

Bringing the business of design to life with Deutsche Bank

Outline for all Design Ventura 2023-24 Lesson Plans

Design Ventura 2023-24

Lesson Plan Outline 1 of 6 - Launch

Introduction

Design Ventura workshop outlines have been created to support teachers in delivering the project to their students. They are intended to support the major milestones within the project. We use the term 'workshop' instead of 'lesson' to encourage a creative and enterprising learning environment. We encourage teachers to edit the outlines according to the time available and the learning needs of the class. Suitably broad learning objectives and student success criteria have been outlined for this purpose. Assessment opportunities have been highlighted in the right-hand column.

All activities are suitable for use with Key Stage 3 and Key Stage 4 students, with further suggestions included for more in-depth learning at Key Stage 4. All content has been developed in line with national curriculum and GCSE subject content guidelines.

Focus

The focus of this workshop is to support students as they begin to work as a team, and in their initial responses to the design brief.

Time Requirements

This workshop is planned for one double lesson (90-120 minutes) but can be easily adapted to suit individual needs by omitting activities.

Workshop Plan

Session Aims

- Introduce the project brief
- Introduce team working and help individual students recognise how to use their strengths to contribute to a team
- Provide insights into professional design and a 'live' design context
- Provide the context for understanding the needs of the user

Learning **Objectives**

- Understand the project brief
- Understand how designers work in teams and make individual and group contributions to the design process





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- Know how to investigate the design and business context and why it is important in design
- Know what is meant by user centred design

Student success criteria

- Teams have been established and each member assigned a role
- Each student has contributed to the team's initial response to the design brief
- Students have begun to identify the look and feel of the Design Museum and Shop
- Teams have identified the user that they will design for and some of the key needs of their user

Employability Skills

- Independent inquiry
- Collaborative working
- Considering the needs of others
- Critical thinking
- Considering real world issues

Hygiene, Health and Safety

Hygiene standards should be considered for workshops, including:

- regular hand washing
- the use of gloves for object handling
- cleaning any shared materials with antibacterial wipes/spray between handlings.

Design **Ventura** Resources Design Ventura Brief film:

Released at the beginning of September. Design Ventura student brief as pdf:

https://ventura.designmuseum.org/resources/student-

brief/

Team Role Responsibilities:

https://ventura.designmuseum.org/resources/team-

role-descriptions/ Team Icebreakers:

https://ventura.designmuseum.org/resources/team-

icebreakers/

the Design Museum Shop and User Profiles:

https://ventura.designmuseum.org/resources/design-

museum-shop-information/

Product Notes Sheet:

https://ventura.designmuseum.org/resources/handling

-collection-notes/

Design Museum Shop film:

https://vimeo.com/226438544

Design Museum Shop Website:

https://designmuseumshop.com/

Design Museum Shop fact sheet

https://ventura.designmuseum.org/resources/design-

museum-shop-factsheet/

Design Museum Shop presentation



museum-shop-information/

https://ventura.designmuseum.org/resources/design-



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Assessment Opportunities and Curriculum

1. Introduction to Design Ventura

Introduce students to Design Ventura See student brief and overview film (brief film released at the beginning of September)

2. Team Working

Organise students into teams of 4-6. Explain that they will each have roles and responsibilities within the team. See Team Role Responsibilities and Team Icebreakers for more information.

3. The Design Ventura Brief

Show your students Design Ventura Brief film Design Ventura 2022-23 Brief on Vimeo (released In September)

In their teams ask students to agree what the brief specifies in relation to:

The target audience

The business context for the product and what kinds of things are sold there

Sustainability

Costing and budget

Manufacturing

Discuss the feedback with the group and agree on the 5 most important points from the Design Ventura brief.

Ask students to write down these design constraints.

4. Team Working - Organising Roles and Responsibilities

Ask students to agree which roles they will take responsibility for within their teams. These are the roles we recommend for team members participating in Design Ventura:

Project Manager – responsible for making sure that all aspects of the design process are completed on schedule

Design Manager – responsible for organising and finalising all aspects of the design (NB all team members should be involved in the design of the product)

Finance Manager – responsible for planning and organising the costing and budget aspects of the design





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Communications Manager – responsible for overall presentation of the design and organisation of the team pitch

For more specific activities around team working and deciding on team roles see:

Team Roles Responsibilities

https://ventura.designmuseum.org/resources/team-role-descriptions/

Team Ice Breakers

https://ventura.designmuseum.org/resources/team-icebreakers/

The Business Context -The Design Museum Shop

Show students the Design Museum Shop film https://vimeo.com/226438544

Ask students to write down the four most important things that they will need to consider when designing a product to be sold in the Design Museum Shop.

Discuss the 'look and feel' of the shop. Does it tell students anything about the style and design of the products sold there? Why might this be important for their designing?

Using the <u>Product Notes</u> sheet and <u>Sustainable Materials</u> sheet as well as internet-based research of products sold in <u>the Design Museum</u> <u>Shop</u>, ask students to work in pairs to find one product to research. Ask them to record:

- The product information function, price, materials, style
- Who the intended user is they could consider how the product itself communicates its suitability to the user
- What makes the product suitable for the Design Museum Shop?
- What are the sustainability credentials of the product consider materials, function, manufacture, end of life, etc.
- Is the product accessible, can it be used be everyone? If not, what could be done to make it more accessible?

Ask students to present their findings to the group. You can also use:

The Design Museum Shop Information presentation

[https://ventura.designmuseum.org/resources/design-museum-shop-information/]

and Location Research Worksheet (for visits to the Design Museum) [https://ventura.designmuseum.org/resources/location-researchworksheet/]

Product Notes Sheet

[https://ventura.designmuseum.org/resources/handling-collection-notes-2019/]

Sustainable Materials Sheet





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[https://ventura.designmuseum.org/resources/sustainable-materials-2020/]

Key Stage 4:

Investigate the work of one of the following designers whose products are/have been sold in the Design Museum Shop:

- Margaret Calvert
- Anthony Burrill
- Charles and Ray Eames
- Charlotte Perriand Philippe Starck
- Marimekko
- John Pawson
- Issey Miyake
- Thomas Heatherwick
- Yinka Ilori (Design Ventura 2020 brief setter)
- This year's brief setter (announced in September)

Think about the following when researching:

- What products has this person or company designed?
- Why is their work seen as iconic/popular?
- Are any of their designs pioneering?
- Who or what have they been influenced by?
- How have they influenced other designers?
- How have they influenced the way that people live or use products?

Plenary and Home Learning activities:

Ask students to identify as many adjectives as they can in relation to the following design factors that relate to a product sold in the Design Museum Shop (examples are given):

- Function (simple, innovative...)
- Style (minimal, classic...)
- Size (small, compact, portable...)
- Materials (sustainable, bright, hard-wearing...)

Give students an image of a generic product - stool, spoon, cup - and ask them to redesign it (changing shape, colour, size, materials etc) to suit the 'look and feel' of the Design Museum Shop.

Ask students to come up with a list of at least 5 adjectives to describe the 'look and feel' of the Design Museum Shop.

6. User Centred Design

Watch the Target Audience film https://vimeo.com/170179537

Explain the principles of user centred design and how product designers use them to design products that meet the needs and fit the behaviours of users.



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Provide each group with the three user profiles:

- Adult design enthusiasts
- Young people and students
- Families

Ask students to identify one product from the <u>Product Notes Sheet</u> or <u>the Design Museum Shop</u> website that is suitable for each user group. They should be able to explain at least 4 reasons for their choice. They could consider:

- Function
- Materials
- Ergonomics Size/ shape
- Product branding

Ask students to suggest at least two things that could be improved to make the product more suitable for the user group. They should be able to explain reasons for their improvements.

Ask students to select one product from the Product Notes Sheet or the Design Museum Shop website and make alterations to make the design suitable for a different user group.

Ask each team to select one user group that they will design for. Explain that user centred design means that they will design a product for this specific group and gather feedback on their designing at key points during the process.

Ask students to analyse the lifestyle of the selected user group. How do they work or study? How do they eat/wash/cook? What do they do for entertainment? What are their lifestyle choices? What are their values and beliefs? This could involve interviewing someone who fits the user group or using a questionnaire to gather data on their target audience. Lesson time can be used to plan how the teams will gather this information. You can also use the Target Audience Worksheet to help with this.

Safety and Accessibility

Ask students to identify the safety needs of their user group. How will they ensure that risks are minimised and the product is safe for all users? Students should also consider accessible design principles and the needs of people with disabilities and neurodivergence, as these users cross audience groups. How would the answers to the earlier questions be different for someone living with a disability/neurodivergence? How could the products used be made to be more accessible to everyone?

Key stage 4:

Ask students to research the social, moral, cultural, social and economic factors that are associated with a person who fits one of these user groups. How might they impact the design of their product?

Plenary and home learning activities:





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Create a mood board, using images and annotation, of the needs and wants of the user group you have selected. You could focus your attention on describing one or two people who belong to this user group. What does their day look like, what would help 'improve their everyday life', make their day easier or more fun?

Give students an image of a generic product - stool, spoon, $\operatorname{cup}-$ and ask them to redesign it (changing shape, colour, size, materials etc) to suit their target user.

Plan and carry out an interview of someone who belongs to the user group you have selected — consider each team member using the same questions so that the results can be compared. Consider focusing these questions around a specific product/product idea so that you can find out how they might use it or how it can be designed to really help them to do something.





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Lesson Plan 2 of 6

Idea Generation

Workshop Focus

The focus of this session is to support students as they begin to work as a team, and in their initial responses to the design brief and the research needs for their product.

Time Requirements

This workshop is planned for one double lesson (90-120 minutes) but can be easily adapted to suit individual needs by omitting activities.

Session Outline

Session Aims

- Support students to create initial ideas in response to the brief
- Provide support as teams define their design
- Provide insights into professional approaches to research in design
- Provide insights into professional methods of user-centred research

Learning **Objectives**

- Know how to generate initial ideas for a product
- Understand how to develop design criteria
- Understand how to identify research needs and
 - carry out research related to a product idea
- Know how to use a user centred design approach to find out the needs and wants of the user

Student success criteria

- Teams generate a number of initial ideas and select one product idea for development
- Teams create a set of design criteria and identify the research needs for the product
- Teams carry out relevant research related to their product idea
- Teams employ a user centred approach to find out the needs and wants of their target audience

Employability skills

- Independent inquiry
- Collaborative working
- Considering the needs of others
- Critical thinking
- Considering real world issues





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Hygiene, **Health** and Safety

workshops, including:

- regular hand washing
- the use of gloves for object handling

Hygiene standards should be considered for

cleaning any shared materials with antibacterial wipes/spray between handlinas.

Design Ventura resources

- The Idea Machine
 - https://theideamachine.org/
- Paper Forms Workshop Video https://vimeo.com/470166111
- Idea Summary Worksheet https://ventura.designmuseum.org/resource s/idea-summary-worksheet/
- **Judging Criteria** https://ventura.designmuseum.org/resource s/judging-criteria/
- **Target Audience Research Worksheet** https://ventura.designmuseum.org/resource s/target-audience-research-worksheet/
- **Product Notes Sheet** https://ventura.designmuseum.org/resource s/handling-collection-notes/
- Sustainable Materials Sheet https://ventura.designmuseum.org/resource s/sustainable-materials-2020/
- **Evaluating Branding Worksheet** https://ventura.designmuseum.org/resource s/evaluating-branding-worksheet/

Assessment Opportunities and Curriculum

1. Introduction

Introduction to the session, outlining the aims of the session and the expected outcomes. Students should be sitting with their teams if possible.

2. Starter Activity

Kickstart the session by giving students an everyday product such as a bottle, brick, peg, paper clip etc.

Ask students to think consider one of the options below in a limited time (5 mins):

Think of as many different uses for the product as possible





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- Add one thing to improve or alter the function of the product
- Combine two products to come up with a new product idea

3. Generating Initial Ideas

Visit theideamachine.org The Idea Machine generates a random design brief, which students have one minute to answer. Use this to get students coming up with ideas quickly and thinking about target users. Return to it whenever students get stuck for ideas.

Ask students to re-visit their research on the user group they have selected. What have they found out about the user's needs, wants and lifestyle? Share this within their teams/with the rest of the class.

Give the student's 5 minutes to mind map 5 product ideas that could help their user to with one aspect of their life/daily routine (e.g. getting up, travelling to school/work, leisure activities/hobbies, etc.) Give students 10 minutes to sketch these 5 product ideas out, annotating what each product needs to include.

Each team member should present their best ideas to the rest of the team, explaining its strengths and weaknesses. Encourage students to ask the presenter questions and discuss the ideas further.

At the end of this feedback time, ask students to come up with one idea that they want to develop into a product design. Remind them that it must be suitable for their user group, and that at this stage it is just an idea – the final design may look very different to this initial idea.

Stuck for ideas or design fixation?

OPTIONAL: Paper Forms Workshop Video (1hour standalone workshop)

Run the **Design Ventura Paper Forms Workshop**. This is a standalone, hour long workshop that can be run alongside the video, by pausing at the appropriate moments. This will help students come up with ideas by using function to follow form.

If you don't have enough time, try the following: The Idea Machine

Return to The Idea Machine to get students coming up with a range of different ideas for different users in only 1 minute. Encourage students not to fall in love with their first idea right away but come up with lots of different options to discuss.

Try combining the best aspects of several different ideas.

Think about a specific phase of the day related to your user group - e.g. mealtime, getting ready in the morning, travel, work, play.

Improve an existing product

Take an existing product and get student's thinking about how they could improve it – think about what improve can mean; make more efficient,





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make work better, provide emotional value, make more fun, make more sustainable, make more accessible, etc.

Give students a collection of products and objects that are interesting in some way – these can be innovative, quirky, compact, expanding, durable, sustainable, and so on. How could aspects of these products be used in their designs?

4. Selecting the Design for Development

Ask students to select one idea that has potential for development. Get them to discuss and make notes on how the idea could be evolved using different materials, manufacturing methods and refining the form and function of the product.

Use the Idea Summary Worksheet to note down the key aspects of the design:

https://ventura.designmuseum.org/resources/idea-summary-worksheet/

5. Design Criteria

Ask students to review the sketches and ideas they have produced.

What are four essential things that their design should do or have in order to fulfil its function? What other design considerations should be made? What could or should the product do, be or have in order to meet the needs of the user? This could be presented as *design criteria* or a *design specification*.

What aspects of the designs they have generated do they wish to hold on to? Which aspects and ideas will they get rid of?

See the Judging Criteria worksheet to compare this design criteria to the competition criteria https://ventura.designmuseum.org/resources/judging-criteria/

Using their design criteria or specification ask students to agree as a team which idea or aspects of ideas they will take forward into the design development stage.

6. Identifying Research Needs

Give students a product from the Design Museum Shop or ask them to refer to their previous product analysis from the Design Museum Shop research to prompt their thinking. Using their design criteria or specification, what will they need to find out in order to develop a design that meets the user's needs?



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Ask students to complete research to inform the design of their product. The questions below are designed to help students to consider the key aspects related to their product. Depending on the product idea additional or different aspects may need to be researched. Students could work independently or in pairs or groups to conduct relevant research related to the team's product.

Students could produce a summary of their findings in order to help them in the design development stage.

User centred design – target audience

What are the needs and wants of the user?

What must the product do, be or have in order to meet their needs? What size should the parts be?

How could the aesthetics (look and feel) of the product be influenced by the needs of the user?

How will the user actually use the product?

How might this influence the choice of materials, or the overall design of the product?

What are the ergonomic considerations for the product? How will this impact on ease of use?

Ask students to conduct interviews or use questionnaires to research the needs of the user. If the user group is 'family', for example, they could use a focus group approach. They could present the findings as a summary or produce a detailed user profile.

Use Target Audience Research Worksheet https://ventura.designmuseum.org/resources/target-audience-research-worksheet/

Materials

What materials could be suitable or unsuitable for the product? Why? How can the product be designed to use as few materials as possible? Why is this important?

Which materials would best suit the needs of the user? Why? Which materials are easy to manufacture?

Sustainability

How could the product be designed with good sustainability credentials? What are the factors that influence sustainability in product design — consider materials, manufacture, use, function, repair, end of life.

Use the Sustainable Materials Sheet https://ventura.designmuseum.org/resources/sustainable-materials-2020/

Branding and marketing

Find a selection of products with a similar function or target audience. How have the designers used packaging and branding to appeal to this user group?

What materials have been used in the packaging of the products?





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How sustainable is the packaging? What type faces have been used in the branding? What does the branding and packaging help to communicate about the product?

Use the Evaluating Branding Worksheet https://ventura.designmuseum.org/resources/evaluating-branding-worksheet/

Key Stage 4:

Ask students to conduct research to generate and analyse anthropometric data relevant to their product idea and user. How will this data be used to ensure ease of use?

Ask students to analyse the responses to user interviews and questionnaires using appropriate graphs and data analysis methods.

Plenary and home learning activities:

Start a sketch book to jot down ideas and sketch quick designs. Look at the products you use at home or school; how can these products help and inform your own designing? Look at the shapes, colours and materials of other products. How can these inspire your own designs?

Give students a product or an image of a product. You can use the <u>product notes sheet</u> for examples from the Design Museum Shop. Ask them to design the worst possible version of it. Use the outcomes to discuss the features to avoid and things that work well.

Give teams two different products with the same function. Ask them to rate each product for how well it performs its function, suitability of materials, sustainability, aesthetics, suitability for user, etc. Ask them to explain the overall better product, explaining reasons for their decisions.

Create a mood board of packaging and branding ideas for the product. Annotate the mood board to explain how materials, style, colour and typeface have been used to appeal and communicate to the target audience.

Ask each team member to interview a user or group of users based on the questions they have planned in lesson time. How does the user think the product could help them? Do they suggest any improvements to the function? How easy will the product be for them to use? Do they provide any other insights that the designer has not yet considered?





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Lesson Plan 3 of 6

Design Development

Workshop Focus

The focus of this session is to support students as they refine their idea and develop their final design, through drawing, experimentation and modellina.

Time Requirements

This workshop is planned for one double lesson (90-120 minutes), but can be easily adapted to suit individual needs by omitting activities.

Session Outline

Session Aims

- Provide students with a range of techniques to develop their designs
- Provide insights into professional design development practices
- · Provide insight into design methods including user centred design and collaborative practice

Learning **Objectives**

- Know how to use a range of techniques to develop the design
- Work as a team and individually to ensure the design meets the users' needs
- Know how to ensure that a design fits the business context
- Know how to use research to inform design development

Student success criteria

- Know how to use a range of techniques to develop the design
- Work as a team and individually to ensure the design meets the user's needs
- Know how to ensure that a design meets the business context
- Know how to use research to inform design development

Employability skills

- Collaborative working
- Problem solving
- Considering real world issues

Hygiene, **Health and** Safety

Hygiene standards should be considered for workshops, including:

- regular hand washing
- the use of gloves for object handling
- cleaning any shared materials with antibacterial wipes/spray between handlings.







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Design Ventura resources

- In the Design Studio with Pearson Lloyd https://vimeo.com/album/2853680/video/50 823631
- Idea Summary Sheet https://ventura.designmuseum.org/resource s/idea-summary-worksheet/
- Sustainability film https://vimeo.com/170177851
- Prototyping film https://vimeo.com/170147725

Assessment Opportunities and Curriculum

7. Inside the Design Studio

Watch In the Design Studio with Pearson Lloyd https://vimeo.com/album/2853680/video/50823631. Discuss with students the key stages of designing and design development.

8. Design Development

The following activities are methods that can be used for collaborative designing. Remind students that they are all working on the same design and that it is good to share and discuss ideas. Once the overall product idea has been refined, students can work as a group, in pairs or individually on the overall design or one aspect of it.

Sketch Modelling, Working in 3D

Give each team a small selection of basic materials, such as paper, masking tape and paper clips, or play dough. Students can work individually or in pairs.

Give students 15-20 minutes to develop one quick sketch model of their product idea. The sketch model does not need to be detailed, but it should experiment with scale and form, and aspects of how the product could work.

Ask students to discuss which aspects of the model works and which do not work, giving reasons. Team should make decisions about how they will develop the final idea.

OPTIONAL: Prototyping Activity

As an alternative to the above, you can use the Prototyping Activity as a starting point to encourage your students to start working in 3D.

OPTIONAL: Paper Forms Workshop Video (1hour standalone workshop)





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If you haven't already you can run the <u>Design Ventura Paper Forms</u> <u>Workshop</u>. This is a standalone, hour long workshop that can be run alongside the video, by pausing at the appropriate moments. This will help students come up with 3D paper prototypes by allowing function to follow form.

4x4 designing

The purpose of this activity is to encourage students to discuss and share ideas and to help them to focus on what is essential and what is desirable for their product.

Give each student a piece of paper and ask them to divide it into four sections. Each sketch should be given 5 minutes.

Each team member begins by quickly sketching their idea for a product in box 1, annotating their idea so that it is self-explanatory. Rotate the sketches around the group, with each team member given 5 minutes to sketch a development in the next box, adding something or taking something away to refine the idea. Each development should be annotated, and specifically relating to the original design or the previous team member's development of it.

Once each sketch has been round all of the team members, ask students to review their original design to see what has been added or removed.

Selecting the final design

Ask each team to discuss which ideas work and which do not in order to come up with their final design. They can compare their drawings and sketches to explore different perspectives, scales and interpretations of the idea.

Pass/Fail or Idea Scoring

Students can quickly assess their designs or aspects of their ideas against the design criteria they created previously to assess their success or suitability for the user. They could also assess it against the Design Ventura Judging Criteria.

At this stage each team should have a final idea that they plan to refine into a 3D prototype. Ask teams to remind themselves of their design criteria – does their final idea meet these criteria? Does the design solve a problem for their target audience? Can it be sustainable, or does it encourage sustainability? Is it possible to manufacture the product within budget? Is it suitable to be sold in the Design Museum Shop?

Students could use the Idea Summary Sheet to focus their thinking: https://ventura.designmuseum.org/resources/idea-summary-worksheet/

9. Sustainability

Watch the sustainability film on the Design Ventura website https://vimeo.com/170177851





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Ask teams to consider what they could change about their design to improve its sustainability credentials.

They could consider some of the following factors:

- Materials (see sustainable materials sheet)
- The product's life cycle
- Manufacturing
- Packaging
- Transportation

Key stage 4:

Complete a detailed life cycle analysis of the product, taking into consideration the ethical, social and ecological footprint of the product. Students should consider these factors in relation to both the materials and components of the product and also the function of the product.

10. 3D Prototyping

Watch the Prototyping film on the Design Ventura Website – https://vimeo.com/170147725

Ask students to discuss when, how and why designers test and model their ideas.

Provide students with a range of suitable materials, tools and manufacturing methods.

Ask teams to refer to their research to inform their selection of suitable materials and manufacturing methods for their prototype.

Ask teams to develop their drawings and models into a 3D prototype. The prototype should be a working model that is produced to scale and should be able to be used and tested.

Key stage 4:

Create a flow chart or work schedule to show the planning involved in making the prototype. Systems planning could record improvements and modifications made during the process and could demonstrate appropriate mathematical calculations and methods involved in product manufacturing.

Ask students to produce detailed parts drawings to plan a final prototype. They could calculate dimensions, surface areas, and show tolerances, for example. They could also demonstrate how waste can be minimised.





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11. User Centred Design - Generating User Feedback

Once a prototype has been produced teams can go back to their user group and generate some feedback on their design. They could use the following methods:

Focus group

Gather a small group of people who fit the user group and ask them to assess the product through discussion. Students could prepare a small number of guestions beforehand to stimulate the discussion. Students should record any feedback.

Role play

Students could put themselves into the situation of the user and discuss how they would use the product or any improvements that could be made from the point of view of that person.

Interviews

Students could interview one or more people who fit the user profile to gather feedback on their design. They should record and comments and suggestions that are made for improvements to the product.

Ask teams to record the feedback that was provided, and to consider what improvements could be made to the design of the product.

The Design Ventura brief asks students to consider how their final design could be improved and refined further, so it is important to encourage students to continue to evaluate their designing, even if they think they have a final design that they are happy with.

12. Suitability for the Business Context

Ask students to remind themselves of the business context for their product. Does their prototype suit the look and feel of the Design Museum Shop? Are there any improvements and modifications that could be made to make the design more suitable for this context?

See Design Museum Shop presentation for more information about the business context:

https://ventura.designmuseum.org/resources/design-museum-shopinformation/

Plenary and home learning activities:

Ask students to model the idea in several different materials sizes and shapes to work out which one works best.

Interrogate the design against the idea summary sheet and identify aspects that could be improved:

https://ventura.designmuseum.org/resources/idea-summary-worksheet/





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Discuss the ideas with a range of people who fit the target audience. What do they think works well? What do they think could be improved?





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Lesson Plan 4 of 6

Enterprise and Branding

Workshop Focus

The focus of this session is to provide students with support as they consider the enterprise and costing aspects of their product.

Time Requirements

This workshop is planned for one double lesson (90-120 minutes) but can be easily adapted to suit individual needs by omitting activities.

Session Outline

Session Aims

- Provide insights into professional approaches to product branding and marketing
- Develop students' understanding of the business context for Design Ventura
- Develop students' understanding of costing and budgeting issues in product design

Learning **Objectives**

- Understand how branding is used to market products to a target audience
- Understand how design is influenced by the business context for a product
- Understand how costing and budgeting is related to product planning
- Know how to develop business and marketing plans

Student success criteria

- Students develop branding and marketing ideas for their product
- Teams produce business and marketing plans for their product
- Teams produce costing and budget plans for their product

Employability skills

- Collaborative working
- Critical thinking
- · Considering real world issues
- Financial planning

Hygiene standards should be considered, including:

- · regular hand washing
- the use of gloves for object handling
- cleaning any shared materials with antibacterial wipes/spray between handlings.

Design Ventura resources

Hygiene,

Safety

Health and

- Budget Sheet Template https://ventura.designmuseum.org/resourc es/budget-sheet-template/
- Evaluation Branding worksheet https://ventura.designmuseum.org/resourc es/evaluating-branding-worksheet/
- Glossary of Enterprise terms https://ventura.designmuseum.org/resourc es/glossary-enterprise-terms/



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 Evaluating Branding: Active Snap https://ventura.designmuseum.org/resourc es/evaluating-branding-active-snap/

Assessment Opportunities and Curriculum

1 Introduction

Show students the Design Museum Shop film again https://vimeo.com/226438544

Ask them to note down what they think the most important elements of the product design, manufacture and marketing are in relation to the business context of the Design Museum Shop.

2. Progress Update

Students should work in teams to complete a SWOT analysis (Strengths. Weaknesses, Opportunities and Threats) of their idea as developed so far. The aim of this exercise is to recap on progress made so far and to bring a business perspective to ideas. SWOT analyses are often used in business to quickly assess situations.

Each team should assess their idea by identifying the Strengths, Weaknesses, Opportunities and Threats in relation to the idea they have developed in response to the brief. They can also use the student check list to check their product against the judging criteria.

One person from each team should be nominated to share the analysis with the rest of the group.

Using this analysis, ask teams to identify considerations of the product from the business perspective. What are the business aspects of their design that should be developed?

3. Business Focus

Give teams a product or ask them to look at products for sale on the Design Museum Shop website. Ask students to evaluate one product in relation to:

- The USP (unique selling point)
- The target audience
- The price

Ask each team to present the product to the wider group with a one minute 'elevator pitch' which explains the product in relation to the three points above. The aim of this exercise is to get students to consider how products are marketed and how to convey the strengths of their idea.

4. Costing and Budget

Give each team one product. Ask teams to mind map all the aspects of the design and manufacture of the product that have an impact on cost and profitability.

They should consider:

materials





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- packaging
- manufacturing
- labour
- overheads for example rent, utility bills, insurance
- marketing

You can refer to the <u>Glossary of Enterprise Terms</u>, <u>Finance Guidance Template</u> and <u>Budget Case Study</u> to support this.

Calculating manufacturing and production costs:

Teams should calculate all the costs related to the manufacture and marketing of their product. Remind students that the manufacturing costs should be no more than £7 per product, and that the retail price should be around £15 per product. The winning product will be manufactured as a batch of around 200 with an overall budget of £1,400. Teams should:

- Calculate quantities and costs of each material or component used
- Calculate quantities and costs of materials for packaging
- Research the costs of manufacturing methods such as laser cutting, die cutting or printing
- Research the labour costs involved in the manufacture (these can be local or national average costs, for example The minimum wage for under 18s is £4.62 per hour.)
- Calculate how many items can be manufactured within budget
- Calculate the expected profit from the sale of this quantity of product

Students can use the Budget Sheet Template to present their findings https://ventura.designmuseum.org/resources/budget-sheet-template/

Key stage 4:

Ask students to evaluate the suitability of their design for one-off production, mass production, batch production, just-in-time manufacture. They should summarise advantages and disadvantages for each method, giving reasons.

Ask students to research stock forms and standard components that could be used in the manufacture of their product. How could this impact on the manufacturing costs and profitability of their design? How could manufacturing methods impact on the suitability of stock forms and standard components for their product?

Ask students to consider the ethical, social and moral implications of manufacture and production costs. What are the implications of outsourcing manufacture to different countries, or using only local labour, for example?

5. Marketing Focus

Ask students to assess the same product from the Design Museum Shop in terms of its packaging and branding, using the Evaluation Branding Worksheet

https://ventura.designmuseum.org/resources/evaluating-branding-worksheet/

You can also invite students to compare and contrast the packaging and branding for the different iterations of Active Snap as seen in the Evaluating Branding Presentation. Invite students to answer the following questions: What are the differences? How has the different retail contexts changed the look and feel of the product? Which is more successful?





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Which would you buy and why? What ideas has this give you for your product?

Using this research, ask students to plan a marketing campaign for their own idea, thinking about ways they could reach their target audience. They should consider:

- how branding can be used to make their product stand out in the Design Museum Shop
- how marketing methods (for example using digital resources) could be used to reach a wider audience

Encourage students to think outside the box and be innovative, while minimising the cost of marketing. They could consider how humour and quirky ideas can be used to appeal to the target audience. Marketing strategies could include:

- email newsletters
- posters and billboards
- give-aways and samples
- print and media advertising
- sales deals
- viral internet campaigns, considering how such campaigns generate interest
- use of bloggers and social media Influencers to review products

Each team should select one marketing approach and produce a quick mock-up of it. They could produce a poster or storyboard to explain the idea. The following information should be included:

- the name of the product and some information about its function
- the USP
- use of font/typeface and colour to appeal to the target audience
- the price of the product
- · where the product can be bought

Key stage 4:

Ask students to consider how trends and fashion influence the development and style of products. How do products influence trends and fashion? How does technology push and market pull influence product development?

Plenary and home learning activities:

Ask students to conduct market research to assess how much their target audience would be willing to spend on their product. Students could find out the views of the target audience on 'value', 'mid-range' or 'high end' products. Does this information support the costing of their product?

Ask students to create a costing analysis of three similar products – value, mid-range and high end. How do they think the retail cost of each product is arrived at (e.g. materials, manufacture, marketing, retail)? How does the target market influence the retail price of the products? What are the advantages and disadvantages of each approach?

Ask students to evaluate the marketing strategy of a product that they have bought. How was the product marketed? How was it designed to appeal to the target audience? What are the factors that influenced their decision to buy the product?





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Lesson Plan 5 of 6

Communicating your Design

Workshop Focus

The focus of this session is to provide students with support as they begin to communicate their developed designs and to complete their product prototype.

Time Requirements

This workshop is planned for one double lesson (90-120 minutes) but can be easily adapted to suit individual needs by omitting activities.

Session Outline

Session Aims

- Provide students with a range of techniques to communicate their designs and design thinking
- Provide insights into the professional presentation of design
- Support the development of students' presentation and pitching skills

Learning **Objectives**

- Know how to evaluate design and feedback to generate final product designs
- Know how to use a number of methods and techniques to communicate the final design
- Know how to plan and deliver a professional pitch

Student success criteria

- Teams agree on the final designs for their product
- Students work collaboratively to create a series of presentation drawings to explain their design and how it meets the needs of the user
- Students work collaboratively to create a high-quality pitch

Employability skills

- Communication
- Collaborative working
- Problem solving
- Planning and organising
- Self-management



Hygiene, **Health and** Safety

Hygiene standards should be considered, including:

- regular hand washing
- the use of gloves for object handling

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 cleaning any shared materials with antibacterial wipes/spray between handlings.

Design Ventura resources

- Triple Double HIT Snap presentation https://ventura.designmuseum.org/resource
 s/hit-snap-presentation-from-triple-double/
- Triple Double Design Cubes presentation <u>https://ventura.designmuseum.org/resource</u> <u>s/design-cubes-presentation-from-triple-double/</u>
- Design Ventura Top Tips for Pitching Chris Ruse, Deutsche Bank https://vimeo.com/album/2853680/video/54609271
- 3 Minute Pitch Planner
 https://ventura.designmuseum.org/resource
 s/pitch-planning-3-minute-pitch-planner/
- Class pitch guidelines
 https://ventura.designmuseum.org/resources/class-pitch-guidelines/

Assessment Opportunities and Curriculum

13. Introduction

Introduction to the session, outlining aims of the session and the expected outcomes. Students should be sitting with their teams if possible.

14. Final Design Decisions

Using their own evaluation of the prototype and the feedback generated from user testing, teams should agree on improvements and modifications and arrive at their final product idea.

If necessary, another prototype could be manufactured to take account of any modifications to the design.

Key stage 4:

Ask students to produce a technical specification for the product.

15. Communicating Designs

Explain and give examples of professional presentation of design ideas. You can use Triple Double's design routes presentations for <u>Design Cubes</u> and <u>HIT Snap</u> to show how a professional design agency communicates its ideas. (NB: These presentations were accompanied by an in person/virtual pitch meeting.)

What methods do designers use to present their product designs to clients?





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What are the advantages of each method? Why is more than one method often used?

Ask students to note down the essential information that they will need to convey in their presentation of their ideas. Remind students that they are taking part in a competition and that the use of visual communication is an important tool in explaining and describing their design.

Communicating product information

Give each team a product or image of a product from the <u>Design Museum Shop</u>. (You can use products from the <u>Product Notes Sheet</u> or choose your own products to use.) If they were presenting this product to a client, what would they need to explain about it?

Ask teams to identify the key information about their product that should be explained to the client. Ask teams to mind map the methods they could use to communicate this information in their presentation sheets.

Design Ventura presentation requirements

The Ventura competition requires teams to produce three A3 visualisation sheets to present the design process. Included in the presentation should be:

- A bit about the team
- Research findings
- Idea generation initial ideas and how the design was developed
- The final design prototype and product description
- Manufacturing processes
- The sustainability credentials of the product
- Business plan costings and target audience
- Marketing campaign

Students should work on the presentation pages, with each team member taking responsibility for part of the presentation. The presentation should tell the story of the team's design process.

Here are examples of the A3 sheets from past winners:

2021-22 Cambourne Village College

2020 Heckmondwike Grammar School

2019 Twynham School

2018 Simon Balle All-through School

2017 Weatherhead High School

2016 Harrogate Grammar School

2015 Finchley Catholic High School

2014 Burnage Academy for Boys

2013 Weald of Kent Grammar School

2012 Trinity School

2011 Woolworth Academy

2010 Haberdashers' Aske's Hatcham College

Research findings

Students should summarise the key points from their research, including information that is relevant to how their product was developed. This page could include information about the materials selection, how the product





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meets the needs of the user, how the product would be manufactured and the sustainability credentials of the product.

Idea generation

This section should show how the product was developed from an initial idea into a marketable product. This page should include images and a description of the final product.

Business plan and marketing

This section should show the costings of the product, explaining how it can be manufactured within budget and how it is able to make a profit. The marketing and branding plan should be explained, with information about how the product can be marketed to the target audience.

Students could use a number of techniques to present their designs. These could include hand drawn sketches and isometric drawings, CAD drawings, detailed drawings of any complex parts of the product or exploded drawings.

Images of the product prototype should be used, with annotation to explain aspects of the design in more detail or feedback gathered from user testing.

Presentation sheets can be either hand drawn and scanned or created digitally.

16. Preparing for the Pitch

Remind the group that the Ventura competition requires teams to pitch their ideas to a panel of judges. Show students the Top Tips for Pitching film on the Design Ventura website

https://vimeo.com/album/2853680/video/54609271.

You could also show them a clip of a Dragon's Den style pitch. Ask them to make their own list of top tips for pitching.

Students should develop a short pitch for their product. They could follow this template:

- We are... (introduce yourselves)
- Our product is... (give your product a name and explain what it is)
- Our target audience is...
- We think they'll like our product because...
- We plan to manufacture our product by ...
- We can reach our target audience through the following marketing...
- Our product will minimise harm to the planet and encourages sustainability because...
- We think we can make a profit because...
- We think the judges should choose us because...

Students should practice their pitch as a team. It is important to allocate a section of the pitch to every team member so that everyone is involved.





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17. Practising Pitching Session

Each team should present their response to the Design Ventura brief in a short pitch (3 mins or less). Students should then be encouraged to ask constructive questions or make suggestions about ways that the ideas can be developed before the final competition.

18. Next Steps

Teams should now be reminded about any final work to complete (e.g. competition entry form and visualisation sheets) as well as the process that will be used to select one team to represent the school in Design Ventura competition.

Only one team per school can enter the final competition so we recommend that each school runs its own pitching event with judges who can use our criteria to select a team.

The Class Pitch Guidelines

https://ventura.designmuseum.org/resources/class-pitch-guidelines/ provides further information about running the pitching event.

19. Competition Entry

The winning team in your school should be supported to complete the entry form. See the practice competition entry form here: https://ventura.designmuseum.org/resources/practice-competition-entry/





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Lesson Plan 6 of 6

Finishing Up

Workshop Focus

The focus of this session is to conclude the project and support students to evaluate their individual and team participation in Design Ventura. This session should enhance in-school assessment of student progress and achievement through participation in Design Ventura.

Time Requirements

This workshop is planned for one double lesson (90-120 minutes), but can be easily adapted to suit individual needs by omitting activities.

Session Outline

Session Aims

- Conclude the Design Ventura project with students
- Provide students with methods to reflect on their participation in Design Ventura
- Provide a framework for student awareness of skills used and learned through the project
- Complete a personal self-assessment
- Complete project evaluation (online)

Learning **Objectives**

- Understand the importance of critical reflection in learning and designing
- Know how to evaluate personal and team contribution to the project
- Know how to consider the overall effectiveness of the design and consider how it could be improved further
- Know how to identify skills used and learned during the project and how these could be used in other areas of learning

Student Success Criteria

- Students evaluate their individual and team contributions to the project
- Students can explain how successful their design is, and give reasons for improvements and modifications that could be made
- Students can explain what they have learned about the design process and design industry

Employability Skills

- Reflective learning
- Collaborative working
- Considering real-world issues and contexts
- Understanding professional practice





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Design **Ventura**

Resources

Teacher evaluation

Student evaluation

1. Welcome, Introduction and Aims:

Project conclusion and evaluation - discuss the importance of reflecting on the project work and assessing the contributions made.

2. Project Review, Responses to the **Brief:**

Provide a short summary of the Design Ventura project and invite students to reflect on the requirements of the project in the following areas:

Idea

- What was good about your final idea?
- Did it have any weaknesses?
- On reflection would your idea work in real life? Why? Why not?
- Did your research help you to develop the practicalities of your idea? How? What else might you need to research to improve the idea?

Demonstrating Design ideas

- What different ways did you demonstrate your design ideas? (e.g. drawing, annotated sketches, modelling)
- Which of these were the most successful in helping you to develop your design? Why?
- Did you show your designs to an audience for feedback? How did this help you to refine your ideas?

Target Audience

- Who is the specific target market for your product?
- Why would your product appeal to this market?
- Could your product be adapted to suit another market? If so, which market and what adaptations would you need to make?
- Did you carry out research on your target audience? How did you go about this? Were your research methods successful? Why? Why not?

Sustainability

- Are there aspects of your idea which are sustainable? What are they? (function, materials, end of life)
- Does the sustainability of your idea make it more or less attractive to the target audience? How?
- How could the product's sustainability credentials be improved?





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Marketing and Communication

- How do you plan to promote your product to your target audience? (branding, packaging, advertising)
- Which aspects or methods do you think would be the most effective? Why?
- What is your product's USP (unique selling point)?
- What is your product called and how did you come up with that name?

Finance

- Briefly explain the costings for the manufacture and retail of your product what will the product cost to manufacture. what will it retail for and what profit will be made? What is the difference between a cost price and a retail price?
- Did you manage to plan your idea to fit in with the budget, so that the product could retail at around £15?
- Did you have to make any modifications to your idea in order to do this? If so, what were they?

Marketplace 'comparing the market'

- How well do you think your product would compete with other items for sale in the Design Museum shop? Why?
- Would it compete well on price, quality, innovation and function? Why?
- Did you carry out research on the Design Museum shop products in advance, and how did this influence your ideas?

General Reflection

Are there any changes you would make to your overall response to the Design Ventura brief? What would they be, and why? (would you, for instance, change the: idea, design, target audience, communication and marketing methods, pitching style, team roles)

Strengths and Weaknesses Team Review:

Make sure students are sitting in their teams. Ask them to reflect on how well they worked together and how each fulfilled their individual role.

Team Roles and Working **Partnerships**

- Was your team a successful partnership?
- Were the right roles allocated to each member?
- What did you learn from working in a team?
- What did you learn from your role?
- What did each of you find the most difficult part of your role?
- Do you feel you needed more professional quidance in order to fulfil your roles? If so, in what way?





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Team
Discussion

- Do you agree as a team about how you have worked together?
- What have you learned about the design industry through working as a team?
- How has collaboration helped you to develop your ideas and design thinking?
- What would you do differently next time?

3. Self Assessment:

Ask the students to briefly assess their personal work and contribution to the project, by considering the following:

- What have you learned about yourself and the way you work through participating in this project?
- What impact has your participation on this project had on your learning? How do you feel you have gained in knowledge, skills and understanding?
- What influence has it had on your views of the design industry?
 Do you feel you understand what working in the design business is about and has it had any influence on your future career choices?
- What improvements, if any, would you make to your overall contribution to the project? Did you notice any particular strengths to be proud of and weaknesses that could be addressed?

4. The Real World:

Sum up by discussing with students the following questions:

In responding to the Design Ventura brief you have taken on a real-world challenge.

- How does design affect the lives of everyday people?
- What has the project made you aware of in terms of the product design industry?
- Are there any things that you have learned that are relevant to other disciplines or subjects in school?
- Has it encouraged you to consider a career in design?
- If so, what type of design are you interested in and what role within the industry would suit you?

5. Complete Evaluation Form:

The Design Museum has worked in partnership with the University of Warwick 2010-2013 and Goldsmiths, University of London 2014-present to evaluate the Design Ventura project. Each year we gather evidence about the impact the project has on teaching and learning. The contribution of you and your students in the evaluation helps to improve the project, and demonstrate the importance of design/business education for all learners.

Teacher survey is found here: Teacher evaluation

Student survey is found here: Student evaluation





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You and all the students who took part in the project (not just the winning team) should complete the online evaluation form. Every student who completes the evaluation is eligible for a project certificate.

6. Keep the momentum going!

There are loads of ways that students can keep motivated and further develop their real-world designing and thinking skills. Suggestions include:

- Set up a design enterprise club in school many products can be manufactured in school and sold locally in shops or markets, raising money for charity or school resources
- Make connections with local designers
- Run school-based design competitions to improve an aspect of the school
- Students could set up a design-based newsletter, writing about local and national design issues and reviewing innovative or everyday products
- Get in touch with the experts in our Industry Insight pages they are more than happy to offer advice
- Join us next year and take part in Design Ventura 2022-23!

