

Textiles Tote Bag

Context

- ☐ Digital Technologies
- ☐ Engineered Systems

- ☐ Agriculture and Food Technologies
- ☒ Material Technologies

Timing

10 Weeks

Indicative Hours

37.5 Hours

Classroom Resources

- Fabric and notions for tote bag construction and decoration
- Sewing Machines and textile hand tools / equipment.
- Measuring equipment and fabric cutting boards.

Unit Description

Using the issue of single use plastic bag reduction as a stimulus, this unit integrates felt design into the production of a textile tote bag. After investigating historical and cultural reasons for reducing plastic bag use, students will evaluate a range of alternatives before designing and producing their own tote bag. Aesthetic elements will be added to the bag through the use of fabric decoration techniques. Students will learn about embellishments techniques to add decorative elements to their tote bag. The PRIME (problem, research, ideas, manufacturing, evaluation) design process will be used so students become familiar with the terminology and layout of a design portfolio.

Outcomes

- TE4-1DP designs, communicates and evaluates innovative ideas and creative solutions to authentic problems or opportunities
- TE4-2DP plans and manages the production of designed solutions
- TE4-3DP selects and safely applies a broad range of tools, materials and processes in the production of quality projects
- TE4-10TS explains how people in technology related professions contribute to society now and into the future

Assessment Overview (40%)

Summative assessment of the Design Portfolio and Design Project will be undertaken. Opportunities for Formative assessment exist during class discussions..

Project Overview

Students will be asked to make a tote bag using the provided materials. Students will conduct research on different fabric types and the impact of plastic bags. They will develop multiple designs until a final design sketch has been constructed. Students will be able to modify a basic bag in order to make it more personable; such as a front pocket for their phone and wallet. The emphasis will be on creating a high quality product that can used rather than a plastic bag.

Cross-curriculum priorities

- ☒ Aboriginal and Torres Strait Islander histories and cultures
- ☐ Asia and Australia's engagement with Asia
- ☒ Sustainability

General capabilities

- ☒ Critical and creative thinking
- ☐ Ethical understanding
- ☒ ICT capability
- ☐ Intercultural understanding
- ☒ Literacy
- ☒ Numeracy
- ☒ Personal and social capability

Other learning across the curriculum areas

- ☒ Civics and citizenship
- ☐ Difference and diversity
- ☒ Work and enterprise

Content	Teaching, Learning and Assessment	Resources
<p>Outcome selects and safely applies a broad range of tools, materials and processes in the production of quality projects TE4-3DP</p> <p>Identifying and defining</p> <ul style="list-style-type: none"> develop criteria to evaluate design ideas, processes and solutions, the functionality, aesthetics and a range of constraints, eg accessibility, cultural, economic, resources, safety, social, sustainability, technical <p>Producing and implementing</p> <ul style="list-style-type: none"> Students: demonstrate safe, independent and collaborative work practices in the production of designed solutions (ACTDEP037) 	<p>Focus: Textiles Intro and Safety Tests</p> <p>Teacher</p> <ul style="list-style-type: none"> Uses menti.com gauge students knowledge of textiles tools Demonstrates safety rules and precautions of the workshop, sewing machines and iron Teacher leads class discussion about safety and hazards Teacher to check OnGuard Safety Tests are complete and mark off in Schoolbox <p>Students</p> <ul style="list-style-type: none"> Students complete page 2-3 of Textiles Workbook (Intro into Tools) Complete required OnGuard tests after demonstration Students complete pages 4-7 of Textiles Workbook (Safety in the Textiles Classroom) <p>Focus: Developing Basic Textiles Skills</p> <p>Teacher</p> <ul style="list-style-type: none"> Teacher explains and explains each part of the sewing machine Teacher plays video to further explain Teacher explains how to thread machine Teacher plays video for students to follow along Teacher explains how to thread bobbin Teacher plays video for students to follow along <p>Students</p> <ul style="list-style-type: none"> Students learn about parts of machine and fill out page 8 of Textiles Workbook Students follow along to threading machine tutorial Students follow along to bobbin tutorials 	<p>Textiles Workbook Menti.com OnGuard Safety Tests</p> <p>Sewing Demo Videos https://www.youtube.com/watch?v=v3qlr8Dz-7U&ab_channel=ElishaHoskin https://www.youtube.com/watch?v=hSplH evausg&ab_channel=ElishaHoskin https://www.youtube.com/watch?v=-w9SceRAA-0&ab_channel=ElishaHoskin https://www.youtube.com/watch?v=KPJNFEED47M&ab_channel=ElishaHoskin</p>

Content	Teaching, Learning and Assessment	Resources
Identifying and defining <ul style="list-style-type: none"> investigate products and services for the individual and/or the community, considering ethical and social factors (ACTDEK029) ST investigate a current and innovative product developed by an Aboriginal and/or Torres Strait Islander designer that is influenced by their cultural identity investigate the role of the professional in the related technology, and their impact on the environment and society develop criteria to evaluate design ideas, processes and solutions, the functionality, aesthetics and a range of constraints, eg accessibility, cultural, economic, resources, safety, social, sustainability, technical (ACTDEP038, ACTDIP027, ACTDIP031) DT ST 	Problem and Research Phase (PRIME) <i>Focus Question: What advantages and disadvantages does plastic bring to society? What is the impact of plastic bags? What can be done to be more sustainable.</i> <p>Teacher</p> <ul style="list-style-type: none"> Introduces the design situation and leads a discussion about the requirements of the brief. Relates the design situation to the concept of design as a problem-solving exercise. Facilitates an investigation into the history of bag use in Australia to prompt an analysis of the needs, problems and opportunities associated with the design brief. Content will include; an examination of Indigenous woven bags and their use in transporting food within early aboriginal society; an analysis of the Behind the News video – Plastic Bag Ban; and research into the function and aesthetic requirements of Boomerang Bags. Exhibits a portfolio sample and explains the PRIME design process and portfolio documentation procedures required. Demonstrates a range of tools and word processing skills associated with effective poster design, such as scale, contrast, text and image formatting. Leads a discussion about the possible criteria and testing techniques used to evaluate the success of a product, such as the Boomerang Bag. Teaches students how to use Microsoft Forms <p>Students</p> <ul style="list-style-type: none"> Students in groups research the effects that plastic bags have on the environment. Create a portfolio document using PowerPoint and complete the Problem stage of the design process. Analyse the design brief needs, problems and opportunities by participating in the investigation into history of bag use in Australia. Investigate and produce a poster to assess the impact of plastic bags upon society and the environment. Students create a Microsoft Form to collect market research of peers about their opinion of plastic bags and what they would like in a bag Develop the criteria to evaluate design ideas, processes and solutions. Develop a time / action plan for the completion of their project and evaluate their progress on an ongoing basis. 	<p>Indigenous woven bag examples: http://www.nma.gov.au/learn/classroom-resources/what-is-this/string-bag</p> <p>https://bulabula.com.au/artwork/146-16/</p> <p>BTN Video: https://youtu.be/nCDcQ3Bjhso</p> <p>Boomerang Bags Case Study: https://boomerangbags.org</p> <p>Boomerang Bag Videos https://www.youtube.com/watch?v=pj5F2TD8nsA&ab_channel=BoomerangBags https://www.youtube.com/watch?v=Dpof4xbM9RM&ab_channel=TheSustainableCity https://www.youtube.com/watch?v=H0gi4ip4lGY&ab_channel=ABCAustralia https://www.youtube.com/watch?v=mZ2lvQ8AGbM&t=33s&ab_channel=BoomerangBags https://www.youtube.com/watch?v=28UyCZd4kmw&ab_channel=clubhousegroup</p> <p>Portfolio scaffold</p> <p>Microsoft Forms</p> <p>Schoolbox</p>

Content	Teaching, Learning and Assessment	Resources
Researching and planning <ul style="list-style-type: none"> investigate the characteristics and properties of a range of materials and products (ACTDEK034) select from a range of materials, components, tools, equipment and processes to develop design solutions (ACTDEP035) ST experiment with a range of appropriate techniques to produce a design solution DT generate and communicate the development of design ideas, plans and processes for various audiences using appropriate technical terms and technologies including graphical representation techniques, for example: (ACTDEP036) CT DT <ul style="list-style-type: none"> sketches, drawings and computer-aided drawings (CAD) patterns models digital presentations use appropriate project management processes when working both individually and collaboratively to coordinate the production of a designed solution (ACTDEP039) CT ST select and justify the safe use of tools and equipment used to create a design solution 	Ideas Phase (PRIME) <i>Focus Question: How do designers develop creative design ideas?</i> <p>Teacher</p> <ul style="list-style-type: none"> Outlines the Ideas section of the portfolio and requirements for completion, including the provision of scaffolds for each element. Demonstrates a range of hand drawing skills which, depending upon student ability, may include pictorial, orthogonal, perspective or rendering exercises. Provides feedback and advice relating to student idea generation. Demonstrates sketching in workbooks <p>Students</p> <ul style="list-style-type: none"> Practice and refine hand drawing skills by completing a range of drawing exercises. Brainstorm, develop and evaluate a range of initial idea sketches for their tote bag design 	<ul style="list-style-type: none"> Isometric Grid Drawing Exercises <p>Tech workbook Pencil Eraser Scanner</p>

Content	Teaching, Learning and Assessment	Resources
<p>Producing and implementing</p> <ul style="list-style-type: none"> demonstrate safe, independent and collaborative work practices in the production of designed solutions (ACTDEP037) 🛠️ ⚙️ apply appropriate tools, equipment, materials, techniques and processes in the production of a design project, for example: (ACTDEP034) ST ⚙️ 🛠️ 📐 <ul style="list-style-type: none"> contemporary, traditional and/or advancing manufacturing techniques surface preparation techniques, finishes, embellishments and/or decorations materials to meet a specific need consider innovative applications of advancing technologies to increase efficiency of time and/or materials in the production of models or products DT ⚙️ 🖨️ 	<p>Manufacturing Phase (PRIME) <i>Focus Question: How do industrial processes enhance the success of my design?</i></p> <p>Teacher</p> <ul style="list-style-type: none"> Assists students in the development of a Manufacturing Plan – including consideration of tools required and safety precautions necessary. Demonstrates safe use of tools, equipment and processes required to prepare and construct the tote bag. Monitors student progress during practical activities and provides feedback to develop student skills and maintain quality project work. Describes and demonstrates the function of sewing machine Students learn about tote bags and the manufacturing process using the Tote Bag Instructions PowerPoint <p>Students</p> <ul style="list-style-type: none"> Analyse and identify their chosen tools, materials and techniques for the development of their project idea through the development of a Manufacturing Plan within the portfolio document. Select and use a range of tools, equipment and processes in the development of their design solution. Processes may include; marking out and preparing fabric, using hand tools and basic machinery for cutting, sewing and decorating fabric. Reflect upon their project progress and techniques applied within the portfolio document. 	<p>Tote Bag Instructions PowerPoint Portfolio scaffold</p>

Content	Teaching, Learning and Assessment	Resources
Testing and evaluating <ul style="list-style-type: none"> evaluate the effectiveness and suitability of choices made during the development and production of the solution assess the solution against the predetermined criteria 	Evaluation Phase (PRIME) <i>Focus Question: How do I ensure my finished product functions as desired?</i> Teacher <ul style="list-style-type: none"> Describes the evaluation process – as established in the criteria to evaluate success – used within the portfolio document. Facilitates peer evaluation of student design solutions. Facilitates student testing and troubleshooting of their electrical circuit. Provides a scaffold for the development of an effective reflective writing piece. Students <ul style="list-style-type: none"> Undertake an evaluation of their project by completing the evaluation table within the portfolio document. Compare their personal evaluation with that provided by their peers and write a reflection piece to suggest improvements to their design or design approach. 	Portfolio scaffold

UNIT EVALUATION

Class	Teacher Code	Start Date	End Date	Were all outcomes, content & skills taught? (if no, please specify)	Evaluation <i>Were any significant changes made to the planned teaching and learning program, such as a change to the scope and sequence or parts of the program not covered?</i>
7teg	ESE	Term 1	Term 1	Yes	Changed the practical – all program covered though
	ESE	Term 2	Term 2	Yes	
7TES	JLI	Term 2	Term 2		
7TE	JLI	Tern 3	Tern 3		

7tem	ESE	Term 3	Term 3		
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