

## Appendix 3d:

### ECOED SAMPLE CROSS CURRICULAR UNIT PLAN DEVELOPED FROM APPENDIX 3c

## **A Sustainable School Camp**

From Stage 2, Part 5, PEOPLE – ECOED – Sustainable School Camps

<b>Context:</b>	<b>Concepts:</b>	<b>Learning Areas:</b>	<b>NZC Level:</b>	<b>Timeframe:</b>
<ul style="list-style-type: none"><li>• School Camp at ECOED Wilderness Education Base and Pan Pac Kiwi Crèche - Lake Opouahi</li></ul>	<ul style="list-style-type: none"><li>• Sustainability</li><li>• Personal &amp; Social Responsibility</li><li>• Budgeting &amp; Fundraising</li><li>• Future Focus</li><li>• Interdependence</li></ul>	<ul style="list-style-type: none"><li>• English</li><li>• Social Sciences</li><li>• Maths &amp; Statistics</li><li>• Technology</li><li>• Science</li><li>• Health &amp; Phys Ed</li></ul>	Curriculum level(s)  3-5	No. of lessons:  7-10

### **The Big Ideas:**

- **Our values and beliefs influence our actions**
- **Decisions and actions about the use and management of resources impacts on environmental, social, cultural and economic sustainability**
- **As individuals and groups, we can take practical actions to contribute to enjoyable and sustainable living**

### **The Learning Context:**

The unit needs at least six sessions leading up to the school camp and one session after the camp, to allow in-depth engagement.

As an introduction, students identify what the concept of sustainability means in practical terms. The activity sequence allows students to explore and analyse their own and others' possibly differing perspectives and values on the issue and reflect on the interdependence between aspects of sustainability.

Teacher introduces the theme "A Sustainable School Camp" for ECOED Wilderness Education Base and Pan Pac Kiwi Crèche - Lake Opouahi. The class identify which groups of people have an interest in this area (eg: Maungaharuru Tangitū, ECOED, local community, farmers, Pan Pac, school groups) In groups, students then research one interest group each, to find out what particular values the area holds for that group. The class discusses these different perspectives, along with any sustainability issues they identify. Students research the ECOED Wilderness Education Base and Pan Pac Kiwi Crèche - Lake Opouahi camp venue to find out what is there. Discuss the values of ECOED for the venue and why the camp facilities are very simple. Brainstorm threats to these values and how these issues might be managed (eg: issues such as rubbish and waste created by people using the area.) Teacher encourages students to keep these ideas in mind when planning their camp.

The sequence described here is a catalyst for moving the students from discussing the issues to exploring and reflecting on their own values and behaviours and deciding on choices and actions they could take for more sustainable living. Students then become active participants in planning their sustainable school camp.

It is important that following the camp, time is allowed for students to reflect on and evaluate their choices, to check if they met the "Sustainable Camp" criteria they set themselves. Discussion about why or why not could provide links for further learning and an even more successful "Sustainable Camp" in future!

## Curriculum Links to EfS and EOTC

### Concepts for EfS

*"Teachers need to connect students' learning to concepts in EfS and school based broad understandings for learning so that students can make sense of their knowledge, experiences and attitudes towards sustainability." (refer <http://efs.tki.org.nz>)*

Through exploring people's values of Lake Opouahi and the ECOED Wilderness Education Base/ Pan Pac Kiwi Crèche and looking at the impact of humans on the area, students will develop an understanding of the concepts of:

- **Environmental Sustainability** – how living and non-living things respond to environmental changes, both natural and human-induced
- **Social and Cultural Sustainability** – how and why different groups of people value the area and what actions they take to ensure future groups will be able to have similar experiences
- **Economic Sustainability** – how appropriate budgeting and fundraising can enable a financially sustainable experience for all participants on camp

Students may also explore the concepts of:

- Future Focus
- Interdependence
- Personal and Social Responsibility

### Concepts for EOTC

*"...students are capable of participating actively in a range of contexts, including those beyond the school, now. This is one of the pathways to becoming lifelong learners" (refer page 7, [EOTC Guidelines: Bringing the Curriculum Alive](#))*

While planning and implementing their Sustainable School Camp and by learning with people and in places beyond the classroom, students will have opportunities to:

- understand and explain how values influence their own interactions with people and places beyond school
- have a basis for learning the skills needed for enquiring into values – exploring, empathising, critically analysing and discussing
- practise and apply the key competencies in authentic contexts, to transform learning
- challenge their values, beliefs and actions while actively engaged in learning *in, about* and *for* the environment
- plan and participate in practical actions to implement a Sustainable School Camp
- reflect on and evaluate their learning, with a future focus

Learning opportunities within the unit "A Sustainable School Camp" provide authentic contexts for students to cultivate and practise the key competencies and to develop the disposition to use them for practical purposes. (refer <http://keycompetencies.tki.org.nz/>)

*"Learning beyond the classroom prompts students to demonstrate that they are ready, willing and able to use the new competencies that they are developing" (refer page 8, [EOTC Guidelines: Bringing the Curriculum Alive](#))*

## Suggested Learning Outcomes:

### **Knowledge and Understanding –**

What do we want students to know and understand?

Through “A Sustainable School Camp”, students will develop the following knowledge and understandings:

- what is meant by the term “sustainability” and how it relates to everyday living
- human activity impacts upon the environment and our values and actions contribute to the extent of these impacts
- groups with an interest in a place may value that place in different ways
- practical actions can be taken by individuals and groups to contribute to enjoyable and sustainable living

### **Skills and Key Competencies –**

What do we want students to be able to do?

Through “A Sustainable School Camp”, students will have opportunities to develop elements of the key competencies *thinking, using language, symbols and texts, managing self, relating to others, participating and contributing*

Throughout the unit, students will develop and use skills such as:

- Research and Inquiry
  - collecting information to visually demonstrate sustainability concepts
  - researching the various groups that have an interest in the Lake Opouahi area
  - looking at past school camps in terms of activities and cost
  - costing out options for transport, food and equipment in relation to the planned camp and sustainability
  - evaluating the success of the planned camp, following the event
- Social and Cooperative Skills
  - working cooperatively with others on a group project
  - negotiating choices; eg when deciding on camp menu, planning activities and sharing tasks
- Communication
  - receiving and conveying information, ideas and feelings through oral, written and visual language
  - discussing the social, cultural, economic and environmental values the Lake Opouahi area holds for interested groups and why it’s important we acknowledge and respect these
  - debating impact of school camps on environment and how this relates to us
- Decision Making
  - identifying links between how our values influence our behaviour and practical things we can do differently, to live more sustainably
  - identifying causes and consequences of environmental problems
  - making choices about actions for sustainable practice
  - determining criteria by which the success of a “Sustainable Camp” will be evaluated
  - reflecting on and evaluating the success of the camp, according to the chosen criteria
  - deciding on what worked and what might be done differently for future sustainable camps
- Planning and Budgeting
  - planning camp; transport, accommodation (tents), camp menu and activities
  - budgeting for cost of camp, taking into account BOT contribution, class fundraising and personal contributions, if any

- Physical Skills
  - taking appropriate action to minimise packaging waste, fuel consumption, transport emissions and other negative environmental impacts
  - carrying out appropriate activities for sustainable fundraising eg: an “only rain down the drain” fundraiser and education day on the school field or “hire a student” community work day fundraiser
  - practical camp skills such as cooking, pitching tents and activity-related skills

## Concepts and Principles -

What concepts and principles do we want students to discuss and develop understanding of?

- Students will engage in the exploration and critical analysis of values in relation to the use of a Hawke’s Bay natural and developed resource; ECOED Wilderness Education Base and the Pan Pac Kiwi Crèche area around Lake Opouahi
- Students will discuss sustainability concepts and relate these to their own values, behaviours and actions

## Attitudes and Values -

What attitudes and values do we want students to develop and demonstrate?

Students will be encouraged to value “ecological sustainability, including care for the environment” (refer: <http://efs.tki.org.nz/EfS-in-the-curriculum/Curriculum-connections>)

Students will be encouraged to:

- respect the values and beliefs of others
- develop understanding of connections and complexities between aspects of environmental, social, cultural and economic sustainability

Through participating in “A Sustainable School Camp”, students will:

- gain awareness of the need for individual and group action to solve sustainability issues
- participate in some practical individual and group actions which can assist in addressing sustainability issues and evaluate their success

## Actions-

How do we want students to act?

During the unit “A Sustainable School Camp”, students will:

- critically analyse their values and their actions based on them
- discuss disagreements that arise from differences in values and negotiate solutions
- make informed decisions and act on them
- reflect on and evaluate their learning
- Students will develop Action Competence through:
  - creating, seeking and using knowledge about sustainable practices
  - exploring their own vision and the visions of others about a Sustainable School Camp
  - reflecting on their own behaviours and deciding on choices and actions they may take to live more sustainably; both individually and as part of the class group
  - as a group. planning and implementing their vision of a sustainable school camp
  - evaluating their experience and using critical reflection practises to develop strategies for future experiences and actions.

# Learning Sequence and Suggested Experiences to Achieve Learning Outcomes:

- 1) **Students identify what the concept of sustainability means in practical terms:**  
Students divide into groups and use the Sustainability Jigsaw model (see below\*) - adapted to the needs of the class - to:
  - identify aspects of sustainability – environmental, social, cultural and economic - through images.
  
- 2) **Interdependence and Sustainability:** In the following lesson, student groups:
  - swap jigsaws to assemble
  - use reflective questions to identify the interdependence between the aspects of sustainability.(\* Refer: <http://efs.tki.org.nz/Curriculum-resources-and-tools/Sustainability-Jigsaw>) For some “student friendly” definitions of environmental, social, cultural and economic sustainability, refer: <http://efs.tki.org.nz/Curriculum-resources-and-tools/Aspects-of-Sustainability-a-graphic-organiser>
  
- 3) **Introduce theme, identify key groups and their values:** (this may take 2 lessons)
  - Teacher introduces theme: “A Sustainable School Camp” for ECOED Wilderness Education Base and Pan Pac Kiwi Crèche - Lake Opouahi.
  - The class identify which groups of people have an interest in this area (eg: Maungaharuru Tangitū, ECOED, local community, farmers, Pan Pac, school groups)
  - Student groups then research one interest group each, to find out what particular values the area holds for that group.
  - Depending on time available, student groups could formulate 3-4 questions each and use these to interview a member of their subject group, perhaps by phone or email.
  - Results could be recorded on a chart, as in sample lesson “Whose Values Count” (refer: <http://efs.tki.org.nz/Curriculum-resources-and-tools/Whose-Values-Count>)
  - The class discusses these different perspectives, along with any sustainability issues they identify.
  
- 4) **Students research venue, identify values and brainstorm threats and management solutions:**
  - Research the ECOED Wilderness Education Base and Pan Pac Kiwi Crèche - Lake Opouahi camp venue to find out what is there. Use maps, ECOED website and other available information.
  - Discuss the values of ECOED for the venue and why the camp facilities are very simple.
  - Brainstorm threats to these values and how these issues might be managed (eg: issues such as rubbish and waste created by people using the area.)
  - Think about our behaviour: could this be a threat to these values?  
**Activity - Pressures on the Earth:** “Balloon Model” or “Earth in Balance”: two ways of getting students to reflect and discuss on which of our everyday behaviours are sustainable and which are not. Includes examples of some possible questions to use.  
Balloon Model: <http://efs.tki.org.nz/Curriculum-resources-and-tools/Pressures-on-the-Earth>  
Earth in Balance: (GAMES: page 24)  
[http://www.eonz.org.nz/site/eduoutdoorsnz/files/Out%20and%20About/O&A\\_issue%2023%20web.pdf](http://www.eonz.org.nz/site/eduoutdoorsnz/files/Out%20and%20About/O&A_issue%2023%20web.pdf)
  - Teacher encourages students to keep these ideas in mind when planning their camp.
  
- 5) **Plan our Sustainable School Camp:** (This could take 3-4 lessons, depending on how “hands-on” the students are with the process – the more hands-on, the richer the learning opportunities.)  
Teacher and students plan the camp together, using information they have recently gathered, along with school records of past camps as a starting point. Some useful tools:

- **Action Planners** as start points for group planning  
<http://efs.tki.org.nz/Curriculum-resources-and-tools/Action-Planner>
- **Decision Making Grid**; a way to help students think critically and reflectively, set criteria and prioritise the usefulness of their ideas toward achieving a goal of sustainable action  
<http://efs.tki.org.nz/Curriculum-resources-and-tools/Decision-Making-Grids>
- **Write our own RAMS**: a good way to get students thinking about risk and responsibility. Use a blank RAMS form based on either a school EOTC format or ECOED activity format. In groups, using a large sheet of paper, students brainstorm all the risks and management strategies they can think of for their planned camp, under the relevant headings. Discuss the group contributions as a class and compare with the official format. (NB: This would be a really valuable exercise to do on camp, directly before an EOTC activity, when it would have the most relevance.)

### Some things to work through and consider are:

- **decide objectives** – What are our goals? What is our timeline? – (it would be useful to draw one up)
- **school policy; gain permission** – What are the school rules around camps? Who do we ask for permission? What information will they require from us? What requirements do ECOED have?
- **organize and implement fundraising** – How much money will we need? How do we know that? Would everyone be able to everyone afford it? Who do we ask for permission to fundraise? How well does our fundraising fit with our sustainability goals?
- **organize assistance** – What do we need help with? How many helpers do we need? Who might be able to help us? How do we ask them and thank them?
- **decide on and arrange transport** – Where is this place? How far do we need to travel? What sustainability issues might this raise? What sustainable transport options could we look at? What are the likely costs/disadvantages? What is the most sustainable option we could use? How do we arrange that?
- **determine previous experiences** – What do we know already? What do we need to know? How can we find out? How well prepared are we? Are we fit enough? How suitable would our planned camp be for our levels of experience and challenge? How do we know we will all be safe?
- **organise equipment** – What equipment will we need (eg: tents, clothing, cooking and camping gear) What do we have already? What sustainable options are there for obtaining the things we still need? How will we look after our equipment?
- **choose activities; note time, equipment needed and costs** – What activities might fit with our sustainability goals? Do we have time to prepare and complete them? How suitable are these activities for our levels of experience and challenge? Do we need any special preparation, help or equipment? What are the likely costs/disadvantages?
- **identify and plan to manage risks** – Why do we need to manage risk? What risks are associated with our planned camp and activities? Who's in charge? Who's responsible for which aspects? What first aid people and resources do we have? What's the weather forecast? How are clothing, food and shelter important to our safety? What outside communication is available to us? What are our school RAMS requirements? What are the RAMS for the activities we are planning? What are my responsibilities? How flexible are we with our planning? What's our emergency plan and who implements it?
- **decide on groupings**– What are our goals? What mix of skills do we need to use to achieve them? How do we want to structure our groups? What are our student numbers, age, experience, skills, interests, attitudes and needs? What is our adult helper availability, expertise, experience, qualifications, and other commitments? What are our adult/student ratios for all camp activities? Do we need outside expert assistance for a specialist activity? If so, what is their role and how does it complement that of the lead teacher? What are their qualifications, experience, expertise, availability, personality and fees?
- **allot tasks and set expectations** – What are our goals? What "rules" or expectations

should we set for our camp, so we can all achieve our goals? What responsibilities and tasks do we have on camp? How can we share these out fairly? How does this fit with our sustainability goal?

- **set up human impact management systems for our camp (eg: waste management)** How can we ensure minimal negative impact on the environment during our camp? What wise consumer choices can we make about the type of food, packaging, fuel and equipment that we take on camp, to support our sustainability goals? How can we ensure good hygiene practices on camp? How can we keep our camp site clean and tidy? How can we make sure we leave the site as we found it?
- **prepare budget and menu** – What is our budget? How much money is already available to us through the BOT or other sources? How much extra (if any) do we need? Can we economise further? Is our planned camp economically sustainable? How much, if any, should we ask families to contribute? Is this fair? How much profit could we realistically make by fundraising? What sort and how much food should we take? What menu can we plan to provide good nutrition that we all want to eat? How will we prepare and store our food? How can we avoid excess packaging and wastage?
- **determine criteria for “Sustainable School Camp” success** – Students analyse their initial project objectives and determine criteria for success, based on indicators of fulfillment of the camp’s sustainability and possibly some supplementary goals they may identify.
- **decide on evaluation methods** – Students take into account project evaluation throughout the planning and implementation process. They should set individual learning goals and also class project criteria for evaluation. Students decide on at least two evaluation methods which can be used during and as a follow-up to the camp. Some possibilities might be a questionnaire, chart, reflection worksheet, verbal feedback, photo montage, visual diary, peer interviews or a debate covering the sustainability indicators identified.

6) **Implement our Sustainable School Camp:** Evaluation discussions can take place both during and after the camp experience.

7) **Evaluate our Sustainable School Camp:** Adequate time needs to be allowed for reflection in both group and whole-class situations. Students are encouraged to use their “success criteria”; both as individuals and members of the class group, to determine what went well and what might be done differently on another, similar occasion. A good starting point when thinking about reflecting and evaluating outdoor learning experiences is the article “Talking the Walk: asking critical questions in Outdoor Learning Experiences” from Out and About, Issue 23, Summer 2010 For online version, refer:

[http://www.eonz.org.nz/site/eduoutdoorsnz/files/Out%20and%20About/O&A\\_issue%2023%20web.pdf](http://www.eonz.org.nz/site/eduoutdoorsnz/files/Out%20and%20About/O&A_issue%2023%20web.pdf)

**Useful planning tools** - helpful planning references are:

- i. “Outdoor Activity Planning Guidelines” from “Totally Outdoors”: Hillary Commission resource, 1997 may be a helpful start point for devising a checklist and delegating responsibilities.
- ii. The Curriculum in Action: In the Outdoors  
[http://www.tki.org.nz/r/health/cia/outdoors/index\\_e.html#top](http://www.tki.org.nz/r/health/cia/outdoors/index_e.html#top)
- iii. EOTC Guidelines: Bringing the Curriculum Alive  
<http://eotc.tki.org.nz/EOTC-home/EOTC-Guidelines>
- iv. NZ Environmental Care Code - refer to:  
<http://www.doc.govt.nz/parks-and-recreation/plan-and-prepare/care-codes/nz-environmental-care-code/>

## Selected Achievement Objectives to Achieve Learning Outcomes:

Depending on student needs, any of the curriculum based achievement objectives listed below could form part of a cross-curricular student learning focus for "A Sustainable School Camp"

### English –

(- these objectives could be part of a student learning focus when researching, planning, implementing, reflecting on and evaluating a Sustainable School Camp)

#### Listening, Reading and Viewing

**Students will:**

##### Level 3:

###### Processes and Strategies –

Integrate sources of information, processes, and strategies with developing confidence to identify, form, and express ideas.

INDICATORS:

- integrates sources of information and prior knowledge with developing confidence to make sense of increasingly varied and complex texts
- selects and uses a range of processing and comprehension strategies with growing understanding and confidence

###### Ideas -

Show a developing understanding of ideas within, across, and beyond texts.

INDICATORS:

- uses their personal experience and world and literacy knowledge confidently to make meaning from texts

##### Level 4:

###### Processes and Strategies –

Integrate sources of information, processes, and strategies confidently to identify, form, and express ideas.

INDICATORS:

- integrates sources of information and prior knowledge confidently to make sense of increasingly varied and complex texts
- selects and uses appropriate processing and comprehension strategies with increasing understanding and confidence

###### Ideas -

Show an increasing understanding of ideas within, across, and beyond texts.

INDICATORS:

- makes meaning of increasingly complex texts by identifying and understanding main and subsidiary ideas and the links between them
- makes connections by thinking about underlying ideas within and between texts from a range of contexts

##### Level 5:

###### Processes and Strategies –

Integrate sources of information, processes, and strategies purposefully and confidently to identify, form, and express increasingly sophisticated ideas.

INDICATORS:

- recognises, understands, and considers the connections between oral, written, and visual language
- integrates sources of information and prior knowledge purposefully and confidently to make sense of increasingly varied and complex texts
- selects and uses appropriate processing and comprehension strategies with confidence
- thinks critically about texts with understanding and confidence

###### Ideas -

Show an understanding of ideas within, across, and beyond texts.

INDICATORS:

- makes meaning by understanding increasingly comprehensive ideas in texts and the links between them
- makes connections by exploring ideas within and between texts from a range of contexts



## Speaking, Writing and Presenting

### Students will:

#### Level 3:

##### Processes and Strategies –

Integrate sources of information, processes, and strategies with developing confidence to identify, form, and express ideas.

##### INDICATORS:

- uses a developing understanding of the connections between oral, written, and visual language when creating texts
- creates a range of texts by integrating sources of information and processing strategies with developing confidence
- seeks feedback and makes changes to texts to improve clarity, meaning, and effect

##### Ideas –

Select, form, and communicate ideas on a range of topics.

##### INDICATORS:

- forms and expresses ideas and information with increased clarity, drawing on a range of sources
- adds or changes details and comments to support ideas, showing some selectivity in the process
- ideas suggest awareness of a range of dimensions or viewpoints.

#### Level 4:

##### Processes and Strategies –

Integrate sources of information, processes, and strategies confidently to identify, form, and express ideas.

##### INDICATORS:

- uses an increasing understanding of the connections between oral, written, and visual language when creating texts
- creates a range of texts by integrating sources of information and processing strategies with increasing confidence
- seeks feedback and makes changes to texts to improve clarity, meaning, and effect

##### Ideas –

Select, develop, and communicate ideas on a range of topics.

##### INDICATORS:

- forms and communicates ideas and information clearly, drawing on a range of sources
- adds or changes details and comments to support ideas, showing thoughtful selection in the process
- ideas show increasing awareness of a range of dimensions or viewpoints.

#### Level 5:

##### Processes and Strategies –

Integrate sources of information, processes, and strategies purposefully and confidently to identify, form, and express increasingly sophisticated ideas.

##### INDICATORS:

- uses an increasing understanding of the connections between oral, written, and visual language when creating texts
- creates a range of increasingly varied and complex texts by integrating sources of information and processing strategies
- seeks feedback and makes changes to texts to improve clarity, meaning, and effect

##### Ideas –

Select, develop, and communicate purposeful ideas on a range of topics.

##### INDICATORS:

- develops and communicates increasingly comprehensive ideas, information, and understandings
- develops ideas by adding details or making links to other ideas and details
- ideas show an awareness of a range of dimensions or viewpoints.

## Social Sciences –

(- these objectives could be part of a student learning focus when researching, planning, implementing, reflecting on and evaluating a Sustainable School Camp)

### Students will gain knowledge, skills, and experience to:

#### Level 3:

- Understand how people view and use places differently.
- Understand how people make decisions about access to and use of resources.

#### Level 4:

- Understand how exploration and innovation create opportunities and challenges for people, places, and environments.
- Understand that events have causes and effects

#### Level 5:

- Understand that people move between places and how this has consequences for the people and the places.
- Understand how people's management of resources impacts on environmental and social sustainability.

## Mathematics and Statistics –

(- these objectives could be part of a student learning focus when researching, planning, implementing, reflecting on and evaluating a Sustainable School Camp)

**In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to:**

### Number and algebra -

#### Level 3:

Number strategies (- when costing options, budgeting and fundraising for camp)

- Use a range of additive and simple multiplicative strategies with whole numbers, fractions, decimals, and percentages.

#### Level 4:

Number strategies and knowledge (- when costing options, budgeting and fundraising for camp)

- Use a range of multiplicative strategies when operating on whole numbers.
- Understand addition and subtraction of fractions, decimals...
- Find fractions, decimals, and percentages of amounts expressed as whole numbers, simple fractions, and decimals.
- Know the equivalent decimal and percentage forms for everyday fractions.

#### Level 5:

Number strategies and knowledge (- when costing options, budgeting and fundraising for camp)

- Know commonly used fraction, decimal, and percentage conversions.
- Know and apply standard form, significant figures, rounding, and decimal place value.

### Equations and expressions

- Form and solve linear and simple quadratic equations.

### Geometry and measurement -

#### Level 3:

##### Measurement

(- when setting a menu, deciding on food requirements, preparing food for camp and comparing and arranging transport options)

- Use linear scales and whole numbers of metric units for length (*distance*)... volume and capacity, weight (mass) ... temperature, and time.

#### Level 4:

##### Measurement

(- when setting a menu, deciding on food requirements, preparing food for camp and comparing and arranging transport options)

- Use appropriate scales, devices, and metric units for length (*distance*)... volume and capacity, weight (mass), temperature... and time.
- Convert between metric units, using whole numbers and commonly used decimals.
- Interpret and use scales, timetables, and charts.

Position and Orientation (- when researching location of venue and planning transport options)

- Communicate and interpret locations and directions, using compass directions, distances, and grid references.

## Level 5:

### Measurement

( - when setting a menu, deciding on food requirements, preparing food for camp, comparing and arranging transport options and researching the venue for tent space capacity)

- Select and use appropriate metric units for length, area, volume and capacity, weight (mass), temperature...and time, with awareness that measurements are approximate.
- Convert between metric units, using decimals.

**Position and Orientation** ( - when researching location of venue and planning transport options)

- Interpret points and lines on co-ordinate planes, including scales and bearings on maps.

## Technology –

(- these objectives could be part of a student learning focus when researching, planning, implementing, reflecting on and evaluating a Sustainable School Camp)

### Students will:

#### Technological practice

##### Level 3:

**Planning for practice** (- when researching and planning for a Sustainable School Camp)

- Undertake planning to identify the key stages and resources required to develop an outcome. Revisit planning to include reviews of progress and identify implications for subsequent decision making.

**Brief development** (- when planning a Sustainable School Camp and determining evaluation criteria)

- Describe the nature of an intended outcome, explaining how it addresses the need or opportunity. Describe the key attributes that enable development and evaluation of an outcome.

**Outcome development and evaluation** (- when implementing and evaluating a Sustainable School Camp)

- Investigate a context to develop ideas for potential outcomes. Trial and evaluate these against key attributes to select and develop an outcome to address the need or opportunity. Evaluate this outcome against the key attributes and how it addresses the need or opportunity.

##### Level 4:

**Planning for practice** (- when researching and planning for a Sustainable School Camp)

- Undertake planning that includes reviewing the effectiveness of past actions and resourcing, exploring implications for future actions and accessing of resources, and consideration of stakeholder feedback, to enable the development of an outcome.

##### Brief development

(- when deciding objectives, planning a Sustainable School Camp and determining evaluation criteria)

- Justify the nature of an intended outcome in relation to the need or opportunity. Describe the key attributes identified in stakeholder feedback, which will inform the development of an outcome and its evaluation.

**Outcome development and evaluation** (- when implementing and evaluating a Sustainable School Camp)

- Investigate a context to develop ideas for feasible outcomes. Undertake functional modelling that takes account of stakeholder feedback in order to select and develop the outcome that best addresses the key attributes. Incorporating stakeholder feedback, evaluate the outcome's fitness for purpose in terms of how well it addresses the need or opportunity.

##### Level 5:

##### Planning for practice

(- when researching, planning and identifying and managing risk and human impacts for a Sustainable School Camp)

- Analyse their own and others' planning practices to inform the selection and use of planning tools. Use these to support and justify planning decisions (including those relating to the management

of resources) that will see the development of an outcome through to completion.

### Brief development

(- when deciding objectives, planning a Sustainable School Camp and determining evaluation criteria)

- Justify the nature of an intended outcome in relation to the need or opportunity. Describe specifications that reflect key stakeholder feedback and that will inform the development of an outcome and its evaluation.

### Outcome development and evaluation

(- when implementing, reflecting on and evaluating a Sustainable School Camp and making notes to inform future camps)

- Analyse their own and others' outcomes to inform the development of ideas for feasible outcomes. Undertake ongoing functional modelling and evaluation that takes account of key stakeholder feedback and trialling in the physical and social environments. Use the information gained to select and develop the outcome that best addresses the specifications. Evaluate the final outcome's fitness for purpose against the brief.

## Science –

(-these objectives could be part of a student learning focus when researching and investigating the attributes of the venue for a Sustainable School Camp)

### Students will:

#### Level 3:

##### [Nature of science](#)

##### [Investigating in science](#)

- Build on prior experiences, working together to share and examine their own and others' knowledge.

##### [Participating and contributing](#)

- Use their growing science knowledge when considering issues of concern to them.
- Explore various aspects of an issue and make decisions about possible actions.

##### [Living World](#)

##### [Ecology](#)

- Explain how living things are suited to their particular habitat and how they respond to environmental changes, both natural and human-induced.

##### [Planet Earth and beyond](#)

##### [Earth Systems](#)

- Appreciate that water, air, rocks and soil, and life forms make up our planet and recognise that these are also Earth's resources.

#### Level 4:

##### [Nature of science](#)

##### [Investigating in science](#)

- Build on prior experiences, working together to share and examine their own and others' knowledge

##### [Participating and contributing](#)

- Use their growing science knowledge when considering issues of concern to them.
- Explore various aspects of an issue and make decisions about possible actions.

##### [Living World](#)

##### [Ecology](#)

- Explain how living things are suited to their particular habitat and how they respond to environmental changes, both natural and human-induced.

##### [Planet Earth and beyond](#)

##### [Earth Systems](#)

- Appreciate that water, air, rocks and soil, and life forms make up our planet and recognise that these are also Earth's resources.

## Level 5:

### Nature of science

#### Investigating in science

- Show an increasing awareness of the complexity of working scientifically, including recognition of multiple variables.

#### Participating and contributing

- Develop an understanding of socio-scientific issues by gathering relevant scientific information in order to draw evidence-based conclusions and to take action where appropriate.

### Living World

#### Ecology

- Investigate the interdependence of living things (including humans) in an ecosystem.

## Health and Physical Education -

(-these objectives could be part of a student learning focus when working together with others to research, plan and participate in a Sustainable School Camp)

### **Students will:**

#### Level 3:

### Personal Health and Physical Development - A

#### A2 Regular physical activity

- Maintain regular participation in enjoyable physical activities in a range of environments and describe how these assist in the promotion of well-being.

#### A3 Safety management

- Identify risks and their causes and describe safe practices to manage these.

#### A4 Personal identity

- Describe how their own feelings, beliefs, and actions, and those of other people, contribute to their personal sense of self-worth.

### Movement concepts and motor skills – B

#### B1 Movement skills

- Develop more complex movement sequences and strategies in a range of situations.

#### B2 Positive attitudes

- Develop movement skills in challenging situations and describe how these challenges impact on themselves and others.

#### B3 Science and technology

- Participate in and describe how their body responds to regular and vigorous physical activity in a range of environments.

#### B4 Challenges and social and cultural factors

- Participate in cooperative ... activities and describe how cooperation ... can affect people's behaviour and the quality of the experience.

### Relationships with other people – C

#### C1 Relationships

- Identify and compare ways of establishing relationships and managing changing relationships.

#### C2 Identity, sensitivity, and respect

- Identify ... ways to act responsibly to support themselves and other people.

#### C3 Interpersonal skills

- Identify the pressures that can influence interactions with other people and demonstrate basic assertiveness strategies to manage these.

### Healthy communities and environments – D

#### D1 Societal attitudes and values

- Identify how health care and physical activity practices are influenced by community and environmental factors.

## D2 Community resources

- Participate in communal events and describe how such events enhance the well-being of the community.

## D3 Rights, responsibilities, and laws

- Research and describe current health and safety guidelines and practices in their school and take action to enhance their effectiveness.

## D4 People and the environment

- Plan and implement a programme to enhance an identified social or physical aspect of their classroom or school environment.

### Level 4:

#### Personal Health and Physical Development - A

##### A2 Regular physical activity

- Demonstrate an increasing sense of responsibility for incorporating regular and enjoyable physical activity into their personal lifestyle to enhance well-being.

##### A3 Safety management

- Access and use information to make and action safe choices in a range of contexts.

#### Movement concepts and motor skills – B

##### B1 Movement skills

- Demonstrate consistency and control of movement in a range of situations.

##### B2 Positive attitudes

- Demonstrate willingness to accept challenges, learn new skills and strategies, and extend their abilities in movement-related activities.

##### B3 Science and technology

- Experience and demonstrate how science, technology, and the environment influence the selection and use of equipment in a variety of settings.

#### Relationships with other people – C

##### C1 Relationships

- Identify the effects of changing situations, roles, and responsibilities on relationships and describe appropriate responses.

##### C2 Identity, sensitivity, and respect

- ... act responsibly to support their own rights and feelings and those of other people.

##### C3 Interpersonal skills

- Describe and demonstrate a range of assertive communication skills and processes that enable them to interact appropriately with other people.

#### Healthy communities and environments – D

##### D3 Rights, responsibilities, and laws; D4 People and the environment

- Specify individual responsibilities and take collective action for the care and safety of other people in their school and in the wider community.

### Level 5:

#### Personal Health and Physical Development - A

##### A2 Regular physical activity

- Experience a range of personally enjoyable physical activities and describe how varying levels of involvement affect well-being and lifestyle balance.

##### A3 Safety management

- Investigate and practise safety procedures and strategies to manage risk situations

#### Movement concepts and motor skills – B

##### B1 Movement skills

- Acquire and apply complex motor skills by using basic principles of motor learning.

##### B2 Positive attitudes

- Develop skills and responsible attitudes in challenging physical situations.

### B3 Science and technology

- Investigate and experience ways in which scientific, technological, and environmental knowledge and resources assist in and influence people's participation in regular physical activity.

### Relationships with other people – C

#### C1 Relationships

- Identify issues associated with relationships and describe options to achieve positive outcomes.

#### C2 Identity, sensitivity, and respect

- Demonstrate an understanding of how attitudes and values relating to difference influence their own safety and that of other people.

#### C3 Interpersonal skills

- Demonstrate a range of interpersonal skills and processes that help them to make safe choices for themselves and other people in a variety of settings.

### Healthy communities and environments – D

#### D2 Community Resources

- Investigate community services that support and promote people's well-being and take action to promote personal and group involvement.

## **Extra Learning and Teaching Resource Links:**

### **Resources to Supplement Learning:**

Interest photos: different foods and packaging photos "Food and Families around the World" (could be adapted to talk about packaging)

Refer: <http://efs.tki.org.nz/Curriculum-resources-and-tools/Food-and-families-Around-the-World>

Mountain Safety Council – The Outdoor Safety Code resources and information

<http://www.adventuresmart.org.nz/land-adventures/>

### **Teacher Planning Tools:**

Ideas for connecting language learning sequences to the key competencies - refer

Appendix 2 – excerpt from school planning

<http://efs.tki.org.nz/Curriculum-resources-and-tools/The-value-of-conversation>

Ideas for teaching about how long it takes different types of waste to break down and what we can do to reduce our impact on the earth. Refer to:

<http://efs.tki.org.nz/Curriculum-resources-and-tools/Waste-timeline>

Social Inquiry Approach – a flexible tool and planning templates designed to assist in re-enforcing the relationships and inter-dependencies of the questions students should be asking as components of any social inquiry project. <http://socialinquiry.ssol.tki.org.nz/>

## Evaluation:

### Indicators for Success

The evaluation process for “A Sustainable School Camp” takes place on several levels.

It is vital for teacher and students to be allowed time for reflection on the experiences and learning which have taken place. Evaluation is facilitated by the setting of clear and measurable objectives at the outset of the learning project, which are then used to determine indicators for success. Students set and evaluate their own goals, as individuals and as a class.

Teachers use their professional observations made during the learning process to determine achievement of selected curriculum objectives and the level to which EfS and EOTC goals have been met, along with confirmation of student development in the areas of Knowledge and Understanding, Skills and Key Competencies, Concepts and Principles and Attitudes and Values, as evidenced by student discussions, presented work and Actions.

### Where to from here?

The cross-curricular learning project “**A Sustainable School Camp**” provides a starting point for multiple related learning pathways. One such pathway could start by going back to the “Big Ideas”. Students can be asked:

- 1) In what other contexts might our and others’ values and beliefs influence behaviours and actions? What implications might this have for environmental, social, cultural and economic sustainability in our school? In our local community? In Hawke’s Bay? In New Zealand? In early New Zealand? In the Pacific? The World? What happens when there’s a conflict in values and beliefs? How do the values and beliefs of people in cultures other than ours influence the way they live their daily lives? What similarities and differences do we notice to our own lives?
- 2) How exactly do decisions and actions about the use and management of resources impact on environmental, social, cultural and economic sustainability? Who makes decisions about the use and management of resources at our school? What about in New Zealand as a whole? In other parts of the world? How might this affect social justice? Why is there not enough food to go round in some places while in other places good food is wasted? (for further ideas and sample lessons on this topic, refer: <http://efs.tki.org.nz/Curriculum-resources-and-tools/Resource-Distribution-and-its-Impact> refer: <http://efs.tki.org.nz/Curriculum-resources-and-tools/Food-and-families-Around-the-World> refer: [http://ssol.tki.org.nz/Social-studies-Years-1-10/Teaching-and-learning/learning\\_units/building\\_sustainable\\_communities\\_level\\_5](http://ssol.tki.org.nz/Social-studies-Years-1-10/Teaching-and-learning/learning_units/building_sustainable_communities_level_5) )
- 3) What other practical actions can we take as individuals and groups now to contribute to enjoyable and sustainable living? How would taking action on these things challenge our values and beliefs and perhaps require us to make changes to some of the things we do? How hard would that be for us? Would these actions contribute to a more sustainable future? Would these changes be possible on a wider level – school – community – national – global? How; or if not, why not?

### Further Action:

- As a class, make a large food web for a terrestrial or marine environment. Ask the students “Where do humans fit into this food web? Look at the interdependence shown here. In what ways does this web illustrate healthy biodiversity as the key to human survival? What does this show about our role in conservation and sustainable living?”
- Have students use a Consequence Wheel (refer: <http://efs.tki.org.nz/Curriculum-resources-and-tools/Consequence-Wheel>) to illustrate the likely world situation in 20 years’ time if starting from today, no one did anything at all toward promoting sustainable practices. Discuss the results. Ask: “Is it worthwhile for humans to live more sustainably? Why?”
- Challenge students to use the skills they’ve developed during “**A Sustainable School Camp**” to plan and implement a simple, practical action for sustainability locally, which would also educate others in their community about sustainability values.