

INNOVATE

Theme inspiration pack



Introduction

The three themes for the V&A Innovate National Schools Challenge 2025-26 are:

Reimagine
Join
Rest

We would like you to work in teams to explore one theme, find a problem you would like to help solve, and come up with a new design idea.

Take a look at objects from the V&A collection to help you explore the themes and find inspiration for your exciting design ideas!



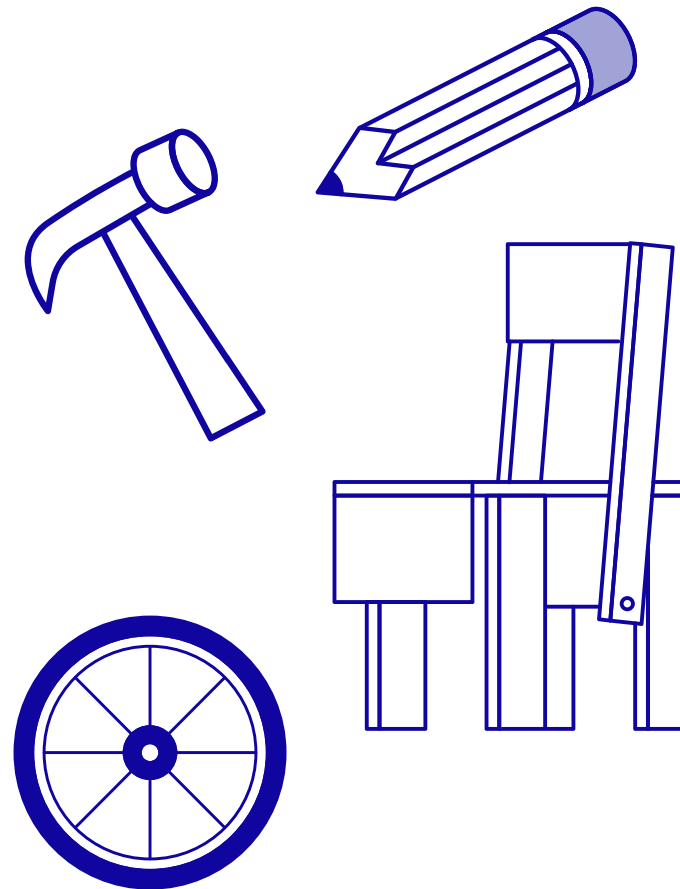
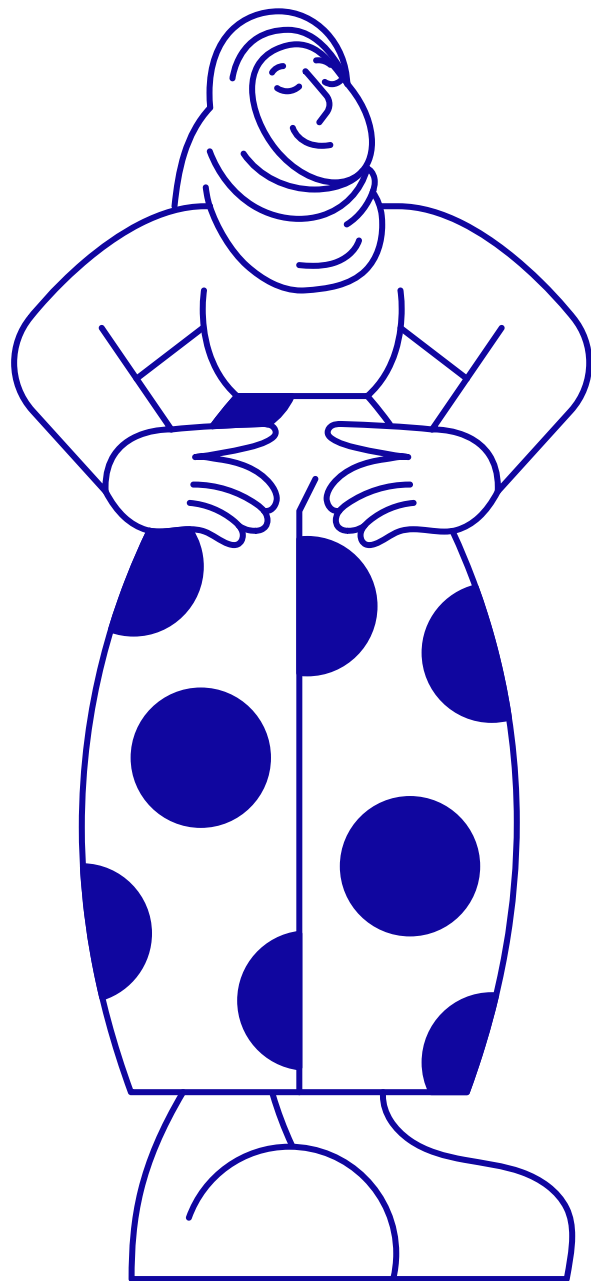
Museum Improvisation – Instructions

Usually when you walk round an exhibition, with a friend, you look at an object, and both discuss it. However, they're not 'connected' to anything. But what if you tried Museum Improvisation? This is what designers do all the time. It's called 'lateral thinking' or 'free association' or 'joining the dots'.

You can play it as a game yourself, with a friend...

- Person A picks an artefact. They pick a Pencil.
- Person B picks another. They pick a Wheel.
- Now Person A has to try and connect Pencil and Wheel.

Have fun surprising each other with the wildest connections.
It's easy to learn but hard to master!



Museum Improvisation – Script

Please use this to help your improv. It will help you create links between objects.



	Person A	Person B
Object 1	Are the objects made from the same material?	What country do the objects come from?
Object 2	Do the objects perform a similar task?	Are the objects the same colour?
Object 3	What size are the objects?	Do the objects come from a similar time period?
Object 4	Who made both the objects, are their jobs similar?	What style are the objects?



Two white arrows originate from the bottom left corner and point towards the word 'Reimagine'. The top arrow is wider and points more directly at the text, while the bottom arrow is narrower and points slightly below it. Both arrows are white and set against a solid red background.

Reimagine

Reimagine

The world is full of possibilities, and with creativity and design, we can reimagine it for the better.

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

How can we redesign everyday objects to better meet our needs while reducing environmental impact?

How might we reimagine spaces to be more inclusive and supportive for all?

Reimagine: starting points

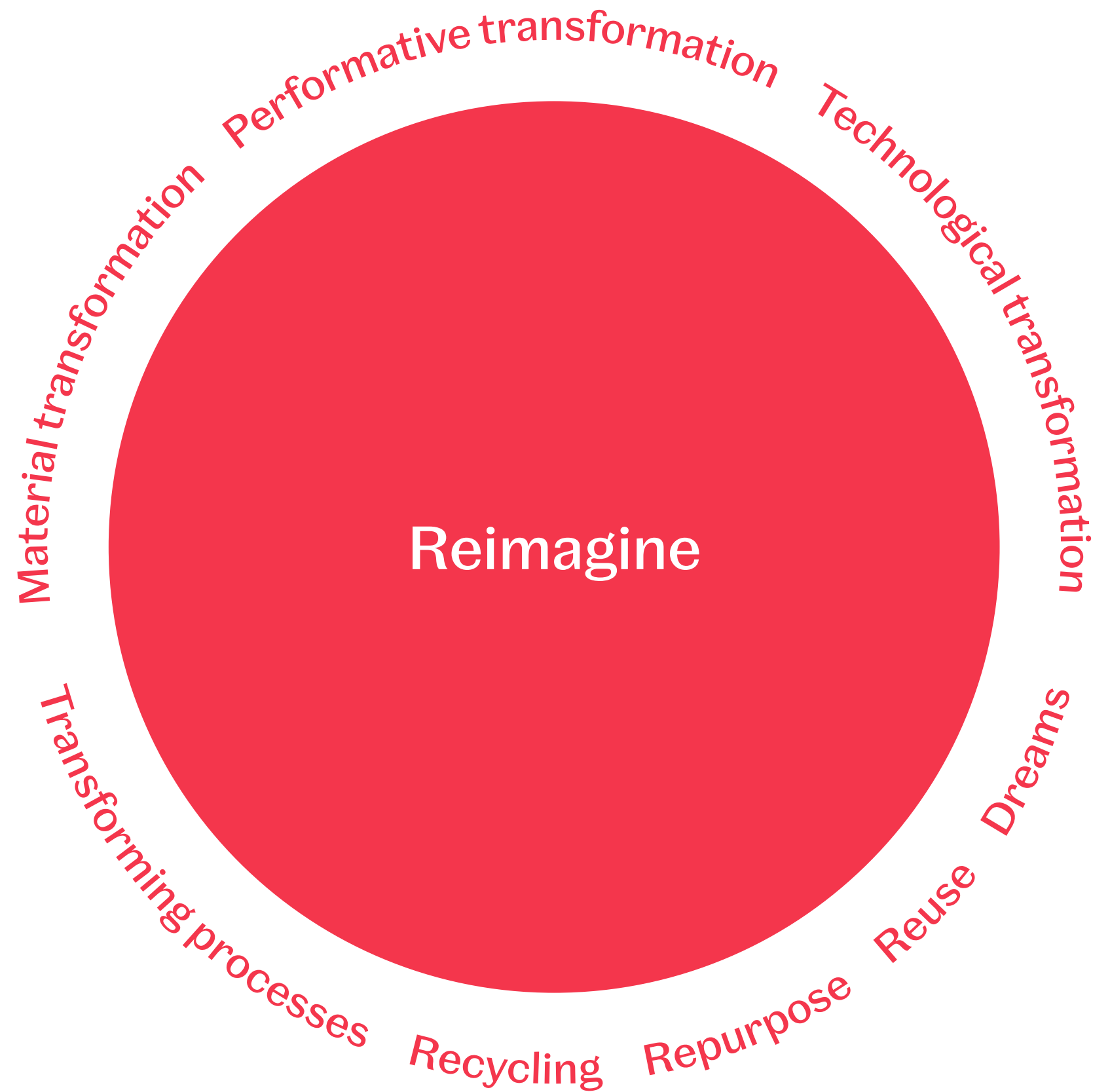
Discuss:

Do you think we always ‘reimagine’ good things?

How do we know what is ‘best’ for our futures?

When we reimagine how good something could be, do we need to reimagine what might go wrong – and design for both to be better?

If you had a time-machine to help you research, how would you design for today?



Rewind, record, reimagine

My First Sony, model CFM-2500
Sony Corporation, 1992

How have music players changed over time?

Before smartphones, this is how kids recorded themselves! This bright and fun radio cassette recorder let children play their favourite music and record their own voices.

It was designed with the user in mind, easy to use with big buttons and a sturdy shape. Today, we listen to music in different ways, but this design helped children interact with sound and technology.

Research Activity

Create a timeline of personal music listening devices, from 1980 – now.
Where can you reimagine the future?



Tradition with a twist

Kimono

Given by Yoshida Kōjirō, 1840–1860

How can traditional clothing be adapted for new styles and trends?

You might think that this bold kimono which shows skeletal art is modern but it is actually around 175 years old! Japanese people had been wearing kimonos since 800 AD, but styles, fabrics, and decorations have changed over time.

This kimono is a great example of how designers reimagined classic clothing to keep up with new trends while still honouring tradition.

Research Activity

Research kimonos and watch this film to see a variety of them from different time periods being worn.

How do pieces of clothing change over time? Look at its shape, fabric and how people wear them today.



Bendy bookshelf

Bookworm

Designed by Ron Arad, 1993

Does all furniture have to follow the rules?

Bookshelves are usually rectangular but not this one! The Bookworm shelf bends and curves like a winding path. Instead of keeping books in rows, it lets them follow the flow of the design.

This challenges how we think about everyday furniture. Who says shelves have to be straight? What other objects could be reimaged in a more creative way?



Research Activity

Watch this film to see another example piece of furniture for which the design has been reimaged.

Then, sketch or describe your own idea for a piece of furniture that is playful and surprising!



Design imitating life

Handbag

Designed by Haruta Yukihiro, 2008

How can design play with expectations?

This handbag might look like it's made from snakeskin, but it's made from copper. The designer has used texture and colour to create an illusion – transforming hard metal into something that looks real.

This challenges the way we think about materials. Can you think of other objects that look like one thing but are actually something else?

Research Activity

Find examples of biomimicry. Choose one and explain why designers might want to create this illusion. Then, sketch or describe an idea for your own design that tricks the eye!

Adapt, Care & Disrupt - Ballet shoes re-invented

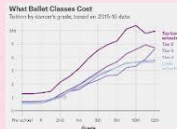
The problem:

A lot of teenagers (16-18) who want to pursue dance professionally dance 'en pointe,' using pointe shoes, which allow a dancer to perform on the tips of their toes. They are incredibly beautiful and instill pride in any dancer who wears them, however they are incredibly painful, not at all durable and most importantly, very very expensive (£50 a pair)

This is an issue as dancers from lower income households often cannot afford to spend hundreds of dollars a week on shoes, causing them to either stop pursuing dance altogether, or to stretch out their shoes for as long as possible, by glueing them or continuing to dance on them once their supportive structures have broken down. This is dangerous and often causes career ending injury.

Statistics:

- Average yearly salary is **\$68,949**
- Average yearly salary falls into the **75th percentile**
- An average salary accounts for both the highest and lowest incomes
- About 88% of ballet dancers fall into the **95th percentile**, roughly **\$300,000**
- Only 17% of all ballet dancing positions are paid between **\$88,500** and **\$80,500**



Fivethirtyeight.com
This graph shows how much ballet classes cost. As you can see, some top school cost \$100,000 and \$50,000

Chop.edu
Ballet dancer injuries

Morethandancers.com

Pointe shoes don't last long – sometimes for just one performance (or part of a performance!), depending on the difficulty of the ballet. A professional ballerina can dance through 100-150 pairs of pointe shoes in one season. At a cost of about \$80 each, PBT spends close to \$100,000 on pointe shoes per year.

PBT.org

Raising A Ballerina Will Cost You \$100,000
The high price of training is keeping ballet's top ranks from being more diverse.

Fivethirtyeight.com
Article by Abby Abrams

WITH PBT SPENDING CLOSE TO £100,000 A YEAR ON POINTE SHOES, THE AVERAGE DANCER TAKING LESS THAN £50000 A YEAR, IT'S EASY TO SEE WHY YOUNG DANCERS ARE IN NEED OF FINANCIAL AID.

The "dead" pointe shoe condition had significantly higher sway during relevé, sous sous and single piqué than the new pointe shoe condition. Peak ground reaction force in the anterior-posterior was also much higher in the new pointe shoes.

Thesportjournal.org



THIS IS A POSTER IN THE ROYAL OPERA HOUSE ASKING FOR DONATIONS FOR THEIR BANGERS POINTE SHOES. THE ROYAL OPERA HOUSE IS THE NEXT BIGGEST UK BALLET SCHOOL, SO THE FACT THAT FUNDING REMAINS AN ISSUE SHOWS HOW MUCH OUR PRODUCT IS NEEDED

Who? What? When? Where? Why?



Design features

My design needs to satisfy 3 needs - the shoes need to be:

- affordable:**
 - possibly made of recycled plastic
 - maybe a faux satin to give the ballet effect without being too expensive - but could rethink pointe shoes altogether
 - built in neoprene toepads, durable, therefore cheap
- durable:**
 - possibly made of strong recycled plastic
 - not constantly needing to be replaced
 - 'suede' caps on top to prevent breakage and fraying
- comfortable:**
 - built in toe pads
 - easy to attach (so at the correct angle) ribbons
 - not likely to go soft quickly
 - toe pads made of easy to mould material to prevent toes being scraped/blistered

Shape and sole - comfort

Presented here are our wide variety of shapes for the sole, created to give all dancers feet the maximum comfort as possible. Dancers can choose their preferred shape depending on the shape of their foot. Sizes can vary between size 1 to 12 to be as inclusive as possible. The sole and toe pad is changeable, recyclable and comfortable. The sole is made from cork and the toe pad is made from neoprene.



On Pointe

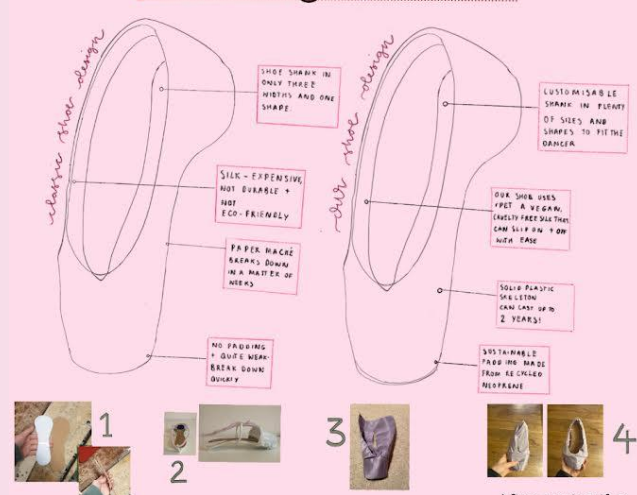
Get some new shoes on

On Pointe

Designed by students from Camden School for Girls, London, 2023

The students from this team set out to reimagine ballet shoes, a personal hobby for many of the team members, who had experience of how exclusive the performance dance community can be. This is largely due to the cost of taking part, which can limit opportunities for people to join ballet clubs. As a result of their research, the team proposed their idea of a ballet shoe which has removeable and replaceable satin. This design shows that it is possible to extend the life of shoes, whilst also making dance more inclusive and accessible.

Creating the Shoe



- First we cut out the shape of the shank in cork and acrylic. Then, using a line bender, we heated and bent the acrylic into the desired arched shape. We then attached the two pieces together using a strong wood glue.
- Using mouldable polymorph plastic beads we moulded the box (toe structure) of the shoe and the extra structure in the middle and on the heel for additional support. We also added a pipe cleaner to make the shape, ready for the satin.
- We used a scrap piece of fabric to create the satin that would go over the skeleton in our product. It is made in a way that it just slips onto the skeleton.
- After sewing the fabric together and adding a ribbon we finished our prototype! Though our actual product is designed to have multiple different foot shapes, for our one we chose to make a wide box, arched shank and narrow back

Why is our shoe appealing?

Skin tone The idea of uniformity still permeates the ballet world and has normalised companies of predominantly white dancers. Ballet has long been criticised for having a problem with diversity, which our pointe shoe attempts to counteract. Dancers with different skin tones are forced to paint or 'pancake' their shoes with makeup to match their skin tone. Eric Underwood, an American British black soloist, described applying makeup to his shoes as a 'messy process that can take as long as half an hour.'

Our pointe shoe is available in a variety of skin tones so dancers of any background can find a perfect match. Though many established companies have recently started providing skin tone shoes, shoes bought for a lower cost are almost always in pink or beige.

Eco-friendly

The shoe is durable and long-lasting. When the satin wears down, it can be removed and replaced, and sent to a fabric recycling centre. which means you can reuse the skeleton rather than throwing it away the whole shoe and having to buy a new one, which is wasteful and expensive. The satin cover then be turned into a new cover for another shoe, creating an eco-friendly, organised cycle.



Cheap and long lasting

1 pair of shoes per week
10 pairs of shoes per show season
Shoes (including accessories) £100
Over a course of three years (16-18) £3000 spent on pointe

To conclude

Ballet is a beautiful sport that is losing popularity due to its expense. Something as simple as a pair of pointe shoes could go a long way in helping to inspire the next generation. Though our model may not be the 'perfect shoe' yet, with technology's new and very fast advancements and our commitment to creating a long lasting, affordable and aesthetically pleasing shoe, it will be soon.

ADAPT
CARE
DISRUPT

On Pointe

Research Activity

Watch this animation to see how you can think like an Innovator as your team creates their own idea





Join

Join

‘To join’ can mean many things to different people. To some it can be connecting anything that has been separated back together again. To others it can be taking that first step and engaging communities which may be new to you.

How can we encourage others to take action?

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

While social media and online spaces join people together, do they bring their own challenges?

How can we act to make sure that people respect and understand ‘social contracts’?

What can we do to make sure that our neighbourhoods, schools and even digital spaces are fair and welcoming for everyone?

Join: starting points

Discuss:

What does it mean to ‘Join’ something?

Who is ‘left in’ and who is ‘left out’?

Discuss with your team:

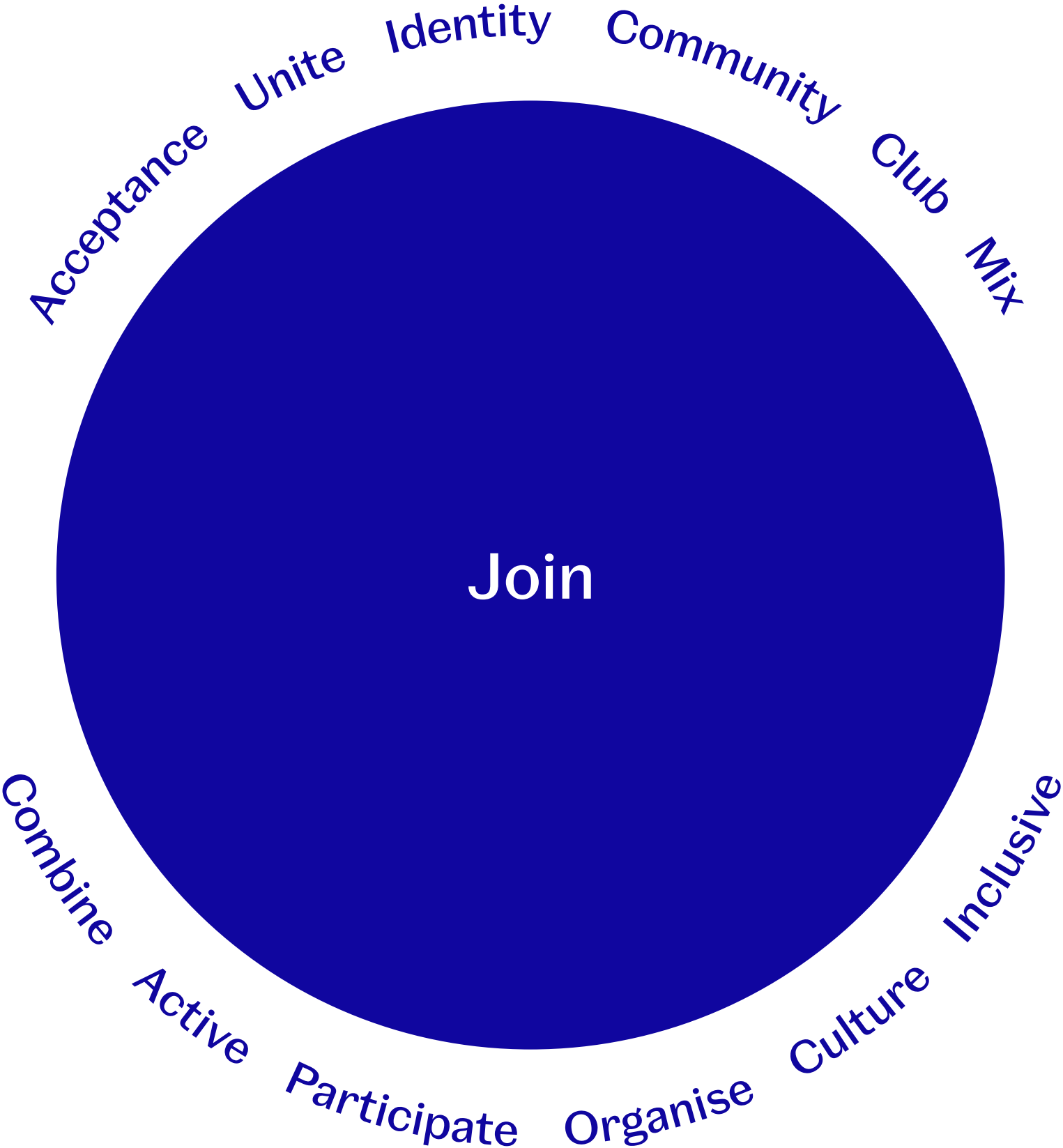
When have you ever felt ‘left out’? How did it feel?

Inclusivity / Discrimination:

When have you felt ‘included’? How did it feel?

When design brings us together for the right reasons: When are we ‘greater than the sum of our parts’? Why is this?

By owning something, is this a ‘permission’ to ‘Join in’?



A game of smells

Incense Game Set

Manufactured in Japan, Edo period 1615–1868

How can shared experiences bring people together?

This is no ordinary game – it's all about smell! In Japan, people have played incense games for centuries, gathering to guess different scents. It wasn't just about winning, it was a way to socialise. Like music or food, scents can connect us to memories, places, and people. What smell reminds you of a special time or community?



Research Activity

As a group, discuss: what are other games that provide users with opportunities to socialise?

Watch games designer Matteo Menapace describe how he made a new board game.



Support to be active

Aura Seismic Suit

Designed by Yves Tahar, 2017

How can technology help people stay active and independent?

This suit is an example of assistive clothing, and is designed to help older people move more easily. It provides gentle support to muscles, making walking and everyday activities less tiring. As people age, staying active can become harder, but technology like this helps them stay independent and connected to their communities. It's a reminder that support isn't just something we get from people – it can come from great design too!

Research Activity

Think about assistive clothing. Imagine a world where clothing could help people in new ways. Who might need special clothing? What could a futuristic outfit do?

A cup for the community

Slop Basin

Manufactured by H.M Williamson & Sons, 1910

How can everyday objects help spread big ideas?

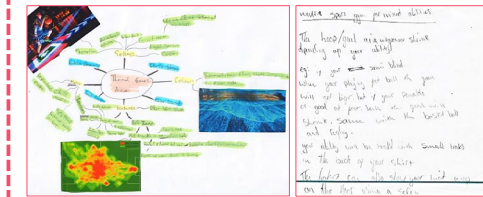
At first glance this cup might just seem to be a part of a tea set, but it has a powerful connection to history. In the early 1900s, women campaigning for the right to vote – the suffragettes – used tea parties to share ideas and raise money for their cause. Sitting together over tea wasn't just a social event but a way to build a community and fight for change.



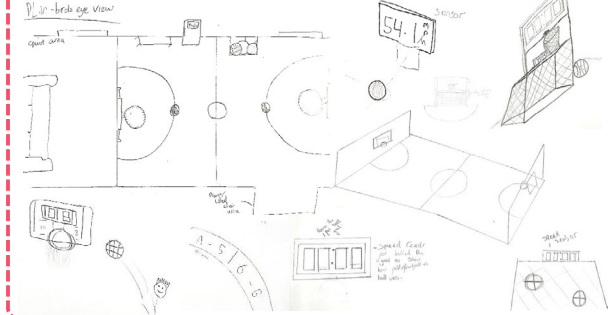
Research Activity

Discuss with your how groups use everyday objects including badges, clothes to spread their message. Present to each other a design that could represent a cause you care about.

How we explored the theme: Online research



Our initial design ideas: Sketches



How we considered the environmental impact:

The group knew that the ideas and brainstorming we had come up with needed heavy duty, long lasting, durable and strong materials. These often leave a higher carbon footprint than others and use lots of energy to produce them. However, knowing this, we thought carefully about sustainable woods, the origins around this and researched this further. We realised that if we used locally sourced materials it didn't have as far to travel meaning that fuel and energy costs would be lower than if we brought others from countries further away. The use of recycled materials such as plastics that have been mulched down and then reformed were also an option for building materials. There seemed to be lots of things out there which would suit our ideas and didn't have such a harsh affect on the planet. We wanted to set up a meeting with our schools Eco-Team leader to help us come up with more ideas about how to consider our environmental impact in a way that weighs up the pros and cons of our material use for its intended purpose and decide on the best possible options. Through our discussion, we found renewable energy really interesting as this ties in with our idea well. We really like the idea of using the kinetic energy produced from playing sport in our facility to power it at the same time!

The Idea: Accessible Sports Hub

Group Name: The Unknowns

Team Members: Charlie, Chloe, Jack and Vutechi

Year Group: 9

How we explored the theme: Discussions and meetings



Sports for everyone

Accessible Sports Hub

Designed by students from Kelvin Hall Secondary School, Hull, 2024

After noticing in P.E. lessons that not all of their classmates could take part in the same activities as each other, the team set out to create a sports hub that was accessible to all. The group researched strong materials that were also sustainable and even considered the use of renewable energy made from all the movement happening in the hub to power it! By interviewing users, they discovered how they should create a concept which could be 'modular' which means it can be customised for whichever group was using the hub.

How we prototyped, tested and iterated:



Our user/peer feedback:

The other groups really liked our ideas and thought if our idea could be achieved it would be a brilliant way to make all games accessible no matter what your ability. They liked the modernisms of our ideas and the way that digital technology would be used effectively to level the playing field in relation to physical and mental abilities and how it made lots of different sports available for all to take part in. When we spoke to the SENCO at our school, they liked that this was our aim and we looked together at how to make it accessible for all, without it being noticeable to everyone. We really liked the idea of making detachable facilities to switch around for different needs, particularly the floor and equipment that present the most problems for those with varied accessibility. We discovered through our discussion that we wanted to offer more to those who become overwhelmed or overstimulated by noise, light and/or contact and ways to make sport more approachable for these people. This led us to add in a potential time out area to help calm those with Autism or ADHD as well as look into the best possible communication methods for everyone to read and understand in a fast paced environment.

The Idea: Accessible Sports Hub

Group Name: The Unknowns

Team Members: Charlie, Chloe, Jack and Vutechi

Year Group: 9

Our reflection as a team:

We worked amazing as a team and each one of us brought lots of making expertise to the idea and final prototype. The final model we thought showed off the idea really well and even people who didn't fully understand the concept could see immediately what we were trying to achieve. I am very proud of the way we worked out our differences in the group and the roles we all played and how we delegated. We supported each other at every stage and are exceptionally pleased with the outcomes. We are so glad to have taken on board all of the feedback people gave us in our journey as this really elevated our idea and made us open to more possibilities. Particularly our meeting with our schools SENCO and Eco-Team Leader as this pushed our idea towards how to be more inclusive as well as more sustainable which is really important to all of us.

Our Final design idea:



Research Activity

Watch this film to see how a designer has considered user accessibility in an object from the V&A's collection.



Rest



Rest

Good design considers how people feel. Soft lighting, comfy seating, and calming colours help our brains switch off. Even the layout of a space, like a bedroom that's not too cluttered can make it easier to Rest.

Have you ever noticed that designers often say 'I get some of my best ideas in the shower, or in bed, or driving to work, or when bored...' Does that suggest that Rest is in fact essential to being innovative?

Can someone have 'too much rest'?

What mindful activities can lead to Rest?

Rest: starting points

Discuss:

What does it mean to ‘Rest’?

Must we work, play, think, explore, debate...
in order to ‘Rest’?

Why do you ‘Rest’? What happens when you do?
Even we you say ‘nothing happens’ – this is likely
not true!

Why do you ‘Rest’ and what happens when you do?

What objects help you Rest?
Headphones, pyjamas, eye masks?

What does ‘good rest’ feel like?
How would you ‘get’ more of it?
Can you design for this?

How can we help users ‘unplug’?



Building your own peace

Floral Garden

Manufactured by Britains Ltd, 1960–1966

How can designing a space help users feel calm?

This toy lets users design their own miniature garden piece by piece. Gardens can be places to relax, play or simply enjoy nature.

Some are wild and full of life, while others are neatly arranged. No matter the style, green spaces are important for rest. Have you ever felt calmer just by being in a garden or park? That's because nature has a way of helping us slow down. If you could design your own perfect rest space, what would it look like?

Research Activity

Look at different types of gardens – like Japanese zen gardens, rooftop gardens, or community parks.

Pick one and find out how it is designed to help users relax.

Draw or describe a small resting spot inspired by what you've learned.



The variety of chill



Photograph of Emma Palladino

Photographed by Samuel A Walker, 1885

Where would be the perfect place for relaxation?

The photographer has captured ballet dancer Emma Palladino, who can be seen taking a well-earned break, totally at ease.

Unlike a bed, or a chair, a hammock moves with the user's body wrapping around you in a way that can feel like floating. Hammocks aren't just sleeping spots but also allow user to take time to pause and reflect.

Research Activity

What makes hammocks a good way to rest? Some people sleep in hammocks every night, while others use them just for relaxing.

Research one example and make a quick sketch or write a short description of how and where they are used.

Writing comfortably

Wrist Rest

Designed by Fan Yaoqing, 1983

How can we support users to complete tiring activities?

We all know that sometimes we have to do tiring activities in school or at work. Typing or writing for a long time can be quite uncomfortable, so what can we do to change that?

After taking inspiration from Chinese scholars, who would have to write for hours and hours, artist Fan Yaoqing designed this wrist rest to support users. By elevating the user's wrist, it prevents the writer smearing pen ink on their paper.

Research Activity

Take a look around your home or school.

What different objects support users and allow them to complete tiring tasks in a more comfortable way? Make a list of these and consider how the designer understood user needs.



How nature can assist relaxation

Restore Decor

Designed by students from Outwood Academy
Haydock, St Helens, 2024

The students researched the human need to connect with nature and recognised how urbanisation is restricting people's access to nature. The group carried out research of their local community to find out what their current access to green spaces was like. They discovered that people did not view connecting with nature as accessible and straightforward. This need for simplicity dictated the team's design as they proposed their idea of terrariums made from reused jars. This was paired with information aimed at educating users about the biology of their terrariums and how users needed to care for it.

Research Activity

Watch the ‘Sitting on Recycling’ animation.

Have a go at some rapid-fire design hacks. Choose 3–4 everyday objects and sketch out how you would recycle them.



Restore Decor : How can we restore our connection with nature with limited access to green spaces

Improve Mental Health By Connecting with Nature

Biophilia is the inherent human need to connect with nature and life that lives around us. We know that people are gradually losing the option to connect with nature however the outdoors can improve your physical health and most importantly your mental health. When we discovered the themes for this years competition we saw the opportunity in the word RESTORE, to think about ways we can RESTORE people's connection with nature to improve their mental health.

As part of our research we conducted a survey for pupils of the school and wider public in the Haydock community. We discovered that a lot people feel better when they have been outside with nature however find it difficult to find a green space near by. We therefore saw an opportunity where we could encourage individuals to adventure outdoors into nature and bring it into their homes where it is more accessible for everyday life.

We researched into the improvement green spaces had on mental health over the pandemic and 45% of people in the UK stated that it helped them cope with stress and anxiety. From this we has a look at different ways people already bring in nature to their homes such as house plants, terrariums and flowers. However when assessing the results from the survey we found that people did not see connecting with nature as accessible and straight forward.

Customer Research

COLLECT

We sent out a questionnaire to students and the Haydock community to find how often they connect with nature and when they do if it makes them feel happier and improves their day.

We found out that those surveyed the majority visit green spaces often and 75% of people had been to a green space in the past month. However 64% of people said they do not have green spaces near by and have to travel to visit them.

All the responses saw visiting green spaces and nature as a way to improving their daily mood and make them feel better. After we looked at the results from the survey we looked at ways we could encourage individuals to get outside and bring the green spaces into the home to help improve their mental health without travelling far.

We extended our research by talking to the World of Glass Charity in St. Helens that links to the heritage and makers of glass in the community. We found the future of glass is to make production carbon free. This inspired us to make sure our product has no emissions and sustainable glass.

V&A Collections Research

We started our research with the themes development pack where we saw the link of restoring buildings and spaces, as people in the community struggle to access green spaces to improve their mental health. From this we used the V&A website to search the collections as a starting point and inspiration for RESTORE category that could inspire our designs. We looked at ways nature has been brought into designs through a range of products and materials.

Restore Decor : How can we restore our connection with nature with limited access to green spaces

MAKE

Material:

The front and back cover of the instruction manual is printed using fertilizer ink and seed paper. This allows the instructions to be recycled in the terrarium and grow help grow plants. The fertilizer also helps improve the quality of the enclosed environment.

Purpose:

The purpose of the instructions manual is to help customers find and use the correct recycled materials such as glass container, soil, stones, plants to create an effective working terrarium as well as improving their mental health and mood when connecting with nature and outside spaces.

Design:

We designed the instruction manual to resemble a fully constructed/working terrarium so users are aware of what they can achieve whilst also catching the eyes of the customers.

QR code:

The working QR code has been made to show the customers a step by step of how to build the terrarium in different sized recycled containers.

Initial ideas:

Sourced items for free from reused jars and soil, plants outside. Trial and tested terrariums.

Front cover

Instruction Booklet

SCAN ME

6 R's:

The instruction manual is accessible for all as the aim for the project was to reduce reuse and recycle. The terrarium reuses existing products such as jam jar, coffee jar and soil, plants that can easily be found outside.

SHARE

Reflection:

We believe this product fits into the RESTORE category as there is a decline in green spaces in the UK and research shows that nature improves people's mental health and we believe that we have designed a product that tackles this problem and is accessible to all.

In our initial testing after making the terrariums we discovered that soil would dry out fast so adding more moss fixed the issue holding in moisture in the soil and adapted the instructions.

To develop this further we would use test the product by giving out materials and instructions to individuals to test and feedback. Also look more specifically at what accessible plants can be used in the terrarium. We would use this feedback to develop the product further.

Outwood Academy
Haydock Team Restore:
 Josh, Riley, Adam and Valencia

INNOVATE

V&A