Summary of key resources and links for understanding Education for Sustainability.

Te Tiriti o Waitangi:

- 1) Weaving in values that honour Te Tiriti o Waitangi reflects the commitment to this founding document:
 - Manaaki (kindness or the reciprocity of goodwill)
 - Whanaunga (our connectedness or shared sense of humanity)
 - Mahi Tahi and Kotahitanga (collective benefits and shared aspiration)
 - Kaitiakitanga (protectors and stewards of our intergenerational wellbeing).
- 2) For support in exploring the concepts of Te Tiriti o Waitangi (along with 2 other iconic constitutional documents He Whakaputanga and Women's Suffrage Petition) we recommend The National Library
- 3) Massey University is a te tiriti led institution and provides links to websites and resources about Te Tiriti o Waitangi, it's history and implications here.

Guidelines for Environmental Education:

In New Zealand/ Aotearoa, EfS has its foundations in Environmental Education and informed by the document *Guidelines for Environmental Education in New Zealand Schools*

The aims of Environmental education are for students to develop:

- Aim 1: awareness and sensitivity to the environment and related issues
- Aim 2: knowledge and understanding of the environment and the impact of people on it
- Aim 3: attitudes and values that reflect feelings of concern for the environment
- Aim 4: **skills** involved in identifying, investigating, and problem solving associated with environmental issues
- Aim 5: a sense of responsibility through **participation and action** as individuals, or members of groups, whānau, or iwi, in addressing environmental issues.

Environmental issues related to a sustainable future are often complex. Multidisciplinary holistic teaching and learning approaches are therefore appropriate for meeting the aims of environmental education.

A focus on Education for Sustainability (from TKI)

- can develop learners who are informed decision makers, and connected to the land and the environment
- provides a context that enables meaningful connections between learning areas, key competencies, and values
- offers ways for students and schools to contribute to the social, cultural, economic, and environmental well-being of New Zealand. A sustainable school prepares young people for a lifetime of sustainable living, through its teaching, its culture, and its day-to-day practices

- provides opportunities for students to engage in genuine learning in their communities and take action
- uses authentic learning to develop creative and critical thinking for a sustainable future."

In a sustainable school:

- People work collaboratively, are reflective of our bicultural heritage and the diversity of their community. They ensure that students are all involved in sharing decisions in order to become confident, connected, actively involved, lifelong learners.
- Programmes focus on learning about the interaction between people and the
 environment and developing attitudes and behaviours for a more sustainable future.
 Through taking action students discover why sustainability matters and how to make
 sustainability a reality in their school and wider community.
- **Sustainable Practices** are part of school culture instigated by students and staff to make a more resilient community for the future.
- A **Place** is created where students and their community work together willingly to reduce their impact on the planet for future generations to enjoy the diverse and beautiful world we live in."

The four aspects of sustainability

While all four aspects of sustainability are important, *Environmental Sustainability* is fundamental to the kaitiakitanga of our environment.

Environmental – this aspect acknowledges the need to enhance and maintain the biophysical systems that sustain all life on Earth. It includes the structure and function of natural ecosystems and the interactions between them and people and calls for guardianship/kaitiakitanga of our environment.

Social – this aspect acknowledges the need for equity within and between generations, and within and between ethnic and social groups. It is inclusive of people's mental and physical well-being and the cohesion of their communities based on a fair distribution of resources.

Cultural – this aspect acknowledges the need to nourish and share attitudes and values that represent diverse worldviews, and the political need for all people to express their views freely and to participate in decision-making. Addressing these needs can build resilience for the future. **Economic** – this aspect acknowledges the interactions of humans with the natural environment in using resources to create goods and services which add value to their lives. It acknowledges the resource use and waste disposal must occur within the capacity of our planet. It encourages a fair trading system that equitably distributed benefits and costs. It further encourages innovation and creativity in developments that lead to a sustainable future.

Understanding Effective Pedagogy:

Here are some options for exploring effective pedagogy for EfS teaching and learning

TKI – Senior secondary site looking at:

- The key concepts Sustainability, Equity, Interdependence and Responsibility for Action
- The four aspects of sustainability (as above) Environmental, Social, Cultural, Economic
- o The inquiry process from NZ curriculum

TKI Toitū te Ao which addresses:

Cooperative learning, Experiential learning and Inquiry learning as well as weaving a Māori Perspectives of the environment through the learning and considering environmental issues.

The carving explores the interdependence and interconnectedness of people and the environment which includes the social/cultural, political, economic, and environmental perspectives of sustainability. It has been created as a visual metaphor representing a Māori world view of education for sustainability.

A range of effective teaching and learning approaches are represented that promote a change in thinking, and develop students' and teachers' action competence for sustainability. Images that can be interpreted as symbols for co-operation, inquiry, and experiential learning are part of the Totit te Ao.

Teachers may choose to share these processes with students and invite them to consider what part of a particular process they are currently working at in their learning.



Looking at the NZ Curriculum:

The New Zealand Curriculum (NZC) states that "future focused issues are a rich source of learning opportunities. They encourage the making of connections across curriculum areas, values and key competencies, and they are relevant to students' futures.

Capabilities for living and lifelong learning. (NZC, p.12)

Education for Sustainability seeks to empower students of all ages to take action on issues of concern and of interest to them. It describes this process as action competence, and uses all the key competencies, combined with experiences from the learning areas, to make this goal possible. The development of action competence and the key competencies is seen as part of the process of taking action.

Such issues include:

Sustainability — exploring long term impact of social, cultural, scientific, technological, economic, or political practices on society and the environment

Citizenship – exploring what it means to be a citizen and to contribute to the development and wellbeing of society

Enterprise – exploring what it is to be innovative and entrepreneurial

Globalisation – exploring what it means to be part of a global community and to live amongst diverse cultures." Page 39, New Zealand Curriculum 2007

Students can participate in taking individual and collective, informed action towards balancing the social, political, economic and environmental aspects of life on Earth. Understanding the connections between local actions to global issues.

There are opportunities for all key competencies to be developed and valued. This learning could be rich in social sciences (identity, culture and organisation, place and environment, continuity and change, and the economic world) and the sciences as well as allowing opportunities to integrate other learning areas.

Action Competence:

The process of students taking action in education for sustainability develops <u>action competence</u>. Experts tell us that action competence is students having the ability and willingness to take action on issues that interest them. In practice, action competence is learning and understanding about environmental issues so that students can plan and take informed action on those issues. Action competence supports the development of the key competencies of the NZ Curriculum through the process of taking informed action. In education for sustainability six aspects that support the development of student action competence have been identified through research in New Zealand schools. These are: Experience, Reflection, Knowledge, Visions for a sustainable future, Action taking for Sustainability, Connectedness.

Pūtatara https://putatara.education.govt.nz/#/about

The urgent, carrying sound of the Pūtātara, or conch trumpet, is a call to action. For this resource, it provides the impetus for schools and teachers to incorporate sustainability and global citizenship across their school curriculum. Sustainability and global citizenship issues are integral to our future on this planet

Pūtātara encourages schools and teachers to create learning opportunities that expand learners' understanding of complex issues and take action for change. The resource is aligned to best practice in local curriculum design, education for global citizenship, and environmental education (best practice as outlined in the Local Curriculum Design Toolkit, Guidelines for Environmental Education in New Zealand, the Learning Framework for 2030 as being developed by the OECD, and UNESCO's work in global citizenship education)

Environmental Education for Sustainability Strategy:

In 2017 a strategy was released to help guide the Government's approach across agencies to "ensure we equip our young people with the understanding, skills and motivation they need to help address New Zealand's many environmental challenges".

"Environmental education for sustainability (EEfS) is more than just communicating information about the environment and the ways in which it is currently threatened by human activity. EEfS helps individuals and communities to grow their understanding, skills and motivation to work together to develop solutions, act as kaitiaki, and advocate for a healthy environment and society. It also empowers individuals and communities to make decisions that are relevant to them.

The relationship between the natural environment and tangata whenua is core to the practice of kaitiakitanga. As well as developing practical skills and scientific understanding, EEfS incorporates a strong human element, including respecting a diversity of perspectives, reducing inequality and promoting cooperative effort." - <u>Environmental Education for Sustainability | Mahere Rautaki:</u> Strategy and Action Plan 2017–2021