UNIT PLAN

Year/s level: Year 1-8   **Term 2**   **2009**

Curriculum Area(s) – Technology major focus – Social Sciences minor focus

Background: *This unit has been developed because recently ERO, Maori Drama Performers and an advisor passed our school entrance because there was nothing to identify our schools location.*

Broad Understandings: (Teacher Directed)
- That the students can play a part in learning, be innovative developers of products and systems
- That the students can explain how the use of technology can be used communicate their school identity

Learning Question: (In negotiation with our students)
- How might we develop an identity that represents our school so that people understand where we come from?

Key Focus Learning Area(s)
TECHNOLOGY

TECHNOLOGICAL PRACTICE
Big Picture Learning Intention: Develop a brief to describe an intended technological outcome**.**

Level two – Focus AO – Brief Development:
Explain the outcome they are developing and describe the criteria it should have, taking account of the need and the resources available.

TECHNOLOGICAL KNOWLEDGE
Big Picture Learning Intention: Understand that products used for developing an identity made from certain colours and materials and have been developed for a purpose.

Level two – Focus AO – Technological Products:
Understand that there is a relationship between a material used and its performance properties in a technological product used in the development in an identity.

NATURE OF TECHOLOGY
Big Picture: Understand that technology has changed the society and environment of Waima and they can use it to increase people's capability.

Level two –Focus AO - Characteristics of technology
Understand that technology has changed the society and environment of increase people's capability.

SOCIAL SCIENCES

Social Studies
Big Picture: Understand the inter-relationship between people's cultural practices (customs, traditions and values) and the place in which they live.

Level two –Focus AO
Understand how cultural practices reflect and express people's customs, traditions, and values
Understand how places influence people and people influence places

Possible links to other Learning Areas		
Learning Area (focus)	**Strand**	**Achievement Objectives**
English	Listening, Reading and Viewing	Select and use sources of information, and prior knowledge with growing confidence to make sense of increasingly varied and complex texts.
English	Speaking, Writing and Presenting	Show some understanding of how to shape texts for different purposes and audiences.
The Arts	Visual	Share the ideas, feelings and stories communicated by their own and others' objects and images.
Mathematics and Statistics	Geometry and Measurement	Partition and/or combine like measures and communicate them, using numbers and units.
Mathematics and Statistics	Shape	Identify and describe plane shapes found in objects.
Health and Physical Education	Relationships with Other People	RELATIONSHIPS: Explore and share ideas about relationships with other people INTERPERSONAL SKILLS: Express their own ideas, needs, wants, and feelings clearly and listen to those of other people.

Opportunities for Enhancing Key Competencies:
Thinking:
- *Thinking about how we will gather the information required to answer our learning question.*
- *Asking questions to ascertain information regarding the history of Waima*

Using language, symbols and texts:
- *Discuss the use of symbols on signs and look at universal signs.*
- *Understand how effective these signs are and what the colour mean on the signage.*
- *Use the language of technology to enhance understanding in technology eg brief development*

Managing self:
- *Utilise the time given to this unit of work effectively.*
- *Work independently when required.*
- *Understand the constraints of the work and how to be economic with resources.*

Relating to others:
- *Work collaboratively and co-operatively in groups when required.*
- *Brainstorming of ideas together.*
- *Learning through experts , sign-writers , other schools*
- *Use the internet to gain information from others, eg. Schools*

Participating and contributing:
- *Students understand how working cooperatively with different groups in the community will support the technological outcome.*
- *Students understand that they can make a difference developing a solution that will give the school an identity. Students understand that their stakeholders BOT and community have differing opinions to them and therefore they need to participate with their stakeholders develop an identify*

Strategies & tools for learning and thinking:

- *Large Mind Map with class , what we know now about Waima's identity*
- *Bus stop, think pair share, Thinkers' keys*
- *Vision chart – what we know about Waima, what we need to find out and how to get there.(Reading Quest)*
- *Compare and contrast Logo (reading Quest)*
- *Using strategies such as SCAMPER to look at already existing solutions to a similar problem (school identity).*
- *Mind mapping to look at information gained from research ideas.*
- *P N I (positive, negative, interesting) chart with logo picture*
- *Use of ICT to seek information and research answers to wonderings.*
- *Blooms Taxonomy (interview skills)*
- *PMI (plusses, minuses, interesting) to look at materials already used in the making other people used in identity*

Learning Focus	Learning Experiences/Sequence	Notes for Assessment Purposes
Immersion: *Knowing* *Introduce and discuss broad understandings & learning question.*	• Read a story about transport about Waima in the 1900 (include artefact found by child and bring in the history – maybe a bone cross) and the significance of the kokako to Waima • Do we have a problem of the people driving past our school?	
Establish prior students knowledge	• Mind mapping what we know about Waima's identity	
Immerse students in the unit and why we are studying this unit	• Read a story about the Maori drama group who didn't perform at Waima School because they missed our • Walk with Clinton - Old Coach Road • During camp discuss with parents/caregivers what does Waima mean to them. Share stories from the past and present with students • Visit and analyse entrance to the school	
Nature of Technology *Understand that technology has changed the society and environment of increase people's capability*	*Knowledge development Characteristics of technology* • Explore examples of technological artefacts /developments and discuss how these have changed over time/the way people now do things	

Immerse students in understandings, the learning they will achieve, and strategies that will be used to support their learning	• Share *key focus Learning Area AOs* (Technology, Social Sciences) for unit with students - what are we going to learn?
	• Vision chart – what do we want to achieve as a result of completing this unit?
	• Continually revisit child speak *Key Competencies*
	  - what they are and what they look like
	  - why are we using them
	  - start a key competencies celebration kite on the wall. Use the ones which are focused on in this unit – these will be continually returned to and the kite updated throughout the unit.	

Social Studies *Understanding the inter-relationship between people's cultural practices and the place in which they live*	*Knowledge development Social Studies* • What identifies/influences people cultural practices used by others to describe their being? • Look at how such cultural practices are depicted in artefacts (e.g. logos/signage, clothes, fonts, art works, tools) and how these have changed over time	Research: complete a chart
Nature of Technology *Understand that technology has changed the society and environment of increase people's capability* **Key Competency development** *Using language, symbols and texts*	• Look at how other local schools identify themselves – complete an internet search to find their web sites and pictures of their entrances/school gate • Design a sheet to ask other schools about what their logo/school identity symbolises and what it depicts/the cultural practices it represents • Research how others organisations project their identities e.g. packaging (i.e. cereal boxes), branding (i.e. McDonalds)	Group work
Social Studies *Understanding the inter-relationship between people's cultural practices and the place in which they live*	*Knowledge development Social Studies* • Interview local whanau - what was their school like and was there a school logo/identity when they attended it • Look at old Waima school photos - compare and contrast to today's school	Compare and Contrast Diagram
Brief Development *Explain the outcome they are developing and describe the criteria it should have, taking account of the need and the resources available.*	*Knowledge development brief development* • Look at the legal requirements for signs – measurement, positioning • Explore change in materials used in signage - Whole class • Students share ideas and take into account the physical and social environment where there technological outcome will be positioned – the entrance to Waima School • Identify who the key and wider stakeholders are to the schools identity - who needs to be consulted and whose opinions need to be sought?	
	Skill development brief development • Develop whole class *initial brief – a conceptual statement and description of the known attributes that will be required in a technological outcome that identifies the school*	
Technological Products: *Understand that there is a relationship between a material used and its performance properties in a technological product used in the development in an identity*	• In groups research materials suitable for manufacturing technological outcome(s) - look at materials, viability, durability, costs • Review brief conceptual statement and investigate what the technological outcome(s) need to be made out of, size it will be etc. • Refine design ideas to include materials it will for purpose • Draw, design ideas of potential technological outcomes for school's identity • Explore costs to determine if we should buy it (have it commercially made) or make it ourselves • Consider social, ethical, cultural, political and economic factors extensively. • Refine design ideas to include materials it will for purpose of size it will be etc. • Consult stakeholders to gain their feedback on the design ideas	
Brief Development *Explain the outcome they are developing and describe the criteria it should have, taking account of the need and the resources available.* **Key Competency development** - *Relating to others*	• Refine initial brief conceptual statement and include attributes that describe what the technological outcome(s) need to do/look like to be fit for purpose • Refine briefs conceptual statement and attributes where required based on stakeholder feedback and new findings • As a class decide on which design idea(s) will be developed further • Reference Fig It out 2-3 pg 18 • Discuss what makes for good group work – establish protocols for working in a group	Criteria grid

Adapted by Deb Green from planning sheet developed by Brenda Weal: Team Solutions, 2009

	• Prepare a presentation for the BOT that presents the brief and plan and refined design idea(s) of potential technological outcome(s) • Discuss BOT feedback and decide on the technological outcome(s) that will be communicated to wider stakeholder (e.g. parents, past pupils of the school, kaumātua) to gain their feedback • Send images of the selected technological outcome(s) and send out to wider community stakeholders (• Refine design(s)to include wider stakeholder feedback and decide on an agreed class design for the schools identity that will be manufactured into a prototype • Use a *vision chart* to find what's next And how to get there	Questions Opinion proof chart - BOT/wider community stakeholders
	• Students make a model to communicate the final class design (if technological outcome is to be made commercially/by people other than the students) *or* make a prototype of the final class design (if final class design is to be made by students)	Group booklet Scrapbook process to be assessed with AO
	• Locate prototype in its intended environment and evaluate it against the briefs attributes	

Learning Focus		Assessment / Notes
Finding Out: *Establish wonderings* *Research*	Learn how to ask questions. • Learn how to extract relevant information. • Learn how the design process works. • Learn how to describe, eg. Personal and group identities • Learn how to develop and conduct a survey • Learn how to interview stakeholders • Learn how to analyse information	
Context Knowledge and Skills *Knowledge & skills specific to the context of the unit*	• Knowledge of materials suitable for manufacturing a prototype. • Skills in using materials to manufacture a prototype • Knowledge and skills in communicating design ideas/conceptual designs • Knowledge about what can identify a schools identity/location	
What to do with the knowledge, information and skills gained (in negotiation with the students)	• Identify and discuss the reasons why • Use knowledge of how to ask searching questions to write questions to ask stakeholders. • Use knowledge of how to ask searching questions to write questions for the police visit. • Identify and discuss why we make the school	

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		more visible/give it an identity. • Identify and discuss products already in existence, e.g. sign outside school, logo(s) • Communicate to the local whanau about the need for a school identity/what is a school identity. • Identify and design a prototype that helps make the school more visible in consultation with our whanau and BOT. • Identify resources able to be used to manufacture a prototype and where feasible, make the prototype or have it sent to an appropriate source for manufacture.	
anufacture			