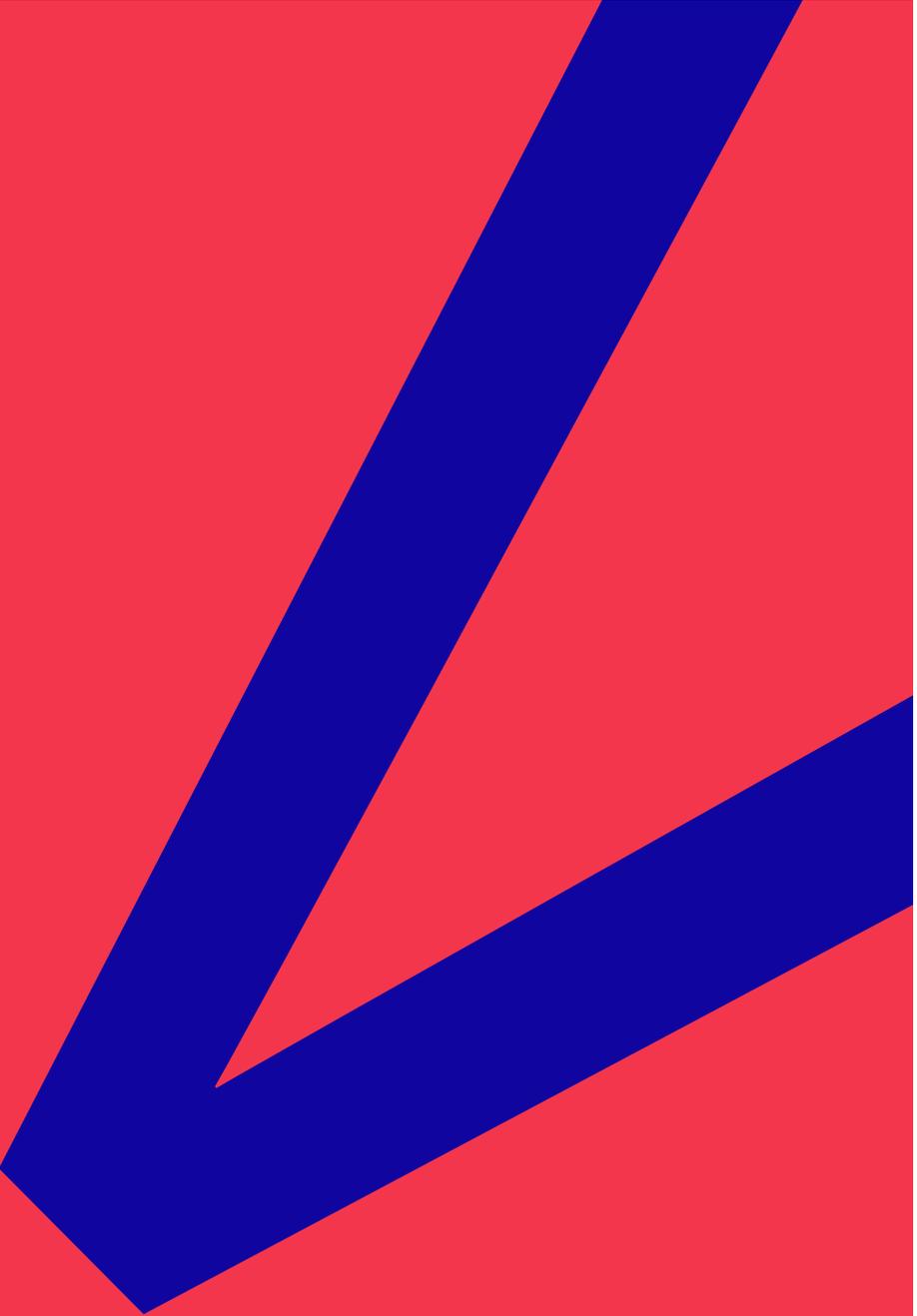




# DESIGN SKILLS FOR A CHANGING WORLD



[vam.ac.uk/innovate](http://vam.ac.uk/innovate)  
[innovate@vam.ac.uk](mailto:innovate@vam.ac.uk)  
#InnovateVAM



**V&A**

INNOVATE

# 03 > COLLECT

This stage is about exploring, discovering, listening, observing, getting out of the classroom and uncovering everything you need to know to help define a design opportunity.

This stage involves:

- > Identifying the right people/places to visit
- > Planning research questions
- > Designing research methods
- > Looking for inspiration everywhere
- > Analysing research and finding insight
- > Defining a unique design opportunity

## ACTIVITIES FOR RESEARCH PLANNING

These activities might help students plan for primary research they could do with peers, family members, or people they know in the community.

Start by using the Eat, Go or Wear inspiration kits to introduce each context and kick-start ideas.

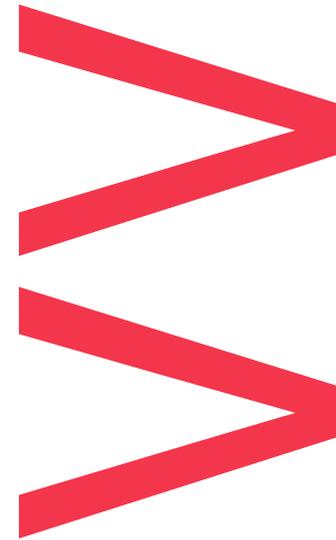
## QUESTIONS FRAMEWORK

Helping students identify the big questions they want to ask through their research.

You will need:

- > Post-its
- > Large sheets of paper

Ask students to write down everything they currently know about their context, what interests them about it and why they think the subject is important.



Then ask students to brainstorm the big questions they have about the context. Encourage the development of open questions.

For example: What influences people's decisions to recycle? How do supermarkets deal with their food waste? What are the hardest materials and products to recycle?

## STAKEHOLDER MAPPING

Helping students identify what they are trying to discover, with who, and how.

You will need:

- > Post-its
- > Large sheets of paper
- > Pens

Ask students to draw a map of the people and places connected to their context. Who could they connect with locally?

Look for the extremes – people who might have a unique understanding of their context and people who might have no understanding at all. For example: interviewing a Greenpeace advocate

about climate change, then interviewing your Grandad about why he doesn't recycle.

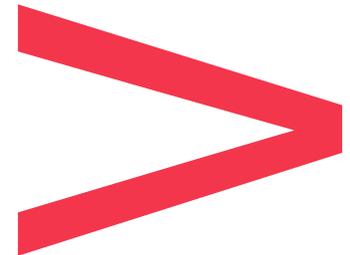
## RESEARCH PLAN

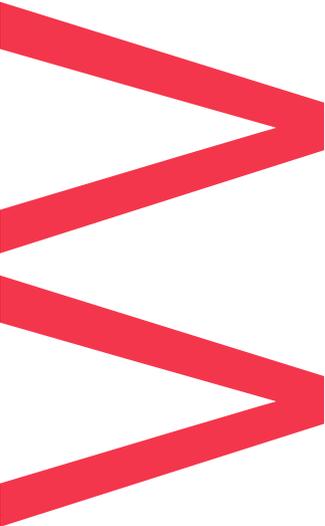
Time-planning research to ensure it is possible, and everyone knows who's doing what.

You will need:

- > Design Research Methods cards
- > Large sheets of paper
- > Pens

Using the Design Research Methods cards, ask students to choose a few methods to try. Consider a range that achieves both breadth and depth of information. Share out tasks within teams and decide when and where the research will take place. Some research will be done in pairs or more, some could be done individually.





## ACTIVITIES DURING RESEARCH

### OBSERVATION: UNPICKING CONTEXTS

Developed with designer Tom Gayler

Helping students identify what they know or assume about people's needs

You will need:

- > Printed visual inspiration from Eat, Wear and Go
- > Pens
- > Tracing paper

Using an image that could represent a problem or people's needs, invite students to list all the needs and design opportunities they can see. For example: Image of a man waiting for a bus. Does he need to get somewhere without walking? Does he need someone to walk with?

Students find as many needs and design opportunities as they can, then pass their image on to another group who add more ideas and feedback.

Students then add a piece of tracing paper to their image and sketch a solution to the problem. Encourage

students to think about how the user would interact with the problem and the solution.

### SIX DEGREES OF SEPARATION

Helping students find interesting and unexpected connections in their observations.

You will need:

- > Six degrees of separation tool
- > Pens

Six degrees of separation is the theory that everyone and everything is six or fewer steps away. Individually or in teams, students can use this tool around school, on their journey home, or at home to find connections between places, people and objects. In teams, students discuss the unexpected connections they found and whether they saw any problems or design opportunities.

### QUESTIONS

Discussing and practicing the art of asking great questions.

You will need:

- > Flip chart or whiteboard

Discuss how asking great questions is the key to getting great information. Encourage students to identify the differences between different types of questions and help them practice the art of open questions through practice interviews.

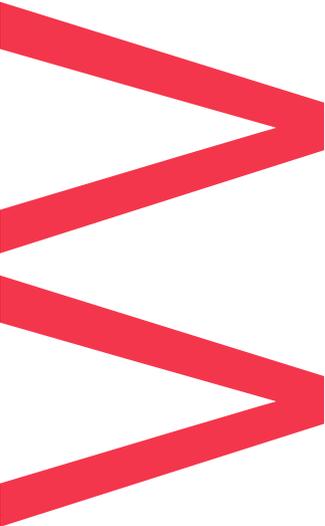
### 5 WHYS

Showing students the importance of looking below the surface of a problem.

You will need:

- > Large paper
- > Pens of different colours
- > Template of five boxes to fill

'5 Whys' is a technique that identifies different causes of a problem, helping to clarify the root cause. Ask students to start with a problem they have identified during research. Ask 'But why?' and write down the answer. Ask 'Why?' again. Ask why five times in total.



## ACTIVITIES FOR RESEARCH ANALYSIS

Here are some activities to take students from a mountain of information, to an edited collection of insights, to a design opportunity.

### SHARE YOUR STORIES

Helping students and teams download everything they have seen, heard and learnt.

You will need:

- > Post-its
- > Pens
- > Board or wall space

In teams, or 2–3 teams together, students listen to each other's research stories: what they've seen, heard and learnt. Print out photos of people and places to help visualise these stories and prompt memories.

Encourage students to write down or draw key pieces of information they hear from others.

### FIND THEMES

Helping students and teams find some order in their research.

You will need:

- > Post-its
- > Pens
- > Board or wall space

As a whole class or in teams, start to map out photos, drawings, ideas and post-its on the wall or floor and cluster related information together.

Use The Big Diamond tool to help students zoom in and out of their research and find new connections.

Ask students: Can you see patterns and connections? Is there something that stands out on its own? What feels surprising and why? What are you most excited about?

### IDENTIFYING OPPORTUNITY

Encouraging teams to discover the gems in their research that will form the basis of their design brief.

You will need:

- > Post-its
- > Pens
- > Sticky dots for voting
- > Board or wall space

Ask students what feels most promising as an interesting and tangible problem to solve. Students could vote on their favourite and have a group discussion to come to a consensus.

Ask students to create multiple "How might we...?" brainstorming questions.

Insight: If people can't see where their waste goes, they don't feel motivated to recycle it.

So: How might we make the journey of a piece of waste visible to the person it belonged to?

Avoid preconceived solutions. So instead of: How might we design a faster bus? Ask: How might we make moving around the city an efficient and enjoyable experience?

### DEFINE YOUR DESIGN OPPORTUNITY

Creating a design brief from all the research to inform and inspire the next stage.

You will need:

- > Large paper
- > Pens

Review the 'How might we...?' questions and discuss their strongest opportunity for design: Which question has the strongest connection to their research? Which one has the potential to answer a real human need? What excites them the most?

Once students have chosen, they can turn this open and inspiring question into a big visual poster to make sure they stay focussed on the opportunity or problem they're trying to solve.

## CRIT #1: DEFINING YOUR QUESTION

Use the Throw a Crit tool to help students reflect and get feedback from each other.

At the end of this stage, students should have:

- > Visual and written evidence of their primary and secondary research
- > A clear set of insights gained through investigation, with documentation of how they analysed their research
- > A clear design opportunity framing the question they're trying to answer next: "How might we...."

*This resource has been co-produced with Ella Britton, V&A Design Thinker in Residence.*