T.I.S Inquiry Unit Plan Term 4 2013, Rm 23 Teacher: Mandy Barber

UMBRELLA CONCEPT/S:

CHALLENGE

SUSTAINABILITY

CULTURE AND IDENTITY

CREATIVE EXPRESSION

IMAGINE

DISCOVERY

COMMUNICATION

ENTERPRISE

CHANGE

INNOVATION

DEEP UNDERSTANDINGS

This inquiry is giving students the opportunity to 'Learn to Understand' - from applicable curriculum areas.

That we need to maintain and restore our natural assets, use our resources more efficiently and reduce our everyday enviromental impact.

Science

All living things can be classified into groups and are interdependent on each other for their capacity to survive, now and into the future.

We need to understand how pests (animals and humans) impact on our environment. How we can reduce and eliminate damage to these threatened environments.

Understand how the water cycle impacts on the environment.

That water quality (healthy water) means healthy communities.

ASSESSMENT FOCUS

Evidence of deep understanding and/or knowledge taught. Ways students will demonstrate this understanding/ learning.

Responding to pamphlet info by using Deep Understandings Self–Reflection

TUNING IN

How can we provoke students' interest/wonderment/ curiosity about this?
How can we help our students reveal their current thinking/ misconceptions about this?
How can we document their thoughts and understandings?
Can we repeat these tasks later?
How can we invite initial questions, wonderings?
What does this information tell us?

- ***VEIW The Lorax Movie and complete Associated activities***
- ***Tracking tunnels in Bio-Tech Room for mice***

RICH CONTEXT/S:

No specific contexts to select from this year. Be guided by your children's wonderings, questions and interests—or school wide focus areas.

Camp Opouahi

KEY KNOWLEDGE TAUGHT

Specific knowledge we want to teach within the deep understandings.

How pests impact on our native flora and fauna and how we manage pests.

How we are affected and can reduce global warming,

What is the water cycle and how o reduce usage and measure water quality.

What is biosecurity and how is it managed in NZ.

How to recognise and avoid hypothermia,

RESOURCES

Robyn McCool –EcoEd, Eco Ed Planner

Lorax Movie and Qns

"Going Bush", "Hypothermia" pamphelts

Pan Pac Kiwi Creche Meet the Locals Video http://www.doc.govt.nz/about-doc/news/meet-the-locals-videos/fifth-series/kiwi-cr%C3%A8che/

Foodchainsong https://www.youtube.com/watch?v=iWfEn8J5xKM

RESOURCES contd:

Discovery https://www.youtube.com/watch?v=T_JCw4Sq-ts

http://www.globalskm.com/About-Sinclair-Knight-Merz/SKM-and-Sustainability/Learning-Today---Sustaining-Tomorrow-Teaching-Resource.aspx

Possum vs Kiwi http://www.youtube.com/watch?v=eHNAeyw_av0&safe=active

Pan Pac Kiwi Creche Meet the Locals Video http://www.doc.govt.nz/about-doc/news/meet-the-locals-videos/fifth-series/kiwi-cr%C3%A8che/

http://tvnz.co.nz/meet-the-locals/s2009-e41-video-2833587—Wet lands

https://www.google.co.nz/#q=meet+the+locals+biosecurityBiosecurity

http://worldnews.nbcnews.com/_news/2013/11/13/21441506-climate-change-threatening-polar-bears-in-canada polar bears

http://tvnz.co.nz/meet-the-locals/s2011-e13-video-4091509 eels

Make Sun S'Mores instructions

Biosecurity Powerpoint -**Mel Galbraith**, School of Natural Sci

Riperian Planting doc

Star map of southern skies – Te Ara Encyclopedia of NZ.mht

FINDING OUT	Skills to be taught/HOM/ PB4L	SORTING OUT
As an inquirer what are the children inquiring into? *How can I help my students investigate this?* *What shared experiences will assist in helping students find out more about this?* *What information do they need to gather and where from?* *What research methodology will they be learning to use?* *How might they record this information?* EDMODO Poll to gauge focus of whole class inquiry ***VEIW*** Pan Pac Kiwi Creche Meet the Locals Video http://www.doc.govt.nz/about-doc/news/meet-the-locals-videos/fifth-series/kiwi-cr%C3%A8che/ WATCH INTRO: In pairs: What questions do we have before viewing this video about the Opouahi Kiwi Creche? AFTER WHOLE VID: What other things have we learned? Collate and answer as viewing takes place. What else don't we know yet? Ask Robyn McCool.	*This inquiry is giving students the opportunity to "Learn to do" - What specific skills are being taught, or emerge at a time of need. Please attach a specific HOM to each skill/lesson taught. Does this tie in to any PB4L expectations that you could incorporate into this time.* **PB4L:** Y Chart: What does a respectful camp look like? Cause and Effect Fish for Safety at different settings Record Role Plays of a Safe/Unsafe camp Draw what we should wear : 3 bodies **Goal Setting:** T-Shirts for camp **Self Management:** Preparation of camp gear Draw what a day pack looks like. **Communicating** with clarity and precision: - Drawing a timeline / food chain / water cycle - Extend vocabulary for processes and consumer types. **Comprehension** of non-fiction text (Text Ex): What makes a good pamphlet? - Hypothermia (KDW) **Listening with understanding:** Robyn McCool—Tracking Tunnels	*How can we help students make sense of and comprehend this information?* *How might students share their new thinking and learning?* *What patterns are emerging?* *Are questions and wonderings being answered?* *How is our thinking changing?* *What questions does this raise?* Setting out tracking tunnels around school. **Sustainability in New Zealand** **With your partner, design a pamphlet in Publisher to display information for other children in the class on one of the following topics.** **Alternatively you could choose your own topic and make fabulous open questions (okay them with Mrs Barber) and research them.**

PIT STOP—Reflection Time. *What have we learned? How has our thinking changed? What are we still wondering? Refer back to Skills Rubric—what skills are they developing, what areas do they need to focus on?*

GOING FURTHER

How can this inquiry be more personalised?
How can we assist students in following up personal areas of interest/passion/need?
What structure/framework will support them in this process?

Independent Inquiry : Sustainability Project

- Biosecurity
- Water
- Global Warming
- Long Finned Eels (Tuna)

Follow the selection of questions set out for them (given the time restrictions).

Set up 3 questions for classmates that they will need to respond to after reading their pamphlet.

Getting back to nature' Peer Assessment Matrix

Responding to pamphlet info by using Deep Understandings Self–Reflection

SKILLS/HOM/PB4L APPLIED

What skills are the children applying in their independent personalised learning? Are their specific skills that need to be revisited? What HOM are they using? What PB4L behaviours are they displaying?

Questioning: Choice of topic students asking open, rich qns.

Listening with understanding: Robyn McCool—Eels display

Identifying stream invertabrates—highly sensitive

Viewing independent study you tube clips and responding to questions

Working Interdependently: with a partner

Using text and symbols: Star Map and Orienteering maps

ICT: Publisher techniques to set up pamphlets

Drawing diagrams

Refer to Peer Assessment matrix for pamphlets

ICT: Powerpoint with Speech bubbles using HOM from reactions and experiences evident in camp photos.

Parent Reports: Thank you to parents in form of our school report (Key competencies and HoMs)

TAKING ACTION

What are we going to do? How are we going to make a difference to SELF, COMMUNITY , GLOBAL—now or in the future? Now what, so what? How can we use this ? What should we do?

ACTIVITY IDEA: Making a solar oven

Designing own traps / weta boxes / tracking tunnels.

GO TO CAMP OPOUAHI! View eels, predator fence (Pouri), Kiwi Experience, Star Map, Orienteering, Stream Study

PIT STOP—Reflection Time. *What have we learned? How has our thinking changed? What are we still wondering? Refer back to the skills rubric - how have the students skills developed. What skills have the used? Have they progressed? Complete the rubric again.* Students have added their own questions to the "Project" questions as the discover more information about their topic.

CELEBRATE AND EVALUATE

What have we learned? How do you know? What evidence do you have? How has our thinking changed? What are we still wondering? What new questions do we have? How can we address these in the future? How are we sharing our learning with others? Who is our audience? Who is assessing this work—peers/, teachers, adults outside the school?

Peer/ Teacher assessment of pamphlets

We are assessing the pamphlets tomorrow and reflecting on the Deep Understanding Self-Assessment sheet!

TEACHER EVALUATION

Did my students know WHY they were doing what they were doing? Are my purposes clear and shared? Was it worth teaching?
What did my students reveal to me? Did I use this evidence to inform my planning, or can I use this for future planning?
Did I teach my students HOW to inquire? Did they know what they were learning?
Did I give my students VOICE? Did they participate in decisions made about their learning? Did I hold all the power?
Did my walls teach or simply display?
Am I an inquirer—did I model wondering, inquiring to my students.
Do I know my students passions and interests—did I incorporate this into this inquiry?

Camp is a wonderful environment for setting up and inquiry. The kids were engaged throughout and having a product that was going to be used by others in the class was key.

The Opouahi video was an effective way to set up their questions and giving them ownership of the inquiry. The Edmodo IT was also a way to engage the class.

Children loved sharing their pamphlets with one another. They took pride in seeing them colour copied.

This was a very guided inquiry due to the fact that many of the questions were initiated by me after gauging what the kids were keen on discovering. I guess this was a form of modelling which would have been better earlier in the year. Our timeframe was tight given that this inquiry took us right up to the last week of the year. Ran out of time for Taking it Further **Designing own traps / weta boxes / tracking tunnels.**

Highlighted areas refer to items for which examples are included in PDF form on this website

TIS'S CONCEPTUAL CURRICULUM PLANNING SHEET

TEAM Room 1/2 TEACHER Kerry Hinton/ Leah Breeds YEAR 2013

Umbrella Concept (& Context)	Curriculum Area(s) & Strands	Deep Understandings	Key Knowledge Taught	IMPACT
SUSTAINABILITY (CAMP)				SELF COMMUNITY GLOBAL
Term 4	Social Sciences Science English EOTC HEALTH	*Social Sciences.* Understand how people make decisions about access to and use of resources. Understand how exploration and innovation create opportunities and challenges for people, places and the environment. *Science:* *Ecology:* Explain how living things are suited to their particular habitat. *Interacting Systems:* Investigate the water cycle and its effect on climate landforms and life. *Inquiry social sciences* to understand that we each have	• Can New Zealand really be considered 100% pure. (green and clean!)conflict and obesity, • Kiwi Conservation – are current efforts sustainable? • The Lorax • Natures systems working together Outdoor cooking, erecting camp tents, appropriate clothing and equipment. Study the bush, bird life, trees, regeneration of natural bush, kiwi reintroduction, history of the area and people who have had an impact on the clearing of the land and its regeneration . Team building ABL games. Buddy	SELF COMMUNITY GLOBAL

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		responsibilities to the care of the environment. *English* to use a variety of texts to promote understanding of environmental issues. Fiction/ non-fiction/ web based texts/ newspaper articles. *EOTC:* to extend and build on prior knowledge and experiences that will further increase our understanding of environmental issues. To understand the history, challenges of wild life and bush regeneration. *Personal Health*: Access and use information to make and action safe choices in a range of contexts. *ABL GAMES:* To work together as a team to solve problems and challenges that require planning, listening, leadership, persistence, co-operation and use of the Habits of Mind.	knots and Icebergs. Using team work and thinking to solve problems. Camp Skit: To entertain and celebrate our ability to act in front of others.	

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EOTC Planning 2013

Intro lesson:

Difference between camp and EOTC! We're going to be doing both.

Camp – in hard covered books (leave a page for title page). Y chart – what I know, what I think I know (what I've heard), what I want to know. Personally first, then share in small groups. Have year 8s answer some of the year 7s questions where possible.

So – what learning opportunities do we have?

Write "Sustainability" on the board – what does this mean? Create a class definition.

Students need = coloured pencils/pens. Groups – mix of year 7s and 8s.

Each group writes their ideas on an A3 piece of paper in one colour. Key = original ideas on sustainability.

For each of the following headings (using a different colour and the key) write down how you think the word sustainability and Opouahi are related/what learning opportunites might we find in this environment? 2 minutes for each topic.

- Land, water, structures, animals, plants, people, habitats

Share for each area. Biggest idea from each group as a round.

Discuss – which of these areas of sustainable learning would you like to learn about the most? Split into groups? What could we find out about, what could we do to help out at Opouahi?

Make a list – what questions do we have that relate to THIS area of interest?

Camp gear list (if time).

Thinking about all of the sustainability we've discussed – listen to reading of "The Lorax" by Dr Seuss.

Text exploration focus: the Lorax activities.

Mini inquiry/SOLE: Are current kiwi conservation efforts in NZ sustainable? Research and present.

Virtual field trip!! Introduction.

Read the diary from Monday 4th.
View photos.
Find out about Stewart Island – facts through socrative?
Audio conference at 9.30am. Make notes.
What questions do we have? Socrative.
Review – kiwi sustainability. Big question PLUS – how did groups approach this? Discuss expectations.

Highlighted areas refer to items for which examples are included in PDF form on this website

Finding out – what is a great walk? Read part of text

What gear would you need to take on a 'Great Walk' and WHY. Make a list in their books (title)

The outdoor safety code – display. Discuss.

Brainstorm – the Opouahi Safety Code. Make them think about safety of people and safety of the environment. Focus on school age students.

In pairs – select the 5 most important things from their brainstorm. To create a GD in computer room on Thrusday.

Gear list – Be prepared. Go through with students.

Mini inquiry/SOLE:

Mini inquiry/SOLE: Select own question and research.

Look at Google map of the area. Discuss the topography of the area and locations of campsites.

Text Exploration Links

Read "The Lorax" and view the movie. Make links between sustainability and the messages in the story.

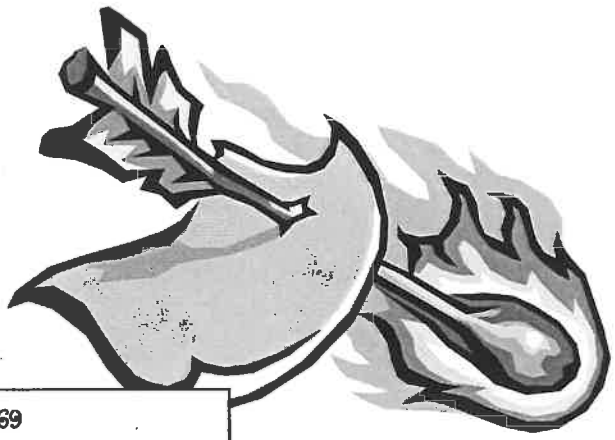
Complete activities (see sheet).

Art activity – show the progression through art of a landscape from pristine to polluted. Discussion of what causes pollution in different environments including how humans cause problems before. After: brainstorm ideas for how people can minimise their effect on the environment and how they can help improve existing environments.

Maths:

Design a tent challenge! Run like a Tech Challenge, provide a specific set of materials. Discuss suitability of shape and design for the conditions. Students to design and then construct a tent that would be suitable for Opouahi. Students to justify their design against the camp conditions in an oral presentation. Resource: Figure It Out – "Inventing Tenting" activity: http://www.nzmaths.co.nz/figure-it-out

FRIDGE REMINDER
OPOUAHI CAMP 2013



Mandy Barber Cell: 0224150169
NB: There is no cell phone coverage from our camp site so if there are any *urgent messages* for your child, please contact school!

GEAR LIST – CHECKED THROUGH THIS AND NAMED EVERYTHING?

Put your SLEEPING BAG in a *named* rubbish bag so it keeps dry?

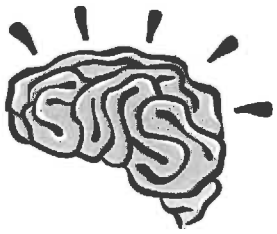
Meet inside the hall on Monday morning by 8.15am. DON'T be late!
Backpack should have lunch, drink, raincoat, thermals, sunblock, insect repellent, medicine, morning and afternoon tea, woollen hat.

Got any medicine I need packed safely where I can find it?

Don't forget your Home baking. Put it in the big box in the hall named 'Room 23' on Monday. Frozen biscuits are fine ☺ Yum yum!!

Got ideas for a group skit?
Got your survival bandana?

Car Sick?
Taken a travel sickness pill? Got one for the return trip? Bring a sicky container/bag. Put cotton wool in left ear or hold a lemon. (It works!)



Got a spare big plastic bags for wet things?
Got an excellent wet weather jacket?
Got thermals and warm stuff?

Remember to give Mrs Barber any medication named in a plastic bag on Monday morning.

Got my traversing helmet?

Got board or card games?
Got a book to read?
Got a torch and batteries?
Got my pencil case?

Warm Clothing?
Make sure you have warm clothing as the temperature in the area where we are going can and does drop quickly. It is sure to be cold in the morning and at night.

Arrive back on Wednesday about 2.40ish pm. Please arrange to collect your child from school.

Drinks, Morning tea, Afternoon tea and lunch ready for **Monday**? – Got it in my schoolbag where it is easy to get at?

Ready to have fun and take on new challenges?