

INNOVATE

Teacher toolkit



# Introduction

The following toolkit, co-designed with professional designers and teachers, gives an outline of how you could run V&A Innovate with your school. There are activity ideas and printable tools for students to support them throughout the V&A Innovate design journey. These are suggestions only, and we encourage you to adapt them based on your students and the time you have available.

With special thanks this year to: teachers Sarah Dowley, Jonathan Harvey, Faye Eveleigh, Anouska Smith and creative technologist, Jude Pullen.

*Thanks to contributors from previous years including teachers Alexandra Bowker, Wendy Da Costa, Leanne Ronayne, Helen Vardy, Stephanie Sweeney, Kate Windle, Rebecca Critchley, Russell Hill, and Tracey Shahlavi; artist Gayle Chong Kwan; and designers Hefin Jones, Ella Britton, Maraid McEwan and Seetal Solanki.*



V&A Innovate National Schools Challenge Overall Winners 2024–25, Manor CE Academy, York  
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# Welcome to V&A Innovate

V&A Innovate is an annual National Schools Challenge asking students in Years 7, 8 and 9 at state-funded secondary schools to work in teams of four, five or six to come up with a solution to a real-world problem. Students explore one of three themes and follow a human and planet-centred research and design process to come up with a new design idea. Students could imagine a new object, building, service, item of clothing, apps, graphic design. They can work in whichever design discipline is best placed to tackle the issue they have identified through research.

This year's themes are: Reimagine, Join and Rest. They have been developed with teachers and students and are inspired by objects in the V&A collection, and issues we are facing in the world today.

To enter, student teams create two A3 design sheets to share their design process and ideas. A panel of industry judges review the entries, and ten finalist teams win the chance to visit the V&A to pitch their ideas to the judges at our annual Pitching and Awards Day.

## Timeline:

- Challenge themes are announced in the summer term.
- Deadline for entries is Friday 6th March 2026 by 23:59. Pitching and Awards Day will take place in June 2026 at the V&A, South Kensington, London.

## Entry requirements:

Each team of four to six students can only submit one idea. There is no limit on the number of submissions per school. All entries must be submitted by a teacher.

## Submission spec:

Submit two A3 design sheets as JPEGs or PDFs. Max. total email size 10MB. If you need to send an email over 10MB please use a file sharing service with access granted to [innovate@vam.ac.uk](mailto:innovate@vam.ac.uk).

If submitting on design sheets isn't suitable for your students, please contact [innovate@vam.ac.uk](mailto:innovate@vam.ac.uk) to discuss alternatives, including video submission.

## How to submit:

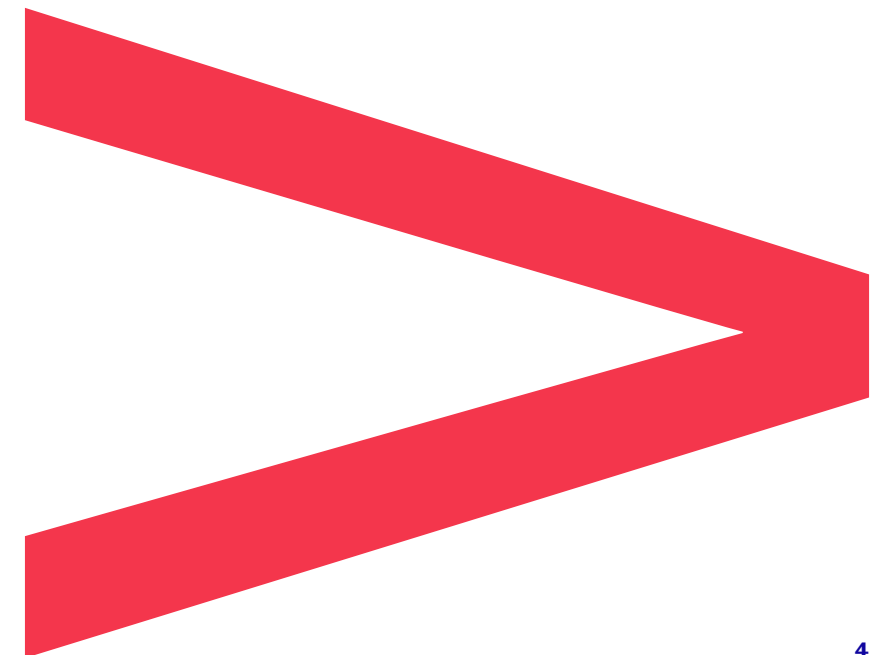
1. Complete the teacher evaluation and submission form, found here:



2. Ask your students to complete the student evaluation form, found here:



3. Email [innovate@vam.ac.uk](mailto:innovate@vam.ac.uk) attaching the A3 design sheets. Each JPEG/PDF must have your school and team name in the file name. The subject heading of the email should be: '<school name> V&A Innovate Submission'





# Themes

This year's V&A Innovate themes are:  
Reimagine, Join and Rest.

Use the Theme Inspiration pack to introduce your students to the themes through objects in the V&A collection and past student ideas.

The themes are broad and open to allow for creative and imaginative responses across design disciplines and to encourage students to find problems they are interested in and want to explore through design. You might give your students the choice of which theme they'd like to focus on, or you might want to choose one to give to the whole class.

We have provided some suggested starting points for each theme to help guide students' research. If some students are finding it difficult to identify a problem they want to tackle within their theme, you could provide them with a more structured brief as a starting point or use the Observational Diary tool on page 9 of the Student Toolkit to help identify an everyday problem to get them started.

## Reimagine

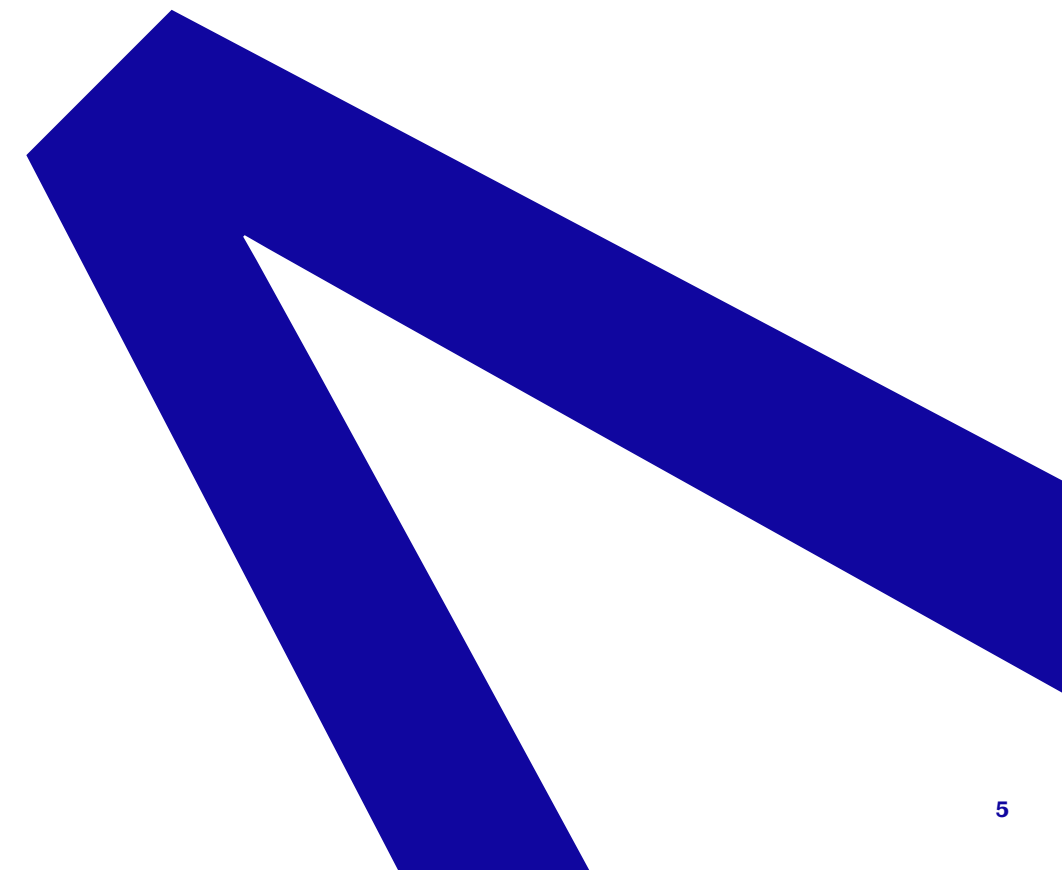
How might we rethink and reshape our surroundings to build a more sustainable future?

## Join

Are we aware of key issues? Can a product or design help us become more powerful as a whole?

## Rest

Why do you 'Rest' and what happens when you do?



# How to Deliver

As the facilitator for V&A Innovate, your role is to kick-start the creative culture required to make the process enjoyable, productive and inspiring for the students.

## Time

How long do you have to deliver V&A Innovate? This is up to you as the facilitator. Could it run over a term as an ongoing project in a creative subject? As an 'off timetable day' perhaps relating to Enterprise, Science or with a PSHE focus? As an extracurricular club for enthusiastic innovators?

We recommend planning for a minimum of 6 hours to deliver the project. Later in this toolkit we have produced an outline of 6 x 1-hour sessions, as well as an overview of how you could deliver an off-timetable day. There are suggested timings for activities within the sessions, but you can adapt these based on the time you have available and your setting.

## Network

The people and places in your town, city or community could offer valuable inspiration. Could V&A Innovate be the start of a network of like-minded, socially conscious and creative people and places around your school? When and where could you factor in inspirational visits, or visitors, to support the creative process? This could be online or in-person.

Could you invite older students to support the project? Could they share their knowledge or be available to provide feedback and test out prototypes?

Could local museums, galleries and/or arts spaces be useful to contact? How about makerspaces and hubs, colleges and universities, creative studios and workshops, or even local industry? Could you or the students contact a local or national charity or business to support research?

## Space

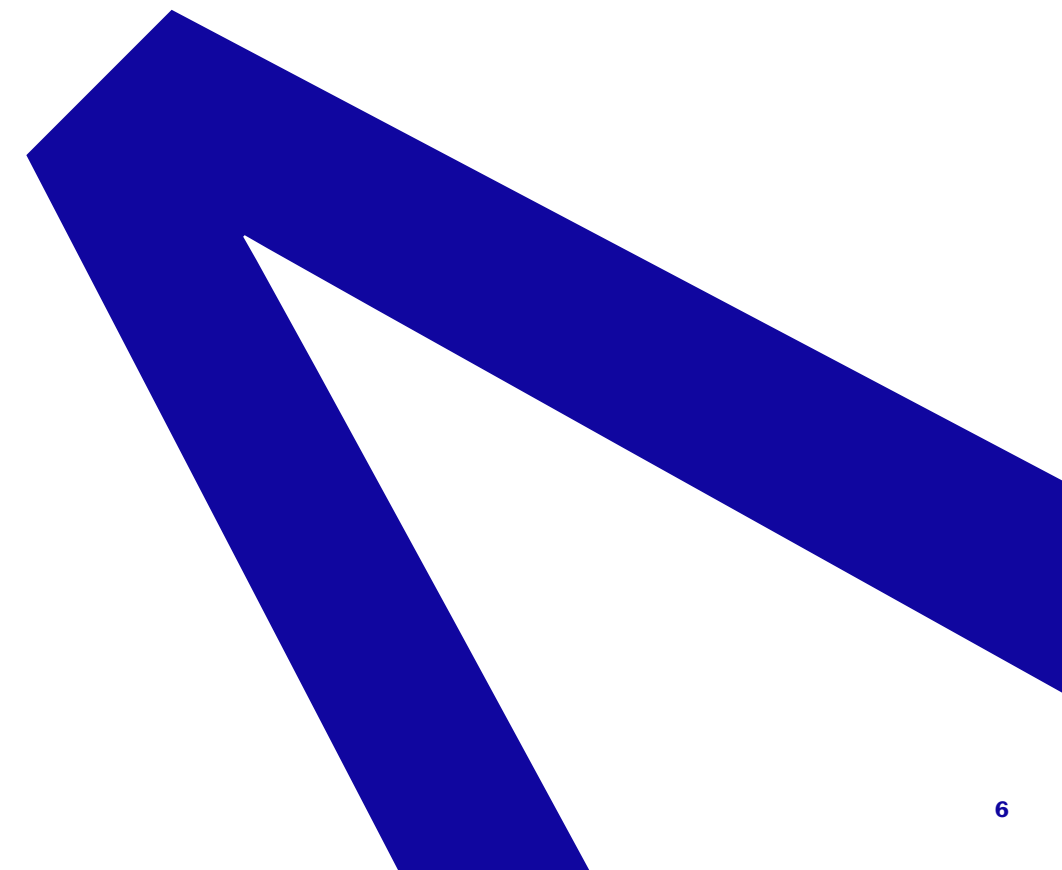
Could V&A Innovate become the culture and environment of your classroom? Could a dedicated space be found – whether a room, wall or fold-away boards – to inspire the creative process? Or an online space for students to find inspiration and share ideas with each other?

## Celebrating success

How could taking part in V&A Innovate help raise the profile of creative subjects in your school? Could you run an internal pitching day and invite SLT, local charities or businesses to judge student ideas?

Each student that takes part receives a certificate. Could you run an assembly to celebrate your students' work and hand out certificates?

If your students are shortlisted, could you contact local press to get the word out about your students' achievements? Many schools have been in the local paper and interviewed on the radio.



# How to Deliver

## Teamwork

Eight top tips to help make group work, work! Activities throughout the session plans draw on these tips.

### 1. Pre-plan your groups

The better you know your class and your students, the better equipped you will be to assign groups. If the class is new to you then try to speak to a form tutor or previous teacher to get a better insight. From reading ages to SEND, try to get an evenly balanced and supported group.

### 2. Ensure students understand the benefits of group work

Emphasise the importance of working together on the challenge. Draw comparisons to real world scenarios; in the future they will be required to work within teams. Explain how using skills of collaboration, communication and compromise can help benefit them as a team.

### 3. Allow students to take ownership of group roles

It is important each student understands their role within the group. Who will be the team leader, the head designer, the researcher, the prototype coordinator? By sharing responsibilities, you will have a range of lead learners within the classroom to whom you can direct students for support.

### 4. Give clear goals for each group interaction, structuring group tasks to ensure all students participate

It may be necessary to set success criteria even for small group tasks. For example, if you are asking students to discuss a particular topic, structure their conversations by making a list of questions on the board and make it clear you could ask any group member what the group have discussed.

### 5. Make the group accountable

When an individual student gives a great answer, it is important to celebrate the group rather than the individual. This helps team building and incentivises all students to contribute. You will see students become focused on ensuring all within the group understand, helping the individual and in turn the group.

### 6. Give students exemplars to critique together

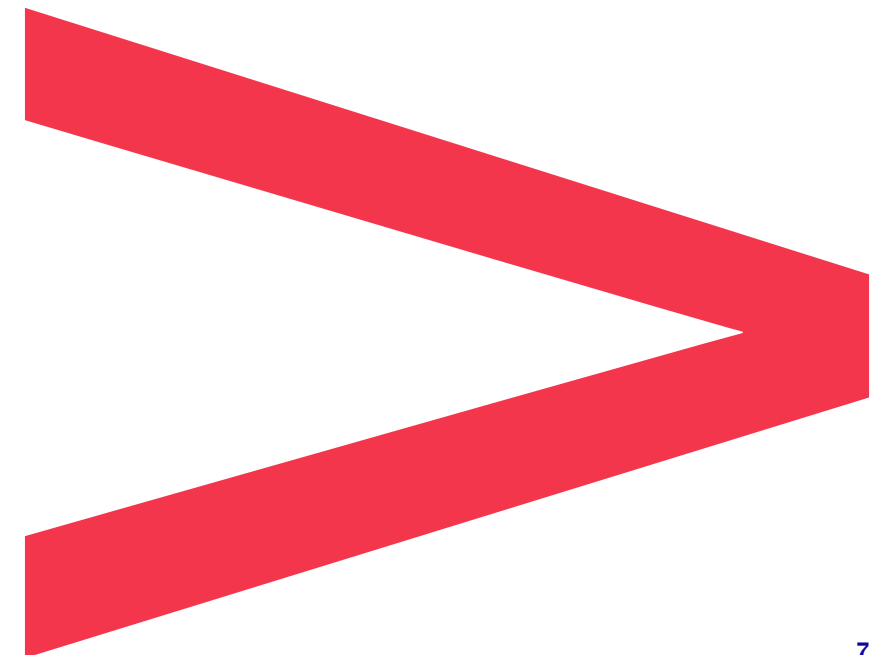
Give students a range of past V&A Innovate submissions and ask them to rank them, being prepared to justify their order. When the group start to pick out areas of strength and improvement they can start to apply this thinking to their own projects.

### 7. Build in time for individual assessment and contribution

This is important if you are running the challenge as part of your curriculum. Consider what tasks could be beneficial for students to complete individually, for example conducting individual research to bring back to the group. Consider having a group and individual booklet to help monitor both stages of progress.

### 8. Pre-plan opportunities for peer feedback

Allow time once individual work is completed for the group to come back together to discuss and review their ideas, findings and thoughts. Emphasise the development of the skills of compromise and collaboration here, as they take their collective ideas and iterate and refine them.



# Judging Criteria

When reviewing your work for the V&A Innovate National Schools Challenge, this is what the judging panel will look for:

## Process

Students have developed the following skills:

### Research

- Considered how the theme relates to people and places locally
- Spoke to people to properly understand the problem

### Making

- Made a model, prototype or digital mock up of their idea

### Iteration

- Tested their ideas with people or in context and taken feedback on board

### Collaboration

- Worked together as a team throughout the journey

## Idea

Students have created a design that is:

### Impactful

- Human-centred: Designed a solution that answers a need
- Planet-centred: Taken into account the environmental impact of their idea

### Innovative

- Developed a creative, exciting and original idea

## Design sheets

Students must enter their idea on two A3 design sheets.

Students submit design sheets that:

- Share their idea clearly, explaining what the concept is, what problem it is trying to solve, who it is for and how it works
- Share their idea creatively through a range of methods (photographs, technical drawings, models, mock-ups, text, links to websites, infographics, quotes from study)
- Describes their design journey from research to final idea, showing how they answered their own design challenge

## Top tips

We are looking for bold, creative ideas – something that has the potential to have real impact with real people.

There is no right or wrong way for students to present their ideas but make sure it is clearly communicated visually so that the judges can understand their thinking.

A strong entry includes evidence of each of the judging criteria, e.g. an annotated photograph showing the group working together and explaining everyone's role is one way to show collaboration.



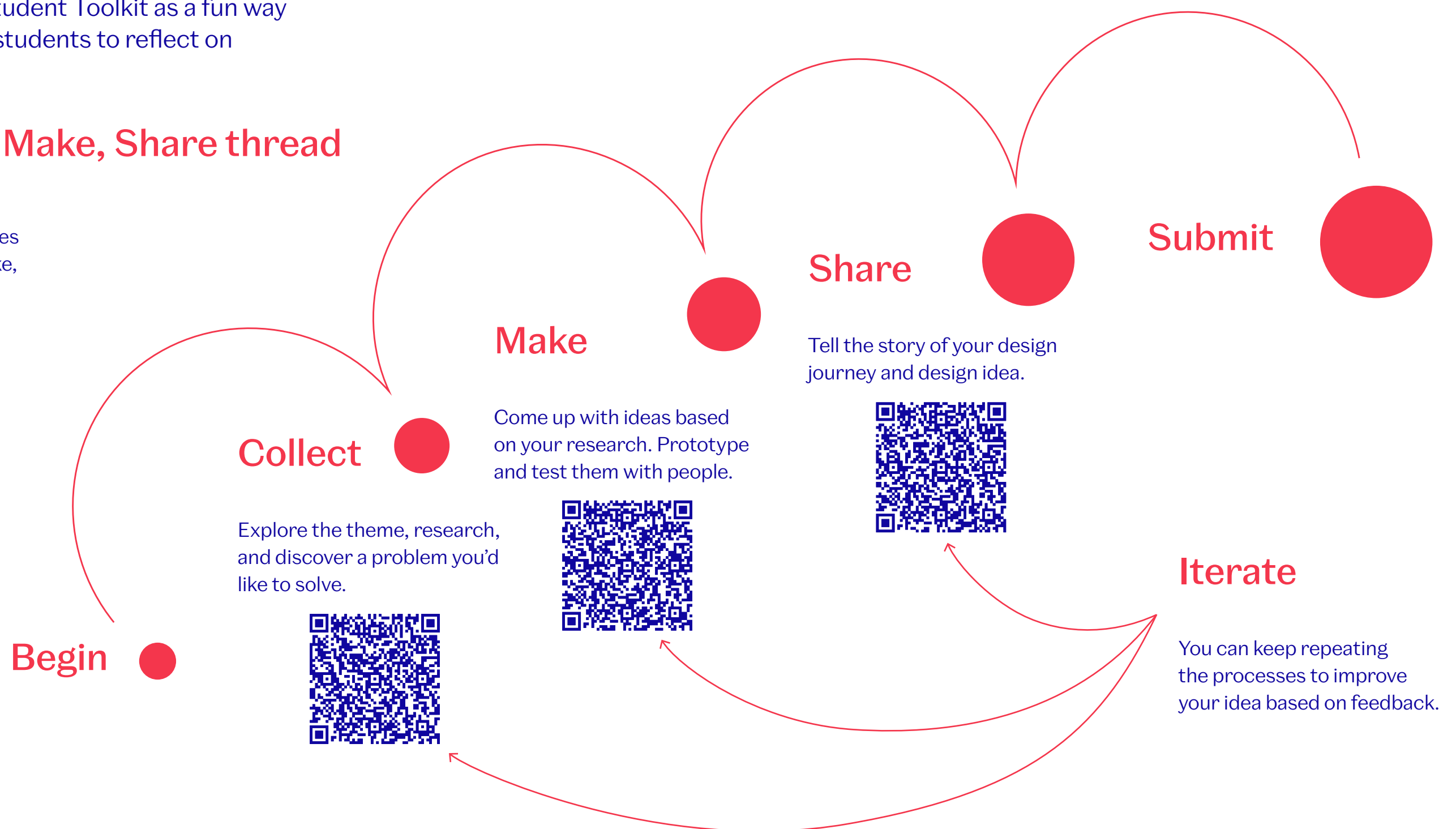
# V&A Innovate journey design process

V&A Innovate encourages teams to follow a human and planet-centred design process with three stages: Collect, Make, Share.

At the end of each stage, you can run a review to help students get ready for the next part of the process. You may want to use the Roll and Reflect die in the Student Toolkit as a fun way to encourage your students to reflect on their progress.

## The Collect, Make, Share thread

Scan the QR codes to watch our previous judges discuss the Collect, Make, Share process.



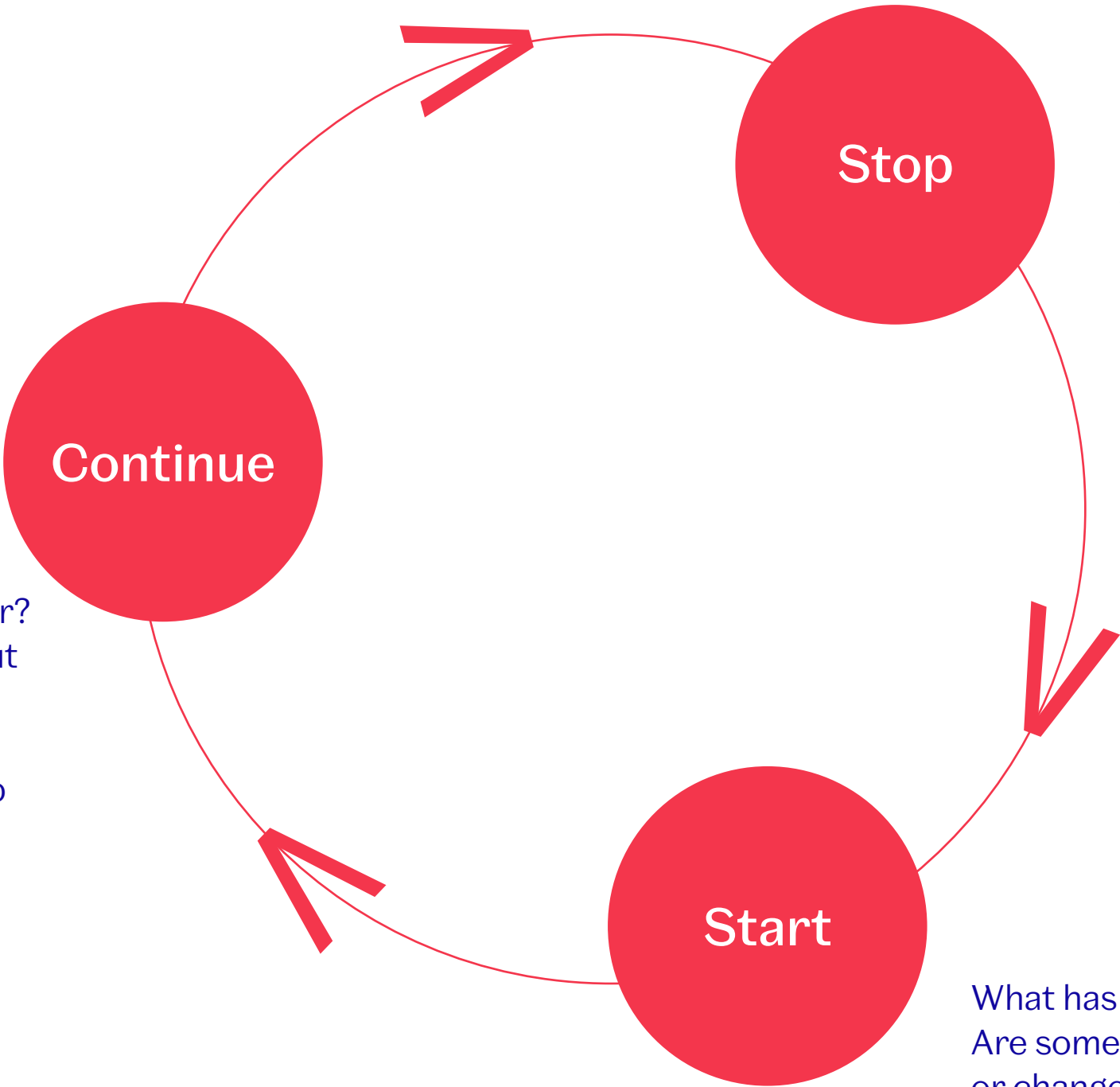
# Reflection

We encourage using reflection as a tool for reviewing and sharing feedback from students at each stage of the process. The prompts below can be used alongside the Roll and Reflect die in the Student Toolkit. Encourage students to record their feelings and reflections through notes and drawings throughout. These can be included in their submissions.

You can use Stop, Start, Continue as prompts to encourage reflection, reviewing and feedback.

What has worked well so far?  
What is the best thing about your project?

Give yourself or your group some praise, note these down and keep going!



Look back at what you have achieved so far.

What have you come up with?  
What have you enjoyed or found difficult?

Identify the things you can stop doing. Letting go of ideas and feelings is all part of the process.

What has been missing so far?  
Are some ideas not being heard, or changes not tested enough?

Make an effort to start doing them from here.

# Online Resources

## YouTube playlist

Play films and animations featuring designers, curators and innovative objects from the V&A collection to provide further inspiration. Find everything listed below on the [V&A Innovate YouTube playlist](#).

### Design thinking animations

Introduce your students to the V&A Innovate design thinking approach: Become an Innovator, Think like an Innovator, The Innovate Journey.

### Objects in focus films

Watch museum curators, designers and artists introduce and explore innovative objects in the V&A collection.

### Industry Insights films

Watch how three inspiring designers follow the Collect, Make, Share process when creating their own design ideas.

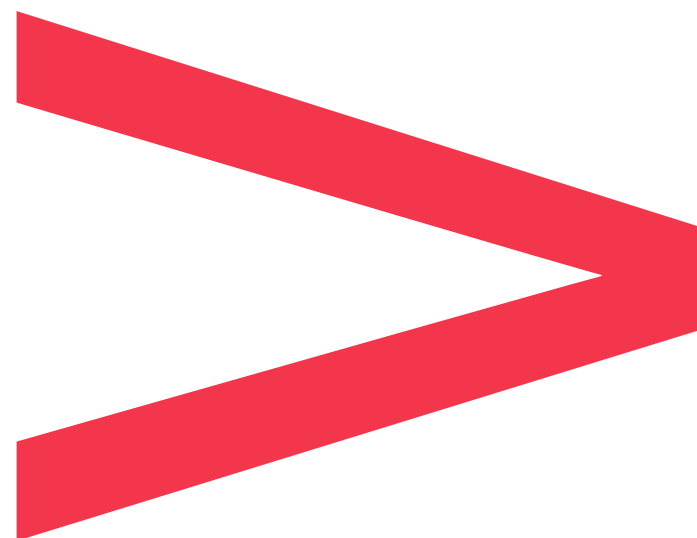
### Collections animations

Short, animated insights into the stories behind objects in the V&A collection: chairs made from recycled materials, the Mitticool Clay Refrigerator and the Liftware Steady handle.

## Explore the Collections

The museum's collection is a fantastic resource for research, inspiration and ideas. You can use the Explore the Collections database to easily search images and information about more than 1.2 million objects by keyword, object type, material, technique, designer, place and date. You could share links to interesting objects for your students to explore connected to the themes, or include high-resolution images on presentations or handouts.

[Visit Explore the Collections](#)



# Delivery Plans

On the following pages are 6 x 1-hour session plans to support delivery, as well as a time planning tool to think about how you might want to run it over a longer or shorter length.

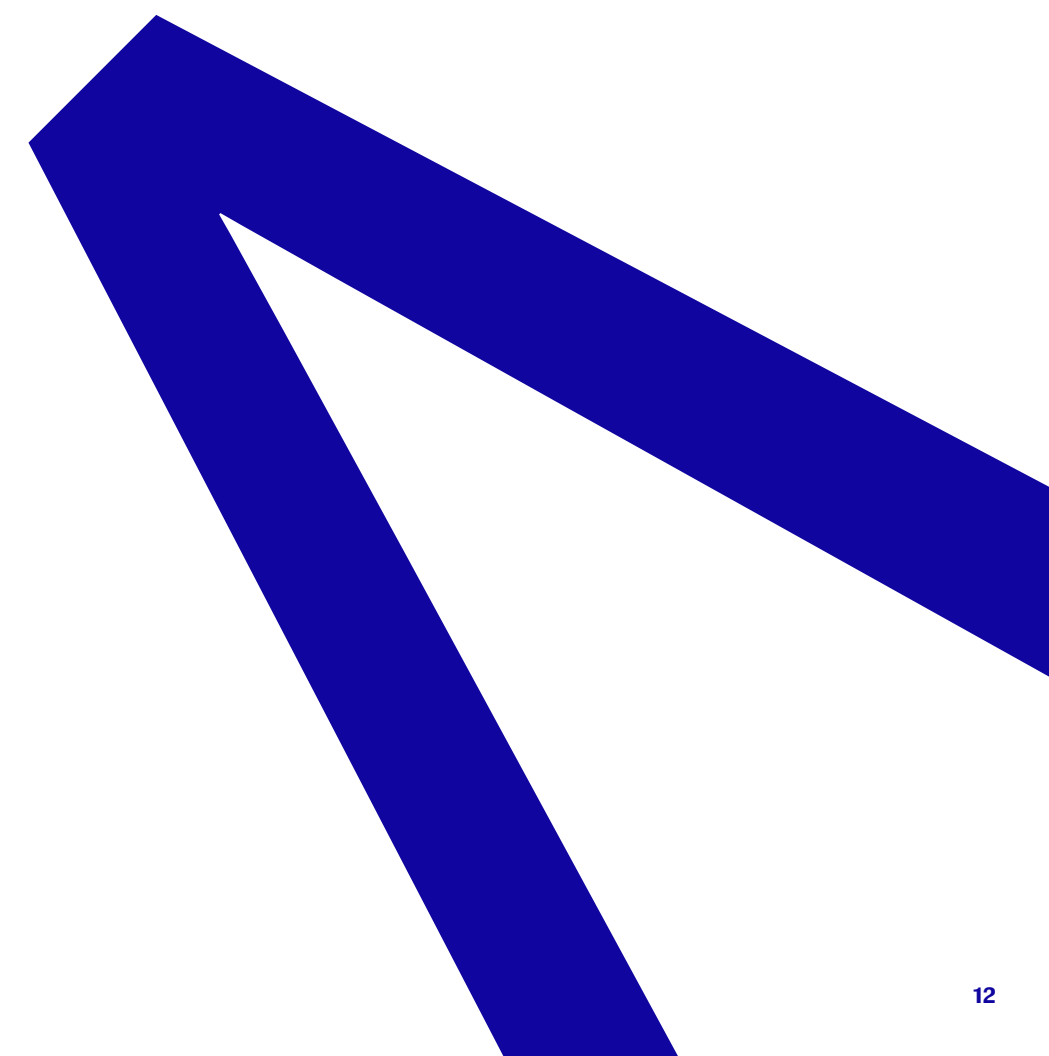
There are printable worksheets for students in the Student Toolkit to support some of the activities. You might also want to give each student or group a sketchbook or long roll of paper to keep track of their ideas, drawings and findings throughout the journey so they can bring it all together at the end for their submission.

Use the reflection tips and the Roll and Reflect die throughout your delivery. This will help to keep track of individual and team development and learning. This could be presented as notes or drawings, or however you or your students see fit.

## Teacher insights

Hear from teachers who have delivered the programme as extra-curricular clubs, over a day, and in lessons.

[Visit the blog](#)





# Time Planning

How can you structure V&A Innovate to fit your needs in the classroom?  
Below are examples of how you could deliver the challenge for two different time-scales:

## 6–12 hours/sessions

Ensure enough time is spent focused on getting started with your students. Give the most time to the Collect and Make stages equally, leaving one or two sessions at the end for consolidating and sharing the final idea.

<b>Getting Started</b> (1–2 Sessions) Introducing V&A Innovate <ul style="list-style-type: none"><li>• Building teams</li><li>• Choosing your challenge theme</li></ul>	<b>Collect</b> (2–4 Sessions) Planning and research <ul style="list-style-type: none"><li>• Inspirational visits or visitors</li><li>• Interviews and observations</li><li>• Defining your design opportunity</li><li>• Review #1</li></ul>	<b>Make</b> (2–4 Sessions) Creative ideation <ul style="list-style-type: none"><li>• Rapid prototyping</li><li>• Testing and iteration</li><li>• Concept refinement</li><li>• Review #2</li></ul>	<b>Share</b> (1–2 Sessions) Visualisation and narration <ul style="list-style-type: none"><li>• Creating two A3 sheets about design journey and design solution</li><li>• Review #3</li></ul>
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The reviews are essential in enabling your students to decide if they have what they need to move on so ensure these are included in your plan.

## One day

A lean and rapid version of the Innovate process could be run over one full day.

When planning your time, prioritise the Collect and Make stages, giving the students some time to focus on getting started, perhaps identifying some sources of inspiration ahead of time.

A pre-planned sharing presentation or rapid testing workshop at the end of the day with invited guests could help. Also consider time at the end of the day to help students plan how they might continue evolving their ideas and perhaps give some time to the students to incorporate this.

<b>Collect</b> 09:00–10:45 <ul style="list-style-type: none"><li>• Introducing V&amp;A Innovate</li><li>• Watching designer films for inspiration</li><li>• Exploring the themes through mind-mapping</li><li>• Defining your design opportunity</li></ul>	<b>Make</b> 11:00–13:00 <ul style="list-style-type: none"><li>• Creative ideas generation against opportunity</li><li>• Rapid mixed materials prototyping</li><li>• Pre-arranged user testing</li></ul>	<b>Share</b> 13:45–14:45 <ul style="list-style-type: none"><li>• Using the Submission Template to share your design journey and design concept</li></ul>
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# Session 1: Getting Started

In this session students will be introduced to the V&A and V&A Innovate, get into teams, and start analysing the challenge themes.

At the end of this session students will:

- Understand the context of the V&A and V&A Innovate and what they need to do for the challenge
- Be in a team of 4–6
- Know the themes and have selected one to explore further
- Have a simple mind map about the theme

## Materials/resources needed:

- Theme Inspiration pack
- Explore the Theme mindmapping guide (Student Toolkit, p7)
- Paper, pencil and/or pen
- [Become An Innovator animation](#)

## Welcome to V&A Innovate film

To support delivery of this session you can play the [Welcome to V&A Innovate film](#) presented by artist Gayle Chong Kwan. She introduces the V&A and V&A Innovate and provides pause moments to do the activities in this session plan.

## Activities

### 1. Introduce the V&A and V&A Innovate – 10 minutes

Watch the Welcome to V&A Innovate film and the Become an Innovator animation. Introduce the V&A Innovate National Schools Challenge and share what the students are being asked to do.

### 2. Introduce themes – 10 minutes

Introduce the themes. The themes are starting points. They're intended to provoke questions and open up creative possibilities. Use information from the Theme Inspiration pack to help introduce each theme. You might want to choose one to introduce to the whole class or let the students choose which of them they'd like to explore further.

Ask students as a class:

- What are your immediate thoughts about the themes?
- What would you love to find out more about?
- Do you care about any of the issues?
- Does something in the theme excite you?

### 3. Building teams – 20 minutes

Organise students into teams of 4–6 and explain that they will need to work together throughout the project.

Students could take on a specific role, based on their interests, for example:

- Project manager
- Sustainability lead
- User researcher lead
- Prototyping lead
- Communications lead

Introducing teamwork:

Choose one of the suggested activities below to introduce group working. Discuss the experience and outcomes. What did they learn about working together?

Show students an object or ask them to choose an object from the Theme Inspiration pack. Ask them to redesign it so it is more suitable for a different user/location/function using one of the below collaborative techniques.

1. Separate then together: each person separately makes an object/design without discussion. Then brings them all together to make one design or object.
2. Cumulative group work: each person makes an object and passes it on to the person beside them who changes and adds to it. Keep passing them around until all objects are passed to each person.
3. Agree individual tasks: Discuss and allocate individual tasks to make parts of a larger object or design.

### 4. Analyse a theme – 20 minutes

Mindmapping by students around the themes. Give students the chance to look through the Theme Inspiration pack together.

Ask students to work in groups to consider some of the questions in the pack to help them explore each theme. There are also research activities connected to each object to spark discussion and discovery. You may wish to choose a handful of objects for the students to explore and discuss as a class, or ask each team to look through the pack independently.

Students should keep note of initial ideas, questions and areas they are interested in exploring further. To support mindmapping, students can use the Explore the Theme worksheet. All this work should be kept to include in their A3 sheets.

## Homework

Students complete a mind map about their theme using the Theme Inspiration pack to support.

# Session 2: Collect – Inspiration and Research

In this session students will be introduced to different research methods and will use objects from the V&A collection as inspiration.

At the end of this session students will:

- Learn about different research techniques
- Have explored V&A collection objects as secondary research, analysing objects
- Have identified a ‘user’ they could do primary research with as homework

## Materials/resources needed:

- Rough 3D making materials e.g. paper, card, string, tape, wire
- Inspiration and Research cards sheet (Student Toolkit, p8)
- Planning Your Research sheet (Student Toolkit, p10)
- Paper, pencil and/or pen
- Roll and Reflect die (Student Toolkit p17)
- [Ella Bulley’s Industry Inspiration film](#)

## Activities

### 1. Sharing mind maps – 5 mins

Teams share their mind maps from the last session and discuss what interests them about the theme and what they would like to explore further through their research. A chance to reflect together.

### 2. Introducing research methods – 10 minutes

Ask the group: What is research? What is inspiration? Why do designers and artists need to do research and get inspiration to be able to create new objects?

Watch [Ella Bulley’s industry inspiration film](#) and ask the students to identify all the different kinds of research she does, where she finds inspiration and how she records it (e.g. sketchbook, mind map, post-its on the wall).

### 3. Inspiration from V&A objects: analyse and redesign – 25 minutes

Do one or both of the activities below. Ask each student to select an object from the V&A collection related to their theme. They could choose one from a theme pack or find one using Explore the Collections. You can introduce rough 3D making through these activities to encourage thinking through making early on.

### Activity A

Take the objects that you have found in the V&A collection and sketch or make a quick 3D version of an object. Then add your ideas to improve the object in relation to the theme. Redesign it for a different user. Adapt the function. Change the material it’s made from. Share and discuss what changes you have made and why.

### Activity B

Share the objects that you have found in the V&A collection and discuss what parts of each are the best in relation to your theme (could be material, user, design, function, appearance, process of making) and then combine the best bits in a new object.

### 4. Planning research – 20 mins

What do you want to find out from your research? Students look back at their mind maps and redesigned objects. What have they learnt so far? What problems or opportunities have they identified? What interests and excites them most about their theme?

Introduce the Inspiration and Research cards. This resource helps students to discover new and creative approaches to primary research. Support students to read through the different methods and discuss any questions they have about them. Let them choose which ones they want to try as a team.

Remind students they will need to communicate their research and inspiration in some way for their entry, so remember to have a place where they can store all their research. They might want to keep a sketchbook that they can refer to when they are developing ideas so they can show their process.

Use the Planning Your Research sheet to support them to pinpoint what they’re trying to find out, where they need to go, who they need to involve and how they could go about it.

This research could take place as homework or in the session. For example, they could interview their peers, do a questionnaire or observe how other students in class use particular objects or spaces.

## Homework

- Conduct one piece of primary research e.g. interview, observation, survey, material experiment
- Visit Explore the Collections for more inspiration: [vam.ac.uk/collections](http://vam.ac.uk/collections)



# Session 3: Collect – Define Your Challenge and Ideas Generation

In this session students will start to come up with ideas that respond to a need, issue or opportunity they found in their research.

At the end of this session students will:

- Have defined a design opportunity
- Have lots of ideas to explore further through prototyping and testing

## Materials/resources needed:

- Rough 3D making materials e.g. paper, card, string, tape, wire
- Observational Diary (Student Toolkit, p9)
- Define Your Challenge sheet (Student Toolkit, p11)
- Ideas Factory sheet (Student Toolkit, p14)
- Paper, pencil and/or pen
- Roll and Reflect die

## Activities

### 1. Team check-in – 5 mins

Each group gets the chance to check in with each other's progress since the last session. This is a chance to reflect together.

### 2. Define Your Challenge – 20 mins

Everyone shares what they have found out from their primary research. Then, use the Define Your Challenge sheet to support students to narrow down what they found out during their research activities and turn it into a focused question or statement that they can explore during the 'Make' stage.

If students are finding it difficult to come up with a 'How might we...' question, you might want to have a couple of briefs prepared for them to work on.

### 3. Ideas generation – 30 mins

Choose one or more of the suggested activities to support idea generation. These activities will help your students unlock their creative thinking. Encourage students to unpack their design challenge and explore it in multiple ways. Students will end up with a range of different ideas that they can use for further development.

1. Ideas Factory: Use these prompt cards to help students come up with lots of ideas for solutions based on their design question. Cut out the individual cards and place them face down. Turn over one card at a time and ask students to come

up with as many ideas as they can in a few minutes. You could use a timer for this activity to keep things moving and stop students getting too fixated on one idea, or concerned about making 'mistakes'.

2. 'Opposite thinking': Take one object, like a table or chair, and describe elements that you think are essential to that object, such as legs or a flat top, and then imagine/sketch the object with the opposite elements such as a table with a wobbly top, or a chair with no legs.

3. 'Mix it up': Each person in the group imagines a feature of a design and draws it on a piece of paper. Do not show it to the others in the group. Then, put them all together and each try and sketch a new design that brings together two or more of the new elements.

4. 'Design problem pass it on': Each group writes their design challenge on a post-it note and puts it on a wall or board. Everyone has to come up with a wild solution to each challenge and write them on post-it notes. At end of the session everyone reflects on each problem and the suggested solutions and what possibilities may come out of them.

5. 'Active thinking': Think of an active word (a verb) that is central to the challenge you have identified. Imagine new objects to make the action possible or different. Rather than thinking about your design as an end point – what it will

look like – think about what you want your design to do – the activities it allows.

6. 'Rough 3D making': It can be really useful to get students to translate some of their early ideas into 3D through very quick model-making tasks. You could use lolly sticks, or even just paper, asking the students to think about the features of a design through its form. It can also be worthwhile to combine these to make new ideas, opening up ways to visualise the development of ideas.

### 4. Research check-in – 5 mins

In groups, ask the students to discuss: What do you still want to find out to help support your idea generation?

## Homework

Split between group:

- Conduct more primary user research, if needed
- Research existing solutions/ideas
- Use the Observational Diary to observe what is going on in your local environment. Can you identify anything that could be improved through design?



# Session 4: Make – Prototyping

At the end of this session students will:

- Understand the importance of prototyping, testing and ideation
- Have made a rapid prototype of their favourite idea
- Have received feedback on their prototype

## Materials/resources needed:

- Rapid prototyping or model making materials e.g. paper, card, string, tape, wire
- Materials specific to student ideas
- Prototype, Test and Iterate worksheet (Student Toolkit, p15)
- Roll and Reflect die
- [Oluwaseyi Sosanya Industry Inspiration film](#)

## Activities

### 1. Team check in – 5 mins

Share research and findings and touch base on progress. A chance to reflect together.

### 2. Introduce creative ideation and prototyping – 5 mins

Discuss the importance of testing, prototyping and iterating ideas.

Prototyping is a great way to quickly develop and test ideas, helping you to see what works, what doesn't and what you need to change. A prototype can be a rough physical version of your idea, made using simple materials like paper, cardboard, tape, toothpicks, waste materials and textiles. Prototypes also stop us getting too fixated on one idea, or concerned about making 'mistakes', and instead support us to look at things in many different ways by making lots of versions through creative play and testing.

[Watch how designer Oluwaseyi Sosanya uses prototyping and model making to test his ideas.](#)

### 3. Rapid prototyping – 40 mins

Take the favourite idea from the idea generation stage and experiment with modelling (or rapid prototyping) to bring it to life.

Choose one or more of the suggested activities:

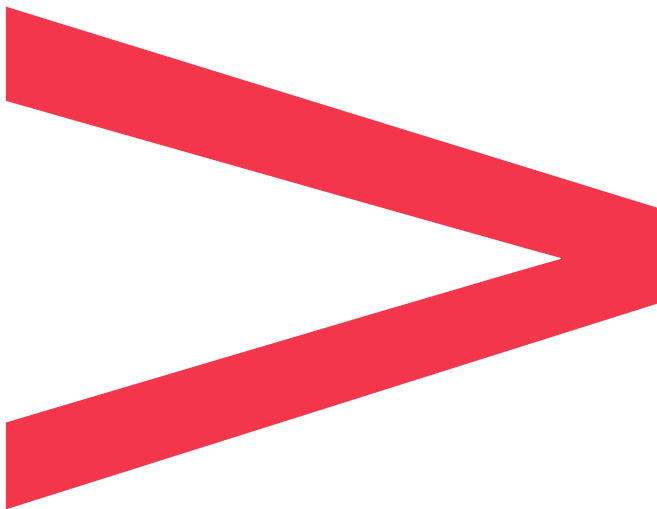
1. Make five different versions of your design, spending five minutes on each, and reflect on which is best and why.
2. Make a model of your design. Ask five people to give feedback. You have to add their feedback to your design. Then reflect on and decide if any aspects are useful and what ideas you will take forward.
3. Model your design in different materials. Does it change your design? How and why? Which works best?
4. In your group, each take a design idea and work on it individually, then come back together and share. Reflect on your designs together and decide which elements work best and which can be combined.

### 4. Planning more testing – 5 mins

Ask the students to discuss how they are going to get feedback on their ideas and how they are going to record it. Introduce the Prototype, Test and Iterate worksheet as a way to support iteration.

## Homework

Test ideas with friends/family/others to get feedback. Use the Prototype, Test and Iterate resource to support this.



# Session 5: Make – Iteration and Refining

At the end of this session students will:

- Iterate and refine prototypes based on user feedback
- Start preparing to submit their idea

## Materials/resources needed:

- Rapid prototyping materials  
e.g. paper, card, string, tape, wire
- Submission Template  
(Student Toolkit, p18–19)
- Impacts of Scale resource
- Roll and Reflect die

## Activities

### 1. Team check-in – 5 mins

A chance to share any new findings and touch base on progress. A chance to reflect together.

### 2. Refining idea – 40 mins

Use this time to iterate and refine based on feedback.

The group can allocate tasks to make changes, tweak, improve on designs through technical drawings and/or model making. All the members of the group could be focused on a particular task e.g. technical drawing, model-making, checking any changes are based on feedback.

You can use the Impacts of Scale resource in the Student Toolkit to help you think about how you could scale up the impact of your design or refine it for a specific group. This may help you think about how the design might impact a person, local community and beyond.

As they are making and refining, students can ask:

- Does our design do what we wanted it to do? Does it do anything unexpected?
- Are there barriers to people using or engaging with it?
- Can we improve it in any way at all?
- Have we taken into account feedback from others?
- Have we taken into account the environmental impact?

- How could our design be improved to impact more people?

Choose one or both of the below activities to support feedback and iteration:

### Activity A

Each group member makes a new model based on feedback they have received and shares their design with the rest of the group through a 'listening session'. The person who made the design should sit quietly and hear the constructive feedback from the rest of the group.

### Activity B

Each group makes a simple model or drawing and writes a description of what it is, who it's for, how it works and why it's important. The mock-up and description are placed in the middle of the table with a big sheet of paper for feedback and questions. All groups go around the room providing feedback on each group's idea.

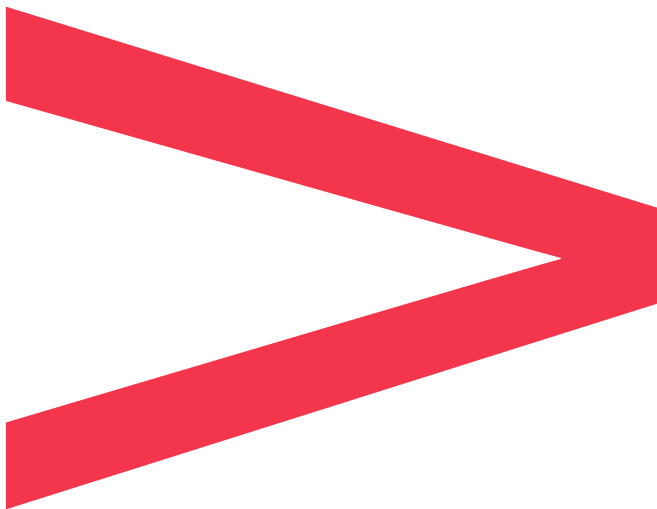
### 3. Preparing to submit idea – 15 mins

As a team discuss how you would like to submit your idea to the judges. Decide who will be working on what part of the submission, for example:

- Gathering photographs of the process
- Writing a description of the process
- Writing reflections on the process
- Bringing all the above together on two A3 sheets
- Checking the submission against the Judging Criteria (p8 of this pack)

## Homework

Make sure you have everything needed to submit – photos, drawings, writing – and gather these up for the next session.



# Session 6: Share – Submit Your Idea

At the end of this session students will:

- Have completed their submission for the challenge, including reflection and evaluation of their design journey, teamwork and final idea
- Have completed the online evaluation form

## Materials/resources needed:

- Submission Template (Student Toolkit, p18–19)
- Examples of previous submissions (You can find examples in the Theme Inspiration pack and at [vam.ac.uk/innovate](http://vam.ac.uk/innovate).)

## Activities

### 1. Self-reflection – 10 mins

Host a reflective discussion that invites students to share what they've learnt about design and about themselves. Ask students to write three things they have learnt during the process, then come together and share.

Ask questions such as:

- What have you learnt about yourself by working in a team?
- What obstacles did you face and how did you overcome them?
- What was the most challenging but rewarding part of the design journey?

Students should have a documented range of reflections that they can include in their entry.

### 2. Visual storytelling – 50 mins

Students gather together all of their drawings, mindmaps, interviews, survey results, photographs, models, reflections and put them together on two A3 sheets. They may wish to use the Submission Template as guidance or design their own.

Encourage students to try out different forms and ways of presenting their submission and get feedback or self-reflect about how clear it is.

Ask questions such as:

- Does our submission clearly tell the 'story' of our research, inspiration, analysis, making, iterating and refinement of our ideas?
- Have we demonstrated how we worked together as a team?
- Will the judges have enough information to understand our idea: what it is, how it works, who it is for, and why it's important?

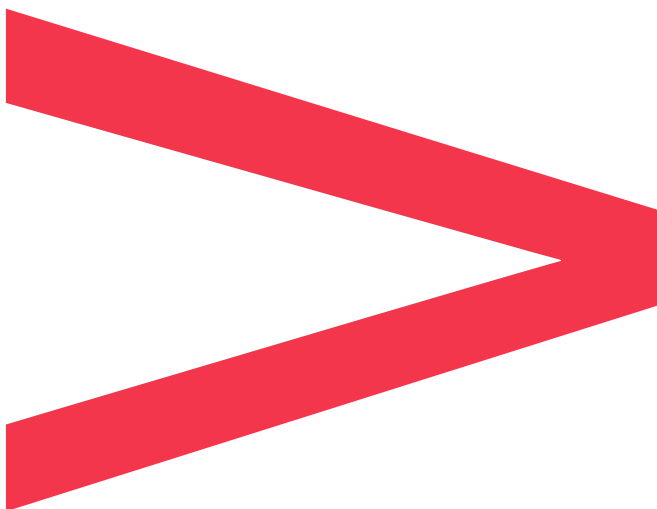
Students should look at the Judging Criteria for guidance to ensure they haven't missed anything the judges are looking for.

## Homework

If more time is needed, complete submission.

## Extension

You may wish to hold a whole class pitching session, giving each group the chance to share their ideas and practice articulating their ideas to others. You could invite a member of your SLT or Drama/Performing Arts Department to watch the pitches and provide feedback. Each group can collect this feedback and use it as part of their entry.



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