructions.

It is good practice to have the kiln reach peak temperature whilst there is someone in the room. Most kilns can be set with a delay time, so you can set it to turn on early in the morning. If in doubt, ask for advice.



# Technical Notes

## How to join clay

Joining clay together properly is important as pieces not secured properly will fall apart in the kiln or as they dry.

You will need:

- Slurry
- Scoring tool (cocktail sticks or small skewers work well)
- Paint brush
- Clay items to join

### Instructions

1. Score both the surfaces of the clay that are going to be joined together in a crosshatch pattern. This increases the surface area in the joint and blends the two parts together when joined.

2. Paint a thick layer of slurry on the surfaces and press them together firmly. Any excess can be wiped away with a brush or a sponge.

Note: Sometimes clay comes out of the bag very soft. For techniques like coiling you may not need to use slurry to join the clay.

## How to roll a slab

You will need:

- Clay
- Cutting wire
- 2 guides (strips of wood as thick as you want the clay)
- Board
- Rolling pin

### Instructions

1. Cut a piece of clay from the bag, big enough to make your slab.

2. Place it between the guides, leaving a space between them and the clay, but not wider than the rolling pin.

3. Roll your clay out, turning and rotating it between rolls until the rolling pin hits the guides and it won't roll any thinner.

Note: Clay will stick to most school tables, so it must always be rolled on a board or cloth. If you need to re-roll a slab, don't fold it up, the clay must be wedged back together properly, to ensure air bubbles are not trapped in the clay.

## Reclaiming and re-using clay (including making slurry & wedging)

Several of the workshops are designed so that the work can be squashed at the end. Recycling clay is great for saving money and the environment and we encourage students to understand why we don't need to fire everything. It also allows students to experiment and realise that not everything needs to be a finished piece.

### Reclaiming clay and making slurry

You will need:

- Clay that needs recycling (break it up into small pieces whilst wet and leave it until it is bone dry)
- A bucket
- Water
- Plaster slab (this is not essential but makes the drying process much quicker)

### Instructions

1. Allow the clay to dry out completely. It is best to break the clay up into smaller pieces as it will dry quicker and slake down faster

later. Don't break the clay up once it is dry as it will create clay dust which should not be inhaled.

2. Place the dry clay into a bucket and cover it with water. Leave this overnight to soak in fully. You will be able to hear air escaping from the clay as the water pushes in between the layers of clay.

3. Syphon off the water on top of the clay as much as possible. Then mix the clay into a smooth consistency. You can take some of the mixture out at this point and save it in an airtight container to be used as slurry for joining.

4. Now spread the mixture on to a plaster slab. The plaster will speed up the process of removing water from the clay. As it dries lift up the mixture and turn it over so





# Technical Notes (continued)

that it dries evenly. Leave it on the plaster slab until it has reached the same consistency as clay fresh from the bag.

5. Now you need to wedge the clay before putting it back in the bag.

## Wedging clay

Wedging clay removes air bubbles from the clay and makes sure it has an even consistency throughout. Soft clay that has been used during a lesson can be wedged back together and re-used. Clay that has been recycled will also need to be wedged before using. As well as these instructions you can find online videos demonstrating the technique.

You will need:

- Clay
- Large board

## Instructions

1. Place a lump of clay on the board at a size you feel you can work with comfortably.

2. There are two main ways to wedge clay, the ram's head method and spiral wedging. We will describe the ram's head method.

3. Ram's head wedging: With the

clay in front of you press your palms into the clay, pressing away from your body into the table, with your fingers resting over the top of the clay.

4. Pull the furthest part of the clay towards you keeping the closest part on the table

5. Being careful not to fold the clay, push the clay back in.

6. This will produce a rocking motion as you push the clay in, down and away from you before pulling it back.

7. Repeat this motion until you have a smooth consistency throughout with no air bubbles.

## States of clay

### Slurry

Slurry (sometimes referred to as slip) is a liquid clay that can be used for joining clay components together. Decorating slips are also a liquid clay but have a coloured pigment added to them and can be used for techniques like sgraffito and paper resist. Slip can also be used to cast pieces in plaster moulds.

### Wet clay

This is how clay comes out of the bag and is malleable enough to be used to model with.

### Leather hard

Clay that has started to dry out and has a leather hard feel. This is a useful state for decorating with slips, adding details and joining pieces together that would deform if still wet.

### Greenware

This is clay that has fully dried out (bone dry) and is ready for either firing or putting through the reclaim process. Clay should be fully dry before firing as any remaining moisture will evaporate quickly and expand in the kiln potentially breaking the work apart. The clay is most fragile at this point and will need to be handled carefully, as any pieces that break off cannot be stuck back on. If pieces are being fired it is important to smooth any edges with a damp sponge at this stage or the leather hard stage as they can become sharp after firing.

### Bisque

This is clay that has been fired once to around 1000°C (depending on the clay firing range). At this stage the clay has changed chemically and physically and is now ceramic. At this stage the ceramics are strong enough to be handled, but the surface is porous enough to absorb glaze.

### Glaze ware

This is the second firing which

melts and fuses the glaze to the ceramic surface creating a non-porous surface.

## Air bubbles in clay

When making pottery we want to avoid air bubbles in clay. This is because it can increase the chance of it exploding or breaking in the kiln due to the air expanding as it heats up. The most common cause of air pockets in school workshops is when students re-use scrap clay or fold up a piece of work to start again. It is important to emphasise that the clay needs to be wedged to remove the air bubbles or to give the students a fresh piece of clay to work with.

## Glazing

Glazes come in a huge range of colours, textures and surface finishes. When glazing students work we commonly use lead free transparent glossy glaze which is available from most ceramics suppliers. When purchasing glaze check the firing temperature of the glaze is within the firing range of the clay used.

Glazes can be either painted on with a wide paint brush or dipped into a bucket. It can be brought ready mixed or in powder form. If you are mixing it up from a

# Technical Notes (continued)

powder, you are aiming for a single cream consistency and you must wear PPE and follow the manufacturer's safety guidelines.

Once the work has been glazed wipe any glaze off the bottoms of the work where it will contact the kiln shelf, otherwise it will fuse to the kiln shelf.

## Firing

Firing clay turns it into a ceramic material. It creates chemical and physical changes in the clay and glazes. Most modern kilns have a controller that can be programmed to fire at different temperatures. You can also use pyrometric cones to check the temperature your kiln is firing at. This is particularly useful as kilns will vary over time.

### Loading your kiln

Make sure you give yourself plenty of time to load a kiln. It is much like Tetris trying to fit all the pieces in and there's nothing worse than accidentally knocking a bit of a student's work off when rushing.

Kilns are packed using shelves to place the work on, with heavier work at the bottom and lighter work at the top. Shelves are separated using props. You should always use three props per shelf and make sure they are in line with the props below.

For the first firing, when there is no glaze on the work you can stack the work on top of one another as much as it will allow. Remember greenware is fragile and brittle at this stage. For the glaze firing all work must be separated or they will stick together.

### Looking after kiln shelves

Small bits of glaze can drip onto shelves and if glaze is not wiped off the bottom of the work they will fuse to the shelf, so always check the bottoms of your pots before you place them in the kiln. To help preserve the kiln shelves and make removing glaze drips easier, paint them with a layer of batt wash. You can make your own using 2 parts alumina and one part china clay or you can buy it ready made from your local ceramics supplier.

### Programming and firing your kiln

Kiln firing programmes have different sections called segments. Each segment controls the speed per hour at which it fires (the ramp) and the temperature it goes to, and how long it stays at that temperature (hold).

### Bisque firing

This is the first firing, which turns clay into ceramic. Work must be really dry before going in the kiln as excess moisture can cause the work to explode in the kiln. When

it comes out of the kiln the surface will still be porous, ready for the glaze to be applied.

### Sample bisque firing

Segment 1 - ramp 40°C per hour, up to temp 210°C

Segment 2 - ramp 100°C per hour, up to 500°C

Segment 3 - ramp 200°C per hour, up to 1000°C - hold 30mins

Your kiln will have a spyhole with a bung in it. Leave the bung out until the kiln reaches 500°C to allow moisture out.

### Glaze firing

Once the work is bisqued it can be glazed and refired. The temperature of the kiln will be higher as the glaze will need to melt. Make sure none of the work in the kiln is touching and that there is no glaze on the bottom of the work.

Depending on the clay used there will be different firing temperatures. There are 2 main types, earthenware (1020°C - 1120°C) and stoneware (1200°C - 1320°C). You will find the firing range either on the bag of clay or online from the supplier.

### Sample glaze firing

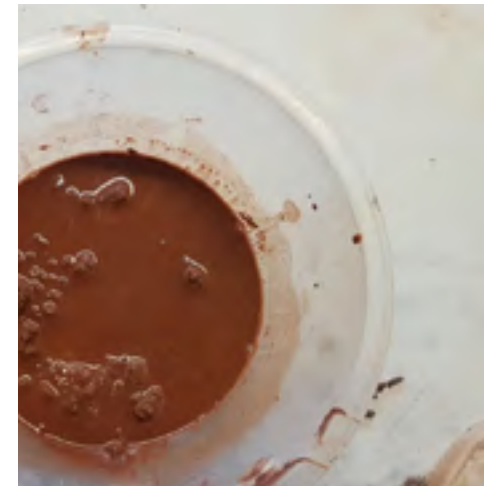
Segment 1 - ramp 40°C per hour, up to 210°C

Segment 2 - ramp 150°C per hour, up to 1000°C

Segment 3 - ramp FULL, up to 'the recommended firing temp' - hold 30mins

### Pyrometric cones

Most kilns will have a thermocouple inside which measures the temperature of the kiln. These are accurate but can be affected by the age of the kiln, how full the firing is and how old the thermocouple is. In larger kilns you will also find a slight variation in temperature between the top and bottom. Pyrometric cones are designed to bend over at different temperatures and can be placed at the top and bottom of the kiln to see what temperature the kiln actually fires at.





# Glossary

The words in this glossary have been chosen and defined by the students on the Transferer project. They represent some of their favourite words to do with ceramics and are not an exhaustive list.

**Bottle kiln** – A big furnace that heats up clay and hardens it. It is no longer used but to power it you would use coal to heat it.

**Collaboration** – Coming up with an idea with multiple people (in a group) to create a masterpiece.

**Colour co-ordination** – Where you get two or more colours and you decide what colours go well next to each other.

**Fettling** – A way to make your art look even better, by removing rough edges.

**Firing** – Baking the clay in a kiln to harden it.

**Glaze** – It gives the clay a nice finish and it makes the fired clay shiny (when a glossy glaze is used).

**Hand building** – A way to shape the clay using different techniques, like coiling, moulding and slab building.

**Kiln** – A large oven where clay is fired at over 900°C.

**Sculpting** – Turning a block of clay into something, using shapes and tools to manipulate the clay.

**Sgraffito** – When you scratch off a layer of slip to make a pattern on the clay.

**Slabs** – Flat clay that you can use to paint on with coloured slip.

**Slurry** – A mixture of clay and water, that can be used to join two different pieces of clay together.

**Texture** – The way the clay feels.

# Acknowledgements

## Transferer delivery team and guest artists

Natalie Armitage

Simon Bayliss

Sue Blatherwick

Emily Campbell

Andrew Erskine

Rhiannon Ewing-James

Sarah Fraser

Jo Loki

Willow Mitchell

Emma Price

Alexandria Rabishaw

Merida Richards

Alice Thatcher

## Schools and lead staff

Haywood Academy –  
Helen Morgan

Thistley Hough Academy –  
Julia Rogers

## Funder

Paul Hamlyn Foundation

## Supporters

Arts Council England

Gener8

Smithfield Stoke-on-Trent

Stoke-on-Trent City Council

University of Staffordshire

V&A South Kensington

V&A Wedgwood Collection

**BCB wishes to thank all of the staff and students for their participation in the Transferer project.**



The Transferer project was delivered by the British Ceramics Biennial with funding from Paul Hamlyn Foundation via the Arts-based Learning Fund.

Photography Jenny Harper, Willow Mitchell, Emma Price, Alice Thatcher, Clare Wood



Supported using public funding by  
**ARTS COUNCIL  
ENGLAND**

