Technology Unit Plan: Year 7; Module 1

Title: Look at Me: Canvas Me

Key Competencies	
✓	Thinking
✓	Using language, symbols and text
	Managing self
	Relating to others
✓	Participating and contributing

Context Setting: Material Technology

Technological Area(s) Focus:	
✓	Materials technology (Accessories)
	Materials (Interior Creations)
	Communications technology
	Food technology
	Graphics

Links to IT:	
	Photocopying onto Materials
	Digital camera
	Wiki
	Pages
	Activboard

Technological Practice	
√	Brief Development
✓	Planning for Practice
✓	Outcome Development & Evaluation

Technological Knowledge	
	Technological Modelling
✓	Technological Products
✓	Technological Systems

Nature of Technology	
✓	Characteristics of Technology
	Characteristics of Technological Outcomes

Habits of Mind

	Persistence		Managing impulsivity		Listening with empathy & understanding
	Thinking Flexibly		Thinking about your thinking		Striving for accuracy
	Applying past knowledge		Questioning & posing problems		Thinking & communicating with clarity & precision
✓	Gathering data through senses		Creating, imaging & innovating		Responding with wonderment & awe
	Taking responsible risks		Finding humour		Thinking independently
	Remaining open to continuous learning				

Glossary:

Design Development	Objective	Concepts
Prior Knowledge	Graphic Organisers	Transactional Writing: Recount
Ephemera/Embellishments	Mulitple Intelligence	Mind Map
Strategies	Stakeholder	Habits of Mind (Gathering data through all the senses.
Initial Brief,		

LEGEND: Areas by colour

Technology | **English** | **Social Studies** | **Health and Physical Education**

Links to other curriculum areas:	Links to prior learning:
Major Focus:	*Technology Year 1-6:* This will be varied depending on the students' previous background from contributing schools and their understanding of:
English Level 3/4: Speaking, Writing and Presenting	
• **Purposes and audiences:** constructs texts that demonstrate an understanding of purpose and audience through careful/deliberate choice of content, language and text form	• Technological Practice components – Brief Development, Planning, Outcome Development and Evaluation
• **Ideas:** selects, forms and communicates ideas	• Recording design decisions in visual diary
• **Language features**: Uses language features appropriately	• Importance of functional modelling
• **Structure:** organises texts, using a range of appropriate structures	• Technological Practice from previous modules
Social Studies Level 3/4:	• Habit of Mind (HOM)
• **Understand how cultural practices vary but have**	*Literacy:* recognise and understand how texts are

Natasha Leith, St Margaret's College, Christchurch, NZ

similar purposes • **Understand how people view and use places differently** **Health and Physical Education Level 3/4** • **Relationships with Other People**	constructed for a range of purposes, audiences and situations.

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Learning Outcome Learning Experiences Students will:	Achievement Objectives Indicator	Resources
TECHNOLOGY		
Understand how to use a mind map Explain mind mapping: *A mind map is a diagram used to represent words, ideas, tasks, or other items linked to and arranged around a central key word or idea. Mind maps are used to generate, visualize, structure, and classify ideas, and as an aid in study, organization, problem solving, decision making, and writing.* Create a mind map about themselves.	**Speaking, Writing and Presenting** *Processing and Strategies*	Mindmap samples/rubric: http://en.wikipedia.org/wiki/Mind_map Prezi: http://prezi.com/ Pages Keynote
Identify appropriate protocols for working in groups - Create a Y Chart Class to create a Y chart following a discussion on what protocols are appropriate for working in groups. What should a group look like, sound like, feel like? Protocols are recorded and displayed in classroom for future teaching/reflection.	**Speaking, Writing and Presenting** *Processing and Strategies* Relating to others (KC)	Y chart
Identify prior knowledge Brainstorm Technology, share responses to establish prior knowledge/understanding. Answer questions such as: What is the product/objects purpose? How has technological practice helped create the made world as we know it?	**Characteristics of Technology** Identify that technology impacts on the world	
Become familiar with the room, safety and routines Label technology kits (place for each student to store their resources /project outcomes) Discuss Technology at SMC (same process Year 7-13.)		Labels for Technology Kits Large sheets of paper for brainstorming
Research the meaning of names and where they originated Students investigate the meaning of their name, culture significance and reasons why it was chosen for them.	**SOCIAL SCIENCES** Understand how cultural practices vary but reflect similar purposes	
Understand that everyone learns differently and everyone has different strengths Each student to complete a multiple intelligence test to identify their strengths and weakness. Share results. Class to celebrate differences.	**Relating to Others** (KC) **HEALTH AND PE Relationships** Identify and compare ways of establishing relationships and managing changing relationships	Multiple Intelligence test/s: http://www.spannj.org/BasicRights/appendix_b.htm

Natasha Leith, St Margaret's College, Christchurch, NZ

Create a timeline/flow chart of significant moments, experiences Teacher to model and formulate *Success Criteria* with students. Students sequence significant moments in their life to date. From the timeline above students choose a significant moment personal to the student's experiences.	**SOCIAL SCIENCES** Understand that events have causes and effects Understand how cultural practices vary but reflect similar purposes	Pages Word Prezi: http://prezi.com/

To identify key attributes of a recount
Share an existing recount with the students. Have students annotate this, highlighting features, strengths and areas for improvement.
 	
Formulate success criteria as a class 'What makes an effective recount?'
For example:
    Interesting vocabulary, correct
    punctuation, spelling, grammar,
    clear beginning, middle, end
    (sequencing), parts of speech
    (personification, onomatopoeia,
    metaphors, similes etc,) varied
    sentence length.
	Speaking, Writing, and Presenting
	Process and strategies
	Purposes and audience
	Ideas
	Language features
	Structure	

Write an interesting recount describing a significant personal experience Create a mindmap based on this significant moment to plan the writing of the recount. Students edit (refer to success criteria) to improve writing constantly throughout process.		
Write 'SMART' goals Discuss what this means. Model writing SMART goals. Students to write academic, social, cultural, physical goals (Specific, Measurable, Achievable, Realistic, Time.)	**Managing Self , Thinking**, (KC)	Smart Goal template
Introduce the Habit of Mind (**HOM**) that is the focus for the module; Gathering data through all the senses.	**Thinking** (KC)	

Explore the meaning of the HOM by brainstorming the questions: **What does gathering data through all the senses look like?** **What does gathering data through all the senses sound like?** **What does gathering data through all the senses feel like?** **What are some examples of gathering data through all the senses?** **Why do we need to gather data through all the senses?** Students share ideas as an unorganized brainstorm on the interactive whiteboard. Provide a copy of unorganised ideas for students to glue into their visual diaries. Students categorise the HOM brainstorm in a way that they will remember. Discuss the various cues that can be used to **increase alertness** of the HOM:	**Thinking** (KC)	Prepared flipchart Interactive whiteboard HOM logo on the whiteboard with a magnet, photographs of senses on the interactive whiteboard. Image of a senses HOM Stamp
Introduce context for technology learning – development of a '***Canvas Me***' Explain the term 'Ephemera' *(Ephemera is transitory written and printed matter not intended to be retained or preserved)*		Examples of Ephemera

Skill development
Develop specific skills to enable the use of specialist equipment with independence:
 	
Teach students skills in the use of:
Sewing Machine
  Straight/embroidery
  Threading the machine
  Filling a bobbin
  Sewing ribbon
Embellishments
  Vliesofix
  Hand sewing
  Sewing on a button
  Copying photos/images onto fabric
		Sample provided, demonstrations given

Knowledge development Demonstrate understanding of a 'colour palette' Discuss how the use of colour can impact on a technological outcome. Students create colour palettes.		Colour Wheels

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Knowledge development Understand that planning is an ongoing process. *Planning exercise:* Provide students with a range of familiar and unfamiliar products (see http://www.techlink.org.nz/curriculum-support/strategies/tp-planning/level5.htm) working in groups answer the following: • What planning tools might have been used to create this product? • What might have been the key stages required when developing this product? • At what stages in the development of the product would it have been necessary to undertake a review of the product? • When might the technologist have reviewed their progress? • What would have informed changes to the planning that was undertaken? *Discussion: what it is important to have in a planning template e.g. key stages, resources etc.*	**Planning for Practice** Ensure that there is a brief against which planning to develop an outcome can occur	Sample Canvas Me
To explore ideas for themes Students brainstorm to identify potential focus themes for individual Canvas (e.g. interests, hobbies.) Link students back to timelines/significant moment.	**Brief Development** Identify a need or opportunity from the given context and issue	
Introduce the Personal profile template. Discuss who are the key stakeholders (e.g. other students), and others who may use the room (other family members). Introduce glossary definition of *stakeholder* Students complete a personal profile detailing favourite colours, themes, stakeholders etc. *Remind students to reflect on prior learning (timeline, recount, smarts, goal setting etc.*	**Brief Development** Guide students to identify the key stakeholders and consider the environment where the outcome will be located.	Personal Profile handout
Research existing Canvases. **Technological Knowledge** *(technological products);* Understand relationships between	**Using language, symbols, and texts KC** Students recognize	

materials used in a product and the way they are shaped and finished. *Knowledge development*: analyse the features (visual and verbal) of existing Canvas/Visual Displays/Crafts What do they like about the canvas? How are the students informed about the person? Possible future goals to improve the canvas. What materials have been used? Are the materials effective? How else could have a similar effect been created?	how choices of language, symbols, and/or text affect people's understanding	
Work cooperatively with others Students work in groups to identify and record features that could be included in their canvas. Findings shared with class to determine possible features which will be used by class members (generic) and those which will specific to individual members (specific to a class.) Provide students with the opportunity to discuss performance properties (subjective; people's perception (looks attractive) and objective (size): fit for purpose.	**Relationships (KC)** **Using language, symbols, and texts KC** Students to recognise how choices of language, symbols, or text affect people's understanding	Magazines Existing Canvases

Literacy
Write 'good' questions which are open ended and will provide a detailed response from the stakeholder.
Questions need to be focused to elicit quality answers that can be used to inform next stage of practice.
Interviewing skills
Why Games to teach interviewing?
Closed-ended and Open-ended questions
The Games:
  What Fairy Tale Character Am I?
  The Hidden Mystery
  Before & After
  The Awful Interviewer
  Next Steps
 	
Draft key questions. Students use these to seek feedback from stakeholder.
	Speaking, Writing, and Presenting: Language Features
	Uses a range of vocabulary to communicate precise meaning.
		Keys to good questions
		www.storydynamics.com/Articles/Education/interviewing.html

Liaise with stakeholder/s	**Brief development**	

Natasha Leith, St Margaret's College, Christchurch, NZ

Students liaise with stakeholder/s to gather ideas of what would be acceptable for their Canvas (compare what stakeholder/s thinks compared to research findings) and determine specific needs and theme for their canvas design. Further research may be required to clarify ideas with stakeholder/s.	Guide students to consider the key stakeholders ideas/needs and the environment where the outcome will be located.	
Brief Development Develop *Initial Brief/Specs* Analyse a range of existing briefs to identify: Conceptual statements Specification including those that are measureable (objective) and attributes (subjective) Resources Constraints Students write an initial brief.	**Brief development** Establish a conceptual statement that communicates the nature (physical and functional) of the outcome and why such an outcome should be developed	Initial Brief handout
Conceptual Design: Sketch designs. Plan layout. Students sketch possible designs for canvas annotating designs to specify its physical and functional features. Continue to liaise with stakeholder/s to seek feedback on designs using key questions. Students refine questions where necessary.	**Outcome Development and Evaluation** Describe design ideas either through drawing and or models.	
Draft an initial Plan Link back to planning discussed earlier. Students to consider time, resources and key stages to design their Canvas. *For example:* *Create a table – 3 columns* *Steps/Resources/Time needed.* *Use recorded key stages as success criteria – steps to success.*	Managing Self (KC)	

Developing students understanding of functional modeling and why it is used. Types of functional modeling: oral, physical and visual. Use examples from other technology classes to discuss their form (ie: visual) and purpose (ie: to test). Test stakeholder acceptance of the physical and functional features. Reflect on types of functional modeling undertaken to date (eg: interviewing stakeholders.)	**Technological Modelling** Undertake functional modelling to develop design ideas into a conceptual design that addresses the key attributes.	
Functional Modelling (Material testing) Explore and test different materials and techniques suitable for the Canvas construction.		Research handout
Design development Sketch any changes to conceptual design. Continue to liaise with stakeholder/s. Application of functioning modelling techniques (talking to stakeholders in order to seek feedback, showing concept ideas to seek feedback.)	**Outcome Development and Evaluation** Describe design ideas either through drawing and or models.	
Decide on suitable materials to construct Canvas. Continue to annotate design development. Test material suitability using functional models - mockups	Evaluate suitability of materials based on their performance properties to select those appropriate for a booklet.	
Writing final brief - Final Brief must be written **before starting the Canvas**. Check specifications are measureable.		Final Brief handout
Reflect on planning process **What have I found easy?** **What have I found difficult?** **How would I like my teacher to help me?** **Next step?**	**Managing Self (KC)**	
Construct individual canvas Students construct their conceptual design into a final prototype		

Natasha Leith, St Margaret's College, Christchurch, NZ

Evaluate Outcome (canvas prototype) Students evaluate the fitness for purpose of the final outcome (prototype) against their final brief including feedback from stakeholders.	**Outcome Development and Evaluation** Evaluate outcomes in site against key specifications.	Photo/evaluation handout
Reflect on the use of HOM HOM reflection. Create a word splash highlighting ways HOM have been applied during the Canvas Me Process.	**Thinking (KC)**	Word Splash using pages or Prezi
Celebrate learning Bring all learning together by having a celebration of 'self'. Students could evaluate their goals, match their timelines/significant moment (if selected) to classmates/peers.	**Relating to others (KC)** **Managing Self (KC)**	

Natasha Leith, St Margaret's College, Christchurch, NZ