Waimea Inlet: Enrichment SAVE module

Why did I want to teach this Enrichment module?

My childhood (age 14): home-made corrugated iron canoe – exploring inlets and developing a passion for the natural world

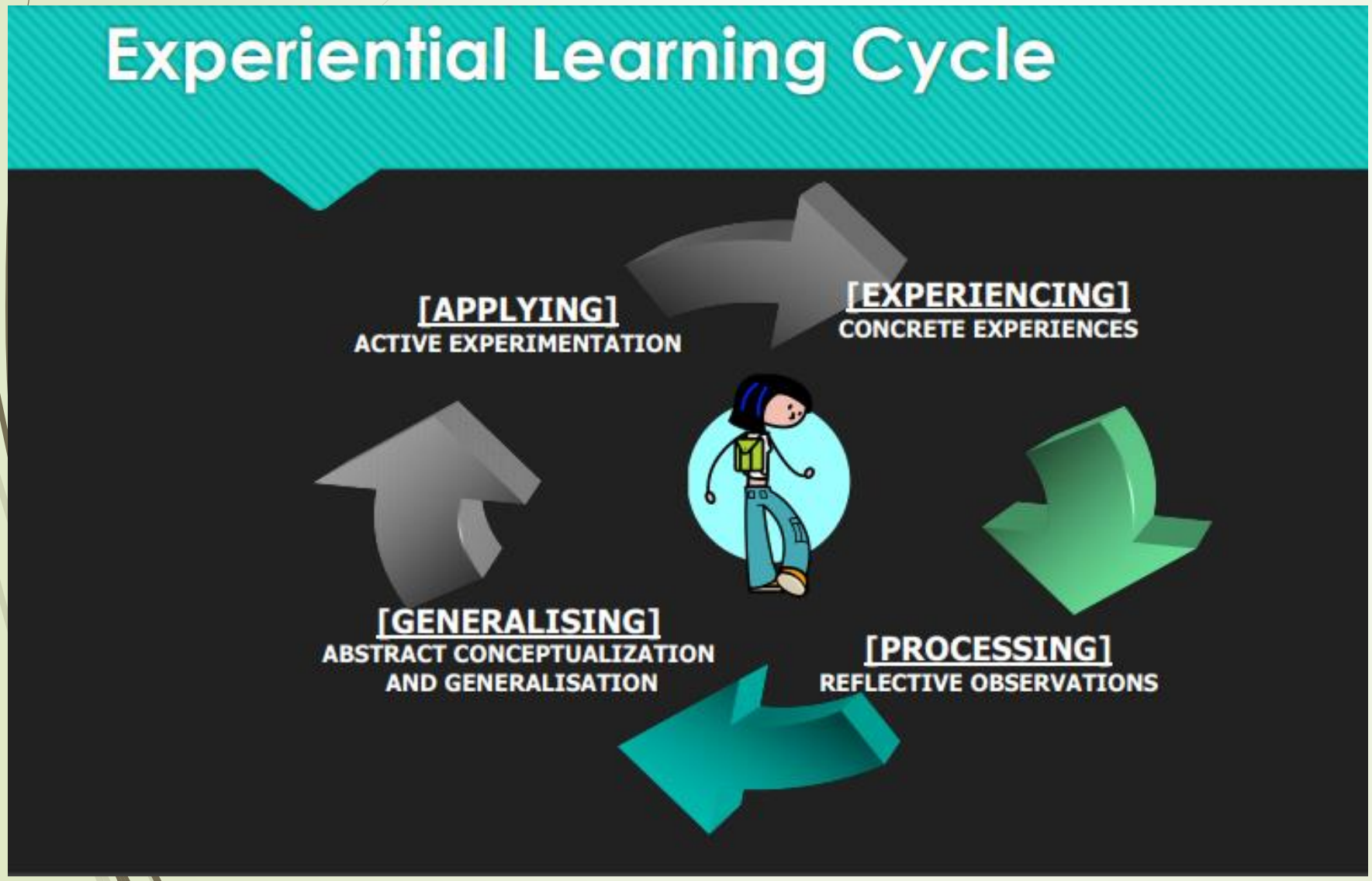
Why are we learning about the Waimea Inlet?

- Its on our doorstep – we should know our backyard!
- It is often forgotten about
- It has the largest shoreline of any inlet in the South Island: 3,455 ha in area, with an internal **coastline** of 65 km

Why are we learning about the Waimea Inlet?

- It shows lots of issues (and opportunities) for us and our fellow creatures
- It is close enough for us to learn about **pests** (monitoring and trapping), **biodiversity** (migratory birds, shore/margin birds, native vegetation), **pollution** (plastics and microbeads, oil, sediment), **recreation** (cycling, boating, equestrian, walking/running), **environmental art**, **Rongoa**/cultural aspects of Waimea Inlet occupation; **waterways health** (monitoring and remediation); **climate change**
- It's a great way to learn in a cross-curricular, inquiry-learning project way with the assistance of community mentors

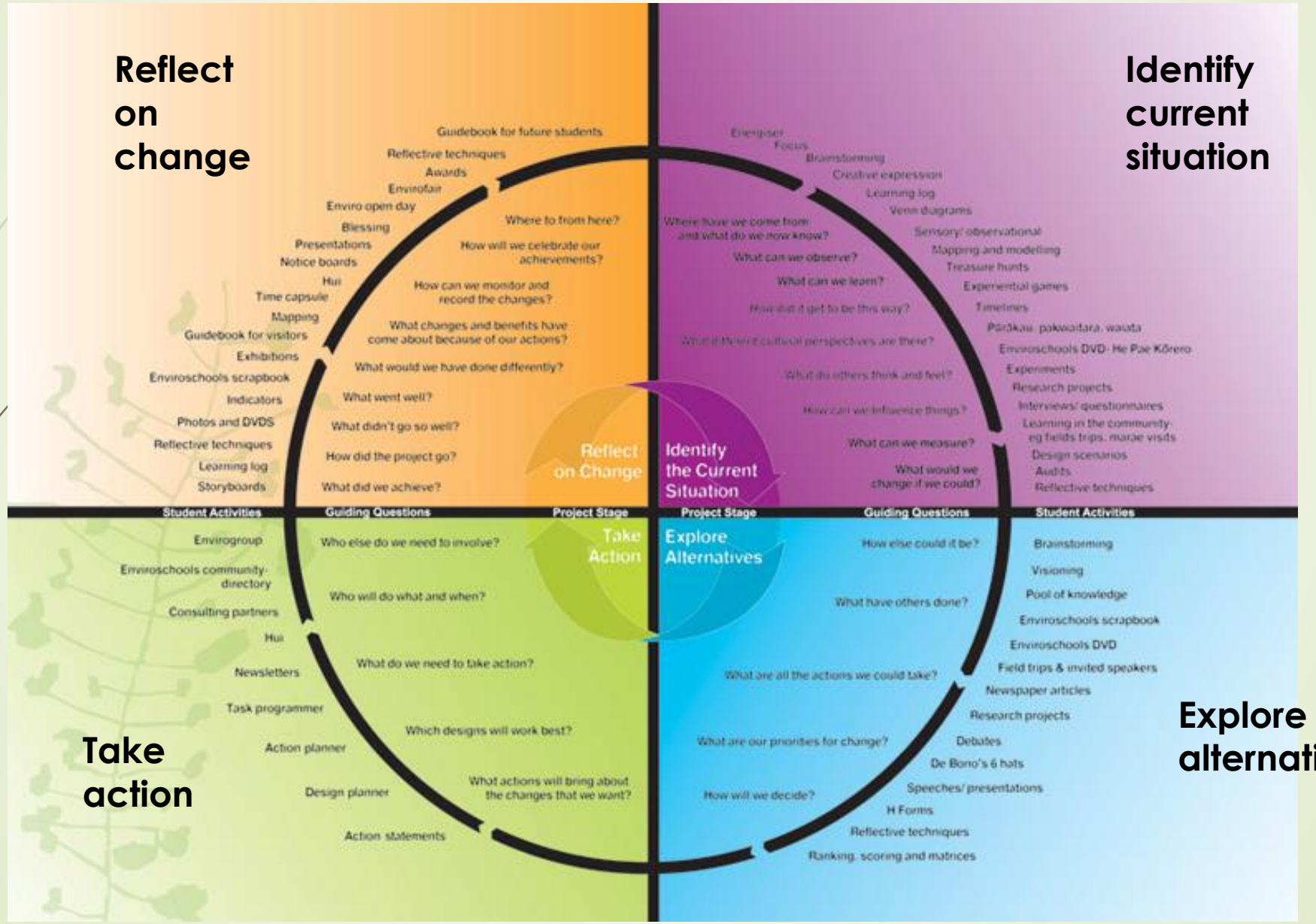
Enrichment SAVE uses Enviroschools Action Learning Cycle as it's Experiential Learning Cycle



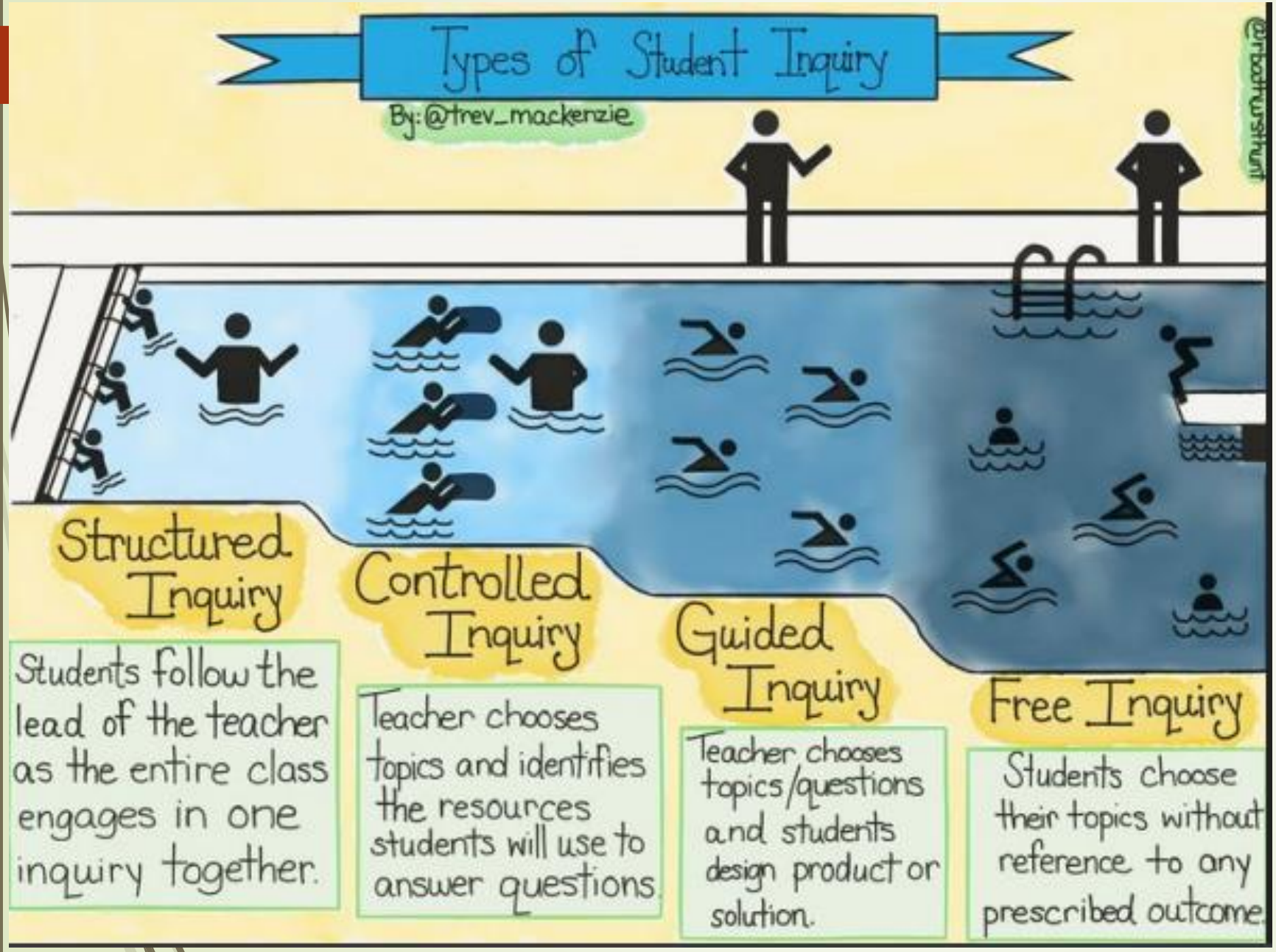
- ✓ Post-experience reflection is a critical component in SAVE:

- ➢ See Saw
- ➢ Reflection Journal
- ➢ Self-and-Peer

Inquiry learning: Enviroschools Action Learning Cycle in SAVE module



Enrichment SAVE Waimea Inlet Inquiry



- ✓ Enviroschools Action Learning Cycle used as an inquiry model
- ✓ Initial third of module tends to be 'Structured Inquiry'
- ✓ Blend of Guided/Free Inquiry in later Action Project phase

Context-based inquiry learning: SAVE's adopted site on Waimea Inlet

1st stage of inquiry learning: what is the current situation? Habitat study: whitebait

Kaitiakitanga and history of Waimea Inlet

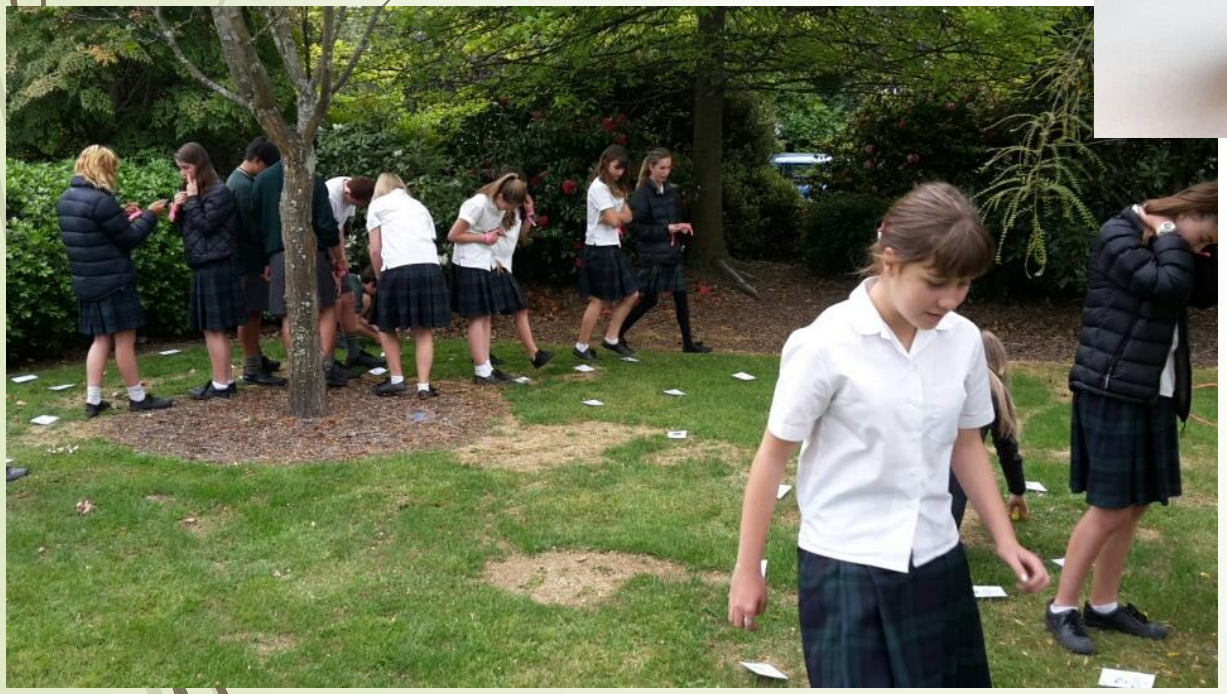
KAITIAKITANGA

Migratory birds

Inquiry learning: 1st stage of ALC: what is the current situation?

Migratory birds

Experiential: barriers and opportunities for godwit migration



Some action projects are born out of initial 'structured inquiry' : kingfisher nesting boxes

Battle for the Banded Rail: working with community partners

Tracey Murray: BFTBR Coordinator

Battle For The Banded Rail

Making chew cards to identify pests

Assessing the health of our waterways

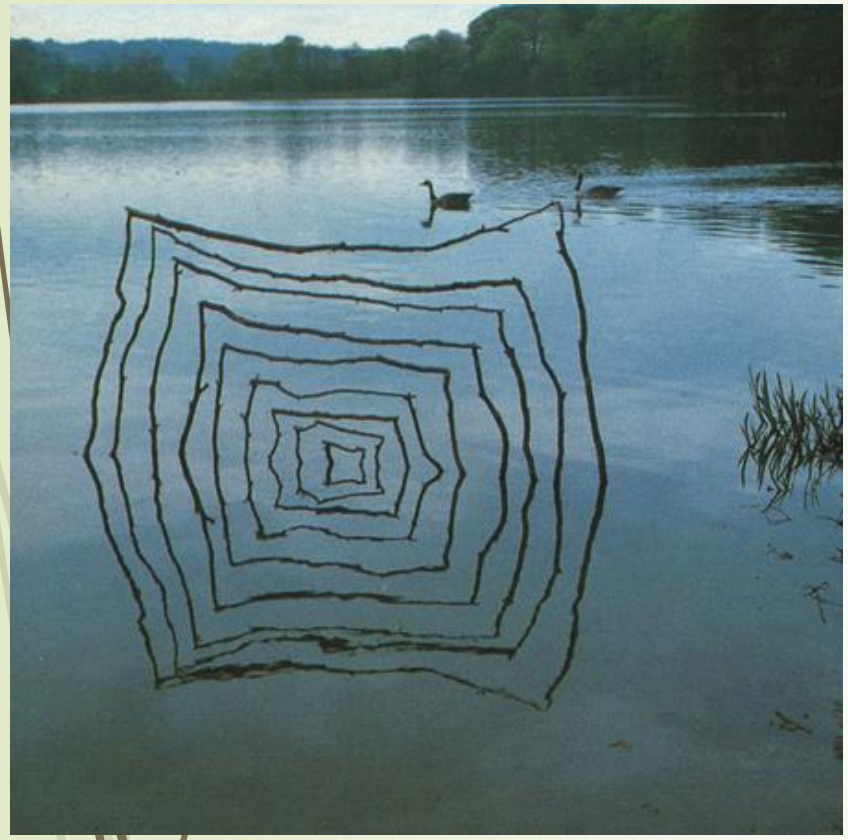
Reservoir Creek – part of Waimea Inlet catchment

Community partnership with Mel from Waimaori Programme

WAI MĀORI

Installation/environmental art

Learning about art-as-action



If Ed Sheeran's "Shape of You" was about Food Waste

Explore alternatives – 2nd stage of inquiry learning cycle

Students brainstorm how the inlet could be different

How can plastic pollution be reduced? Could migratory birds have their habitat improved? How can we make better whitebait spawning sites? How can cycle touring be improved? How can we reduce conflict between jetskiers, swimmers, birds? How can our adopted area be improved? How can information for walkers and other users be improved? Could we make monitoring tunnels and traps to reduce pests? How can art express feelings and actions about the inlet?

Take Action – 3rd stage of inquiry learning cycle

- Present proposals to Waimea Inlet Forum
- Construct monitoring tunnels
- Create an information panel design
- Plant appropriate natives at our adopted spot
- Source and place whitebait spawning material
- Promote recreation options to fellow students at assembly
- Express a message through environmental art
- Make an app

Take Action – 3rd stage of inquiry learning cycle

Process organiser for group work: the decision-making matrix. What action project shall we do?

Decision making matrix for possible action projects: Enrichment SAVE Waimea Inlet

Criteria	Interpretation panel	Whitebait habitat restore	Monitoring tunnel make	Stream health assess	Migratory bird survey	Cycleway user survey	Microbeads	
Achievable in 5 weeks?	2		9					
Achievable in 1 hour periods?	7		7					
Involve whole group?	10		9					
Specialised kn or gear?	4		5					
Is it 'action'?	5		8					
Is it helping the environment?	8		8					
Is it expensive/hard to source gear/materials?	3		2					
How much is it dependent on Council/mentor help?	1		3					
Total score	40		51					

Score from 1-10. 1 is very challenging; 10 is achievable

Planting and seed gathering

Working with community partners/mentors:

Working with mentors: tracking tunnels

Retired community mentor Greg Pickford

What predator is that?

Using charts, tables to infer (infur?) pest tracks left on students tracking tunnels

More action projects….

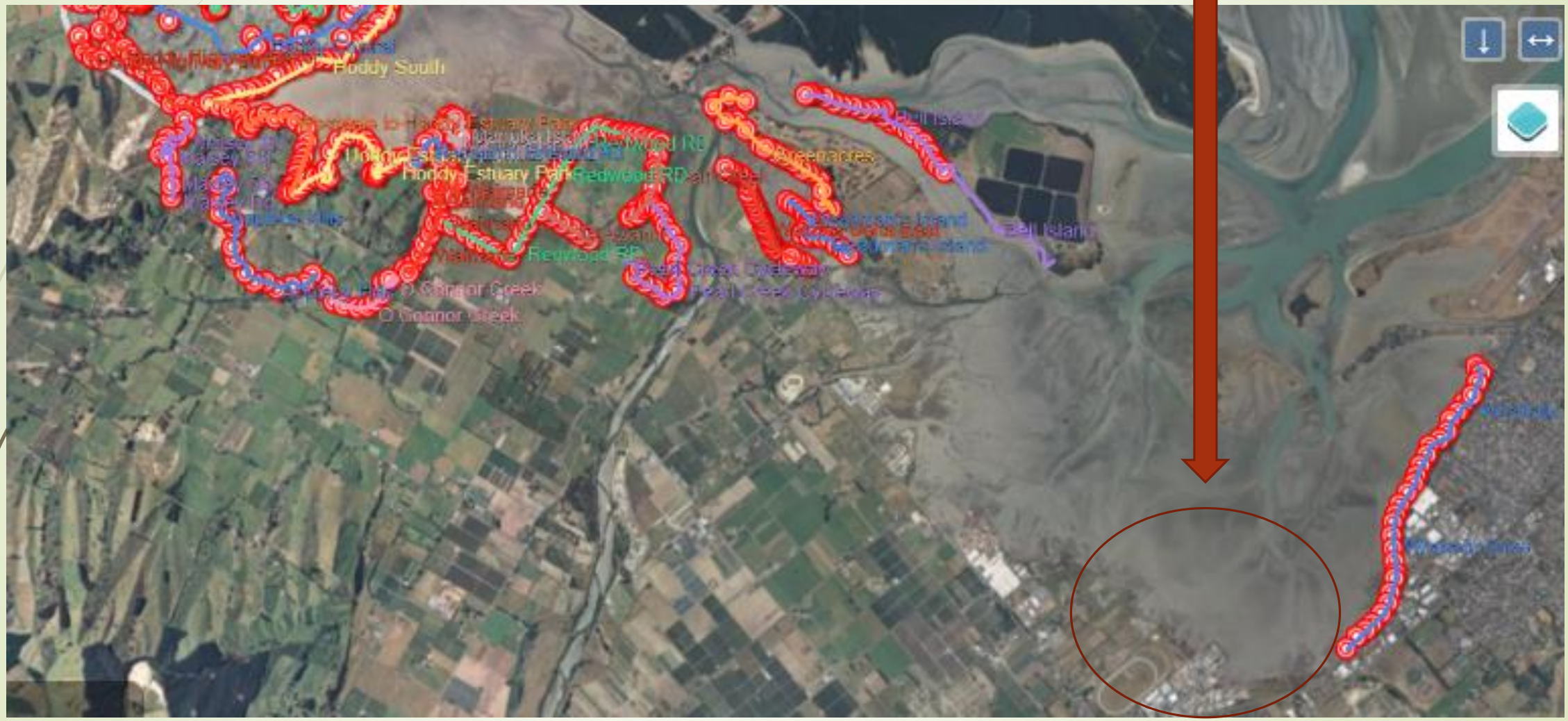
Oh no! When trapping goes wrong…

Baby pukeko caught in student's trap

However, **teachable CSI/detective** moments: How did the pukeko get in there? Was it an adult pukeko that crushed the mesh? Human sabotage? What can we learn?

Battle for the Banded Rail:

Waimea College is filling in the ‘trap gap’



Cross-curricular learning

Mindfulness: sensory log

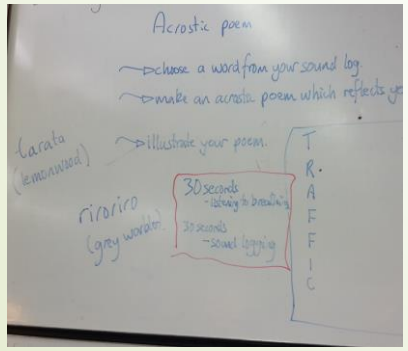
Technology

Maths: GPS

Science

Art

English: acrostic poems



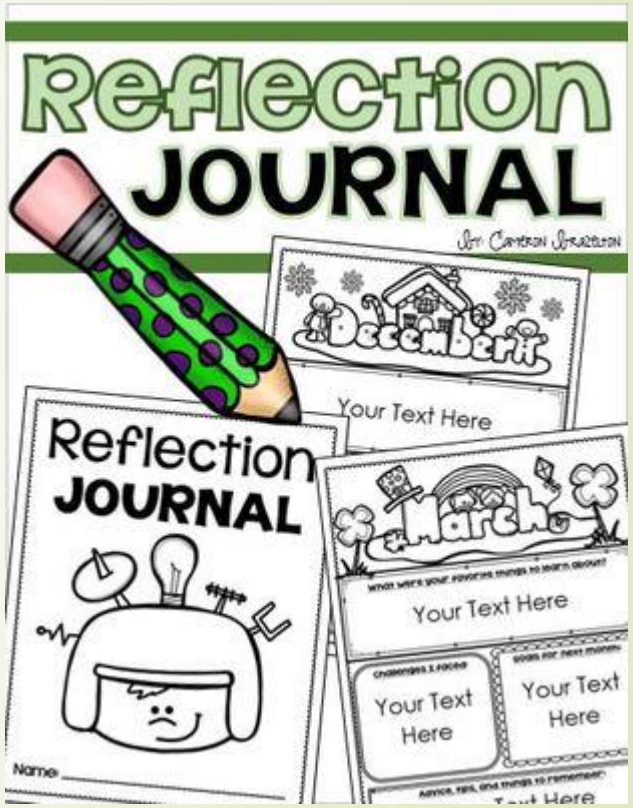
PE: cycling

History, social studies

SAVE Waimea Inlet content topics

Reflect on change: 3rd (embedded) stage of inquiry Action Learning Cycle

- Record via See Saw = learning journal.
- Reflection interviews



Part 2: Wednesday sessions Learning Journal

Date	Task/Activity	Key Competency (see last page)	Before the activity I felt or knew…	After the activity I felt or knew…	I learnt that…	Now I want to….