DESIGN VENTURA

Bringing the business of design to life with Deutsche Bank

WORKSHOP OUTLINE 2 OF 6 – IDEA GENERATION

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 2017 GCSE subject content guidelines.

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 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	• Support students to create initial ideas in response to the brief • Provide support as teams define their design criteria • 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 want 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

continued overleaf…

the DESIGN MUSEUM + BORN TO BE The Deutsche Bank youth engagement programme

DESIGN VENTURA

Bringing the business of design to life with Deutsche Bank

	• Considering the needs of others • Critical thinking • Considering real world issues
Design Ventura resources	Idea Summary Worksheet https://ventura.designmuseum.org/resources/idea-summary-worksheet/ Judging Criteria https://ventura.designmuseum.org/resources/judging-criteria/ Target Audience Research Worksheet https://ventura.designmuseum.org/resources/target-audience-research-worksheet/ Evaluating Branding Worksheet https://ventura.designmuseum.org/resources/evaluating-branding-worksheet/

ASSESSMENT OPPORTUNITIES + CURRICULUM LINKS:

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

2. Starter activity	
Kickstart the session by giving students an everyday product such as a bottle, brick, peg 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 • 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	
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? Ask students to mind map product ideas that could help the user to undertake one aspect of their life. Work as a team to select one idea and refine it; they should come up with a list of things that the product should do, be or have. Give students 10 minutes to sketch at least 5 different ideas for their own product. Each team member should present their best ideas to the team, explaining how each idea does or does not meet their team's design specification. Encourage students to ask the presenter questions and discuss the ideas further.	Student work Questioning Peer questioning and feedback

continued overleaf…

the DESIGN MUSEUM + BORN TO BE The Deutsche Bank youth engagement programme

DESIGN VENTURA

Bringing the business of design to life with Deutsche Bank

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?** *Try combining the best aspects of several different ideas* *Think about a specific phase of the day related to your user group – e.g. meal time, getting ready in the morning, travel, work, play* *Improve an existing product idea – think about what improve can mean; make more efficient, make work better, provide emotional value, make more sustainable or healthier* *Give students a collection of products and objects that are interesting in some way – these can be innovative, quirky, compact, expanding, durable, renewable and so on. How could aspects of these products be used in their designs?*	Student work

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 https://ventura.designmuseum.org/resources/idea-summary-worksheet/ to note down the key aspects of the design.	Teacher questioning Peer discussion Student work

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 design criteria to the competition criteria https://ventura.designmuseum.org/resources/judging-criteria/	Student work

continued overleaf…

the DESIGN MUSEUM + BORN TO BE The Deutsche Bank youth engagement programme

DESIGN VENTURA

Bringing the business of design to life with Deutsche Bank

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 handling collection, or ask them to refer to their previous product analysis 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?	Teacher/peer questioning
Ask students to complete research to inform the design of their product. Students can continue to use the handling collection and other relevant products to focus their research. 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/	Student work
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	

continued overleaf…

the DESIGN MUSEUM + BORN TO BE The Deutsche Bank youth engagement programme

DESIGN VENTURA

Bringing the business of design to life with Deutsche Bank

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.

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? 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 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. 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 students an image of an everyday product, e.g. plastic water bottle, clothes peg, paper cup, comb. Ask them to think of at least 10 different uses for the product. Discuss ideas for refining or adapting a product design for a different or new use or function.

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

continued overleaf…

the DESIGN MUSEUM + BORN TO BE The Deutsche Bank youth engagement programme

DESIGN VENTURA

Bringing the business of design to life with Deutsche Bank

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?	