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Response to the Draft New Zealand Curriculum

By Environmental Education and Education for Sustainability leaders

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By Environmental Education and Education for Sustainability leaders"

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Executive Summary

Economic, social and environmental sustainability is pivotal to New Zealand's future. It is a key reason for education in the formal sector.

In its current draft, the New Zealand Curriculum does not guide the way New Zealand society needs to be heading for the 21st century, and does not encourage a new way of thinking and acting about 21st century issues and opportunities.

To address this, a stronger position needs to be taken by government to incorporate sustainability and environmental education within the New Zealand Curriculum, as have other countries such as Sweden and the United Kingdom in their curriculum documents.

Key recommendations are to:

- Include Sustainability as a Principle of its own.
- Include an additional Key Competency called "Living Sustainably".
- Broaden the overall focus on individualism to include community perspectives.
 This is critical if we are to move forward as a collaborative, cooperative and sustainable nation.
- Shift the Designing a School Curriculum section forward of the Learning Areas, and provide a model demonstrating how to integrate thematic programmes across the entire curriculum, using sustainability as an example.
- Refer the Treaty of Waitangi as a founding document of New Zealand, and as central to the way we view and use natural resources.
- Adopt all other changes recommended throughout this report that will see the current text improved to better reflect a commitment to sustainability.
- Provide professional development for pre-service and in-service teachers in Education for Sustainability following implementation of the New Zealand Curriculum, including updating the Guidelines for Environmental Education in New Zealand Schools.

Introduction

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption. WWF – New Zealand's key focus areas are oceans and coasts, climate change, support for community conservation in New Zealand and developing countries, and Environmental Education.

WWF's vision is for all New Zealanders to make sustainable lifestyle choices. Education is a critical way to achieve this which is why WWF has been active in Environmental Education for over ten years.

WWF believes that the curriculum review process is a significant opportunity to establish a distinct place for sustainability in New Zealand schools, and as such on 14 September 2006 bought together a group of non-government Environmental Education/Education for Sustainability leaders to workshop a collaborative response to the Draft Curriculum. This report is a summary of workshop outcomes, and provides a case for why sustainability needs to be included in the New Zealand Curriculum (both as content and as a teaching and learning approach) and recommendations as to how the current draft could be changed to better reflect this.

WWF, along with the workshop participants, urge the government to adopt the recommendations outlined in this document, and to commit to subsequent support for teachers so that they are confident and competent agents of change towards a better New Zealand.

Contributors:

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Part One: Sustainability and the New Zealand Curriculum

"The bottom line of the Millennium Assessment findings is that human actions are depleting Earth's natural capital, putting such strain on the environment that the ability of the planet's ecosystems to sustain future generations can no longer be taken for granted. At the same time, the assessment shows that with appropriate actions it is possible to reverse the degradation of many ecosystem services over the next 50 years, but the changes in policy and practice required are substantial and not currently underway"

United Nations Millennium Ecosystem Assessment 2005

As evidence mounts throughout the world, it is clear that the growing tension between continued economic growth and the subsequent impact on the health of people and the environment has moved from theory into reality.

Education as social policy reflects what a nation values. Our curricula of the past have led to developing a way of knowing and acting that has fostered non-sustainable lifestyles and values. As we head into the 21st century, this needs to change. By securing a visible place for sustainability within the revised New Zealand Curriculum we have the opportunity to make the social shift required to create and sustain a vibrant, responsive economy; equitable, safe and healthy lifestyles; and natural ecosystems that reflect our true natural heritage.

Sustainability goes beyond 'green' environmental issues and is relevant to New Zealand's economic and social priorities:

1.1 Sustainability and the economy

New Zealand's economy is dependent on the environment. Our leading export earners - tourism, agriculture and fisheries - are based on healthy functioning ecosystems. The workforce of tomorrow will be engaged in the challenge of sustaining these critical income earning sectors, and they urgently need the skills to do so in the face of a changing global economy and physical environment.

For example, as consumer choices overseas change to consider ecological footprint aspects such as food miles and carbon emissions, New Zealand is potentially very vulnerable considering the substantial distance we are from key markets. Further, the impact of changes in weather patterns makes primary industries such as horticulture, viticulture and dairy highly vulnerable and difficult to manage effectively in the face of such uncertainty.

1.2 Sustainability and health

Essential life-supporting systems, in particular soils, water and air, must be kept at high quality if New Zealanders are to enjoy our healthy lifestyles in perpetuity.

However, in and beyond New Zealand, there is growing concern about the widespread impact of environmental degradation on people's health. Poor air quality alone is responsible for hundreds of premature deaths and chronic respiratory illnesses in New Zealand every year.

Research conducted by groups such as the United Nations Millennium Ecosystem

Assessment clearly indicates that increased pressure from economic growth is resulting in significant health issues for people, and is expected to worsen over the next 50 years.

1.3 Sustainability and New Zealand's heritage

The kiwi is iconic as our national identity, however along with many other native species, it is currently in danger of extinction. How will we feel about ourselves if this happens? We are already close to becoming the world's first country to lose a dolphin species due to human activity (Maui's dolphin), yet most New Zealanders will agree that our oceans and coasts and the things living in them are incredibly special and need to be protected. The contradiction between what we value as a nation and the condition of our native biodiversity (species and habitats) is striking.

For indigenous New Zealanders the relationship between identity and the environment is paramount. Notions such as Papatuanuku, whenua, mauri, and kaitiakitanga are central to Maori worldviews and shape the way Maori relate to and interact with the natural world. Further, the Treaty of Waitangi provides the mandate for lwi to manage their natural resources, placing them as key stakeholders in the well-being of the environment.

1.4 Sustainability and the New Zealand Curriculum

While there are currently some environmental education programmes operating in New Zealand schools, for a transformation to a truly sustainable society, much more is needed. As a future-thinking document, the New Zealand Curriculum must contribute towards the need for an eco-literate, innovative thinking, and socially and environmentally conscious society if we are to provide a prosperous, safe, and healthy future for generations yet to come.

Sustainability is not an abstract theory about the future. It needs to be clearly articulated and demonstrated throughout the curriculum. Education for Sustainability builds competencies to meet the challenges of future realities. It also supports young New Zealanders to learn how to make sound decisions and become responsible and active global citizens.

"Our biggest challenge in this new century is to take an idea that seems abstract ... sustainable development ... and then turn it into reality"

(Kofi Annan, UN Secretary General, 2001).

Part two: Feedback on the Draft New Zealand Curriculum Statement

This section examines five key components of the Draft New Zealand Curriculum. Discussion points expressed in the workshop are summarised, and recommendations for what changes should be made to reflect these points are highlighted in bold.

2.1 Vision

2.1.1 Key discussion points:

- The visual presentation is good (emphasising it is a Vision for New Zealand and the planet), however, the language is obscure and inconsistent with other parts of the draft.
- The focus is on economic growth and a knowledge-based society, yet there is no
 future orientation, and no mention of sustainable economic growth (i.e. economic
 growth that considers health and well-being of people and the environment).
- There is an over-emphasis on individualism, and no reference to students reaching both their own, and collective potentials.

2.1.2 Recommendations

"Education has a vital role to play in helping our young people to reach their individual and social potential and develop competencies they will need for further study, work, and lifelong learning. It is by developing these competencies that they are equipped to participate fully in New Zealand society and contribute to the growth of its economy that considers the health and well-being of people and the environment."

"Our young people will be...

Inter-connected:

Able to relate well to others

Effective users of communication tools

Able to relate to local and global environments"

2.2 Principles

2.2.1 Key discussion points

- To highlight responsibility (citizenship) and involvement (connections and participation), sustainability needs to be a Principle of its own. This is of particular importance as this is the only section of the Draft that does not mention the environment or sustainability, thus limiting the connectivity between all sections
- As with the Vision, the Principles reinforce the 'me' aspect of learning which does not support the concept of sustainability rather than the 'we' co-operative model which does.
- In order to distinguish Excellence from a Value, it could be changed to the pursuit
 of excellence, and broadened to include collective excellence and celebrating
 that of others.
- The focus is on cognitive ideals with no action-based or future-focused components.
- The Treaty of Waitangi needs to be recognised as a founding document of New Zealand, and central to the relationship between peoples, and between people and the natural world.
- Recognising the need for coherent pathways of education is supported, as the current lack of these pathways limits sustainability education in schools.

2.2.2 Recommendations

Pursuit of Excellence:

"All students are empowered to learn and achieve to the best of their abilities and to seek **collective and** personal excellence regardless of their individual circumstances, and celebrate the success of others".

Learning to Learn:

"All students experience a curriculum that enables them to become active, confident, creative and innovative learners, thinkers and participants".

Cultural Heritage:

"All students experience a curriculum that reflects New Zealand's bicultural heritage and its multicultural society. All students have the opportunity to experience a curriculum that reflects and values te Ao Maori and the Treaty of Waitangi".

Connections:

"All students experience a curriculum that makes connections with their lives and engages the support of their families and communities, and helps them to understand their dependence on the natural world"

Coherence:

"All students will have a broad and balanced, integrated, holistic and seamless education that provides a range of coherent pathways to further learning."

2.2.3 Recommended Principle

Sustainability

- All students experience a curriculum that gives them the opportunity to learn in holistic (integrated or interdisciplinary) ways that provide them with the knowledge, skills, attitudes and values to equip them for a sustainable future.
- All students experience a curriculum that gives them the opportunity to appreciate the ways in which our way of life can be adapted to foster sustainable development.

2.3 Values

2.3.1 Key discussion points

- It is positive to see the discussion about schools and their communities, as opposed to the focus on individualism which features strongly in other sections.
- However, the Values do not reflect a wider global perspective that recognises environmental sustainability as an intrinsic value.
- It needs to be more eco-centric (a world view that is more inclusive). Care for all living things - the environment, is about sustaining it for future generations and needs to be expressed as such.
- The quality of different relationships and the generosity of spirit also need to be emphasised as values.
- The format of this section, in particular the size of the font and subheadings which differ from that of the Vision, Principles and Key Competencies, devalues the significance of Values within the document.

2.3.2 Recommendations

New Zealand students are encouraged to value:

Respect:

"Respect for themselves, for others, for human rights, and for all living things"

Equity:

"Equity, through fairness and social justice for all"

Sustaining the environment:

"Sustaining the environment for the benefit of future generations of livings things, including the Earth and its interrelated ecosystems (Note: delete existing brackets)

Through their learning experiences students will learn about:

"Different kinds of values, such as moral, social, cultural, aesthetic, economic **and environmental**"

Through their learning experiences, students will develop their ability to:

"...make ethical decisions and act on them for the benefit of themselves, their community, and their natural world."

2.4 Key Competencies

2.4.1 Key discussion points

- This section lacks reference to sustainability and the impact of people's behaviour on the environment – either positive or negative. It is therefore recommended that an additional Key Competency be included called "Living Sustainably"
- The draft Key Competencies promote an anthropocentric approach that focuses on the learner as an individual only, not also as a member of society.
- "Systems thinking" is a competency central to many Learning Areas, Science in particular, and needs to be explicitly referenced in the Thinking competency.
- Creativity is an important aspect of competencies and should be more explicit throughout.

In general, students need to develop the competencies to:

- Work both independently <u>as well as</u> cooperatively and collaboratively.
- Relate to others <u>as well as</u> to their environment.
- Act appropriately and be aware of the nature of interdependence, of working cooperatively and making good choices in relation to resources.
- Understand the impact their choices can have on themselves and others, as well
 as on their environment.
- Understand the patterns of consumption within the context of managing themselves in a sustainable world. New Zealanders have a glaring problem managing their consumption and this has significant impacts on people's health and the quality of the environment.

2.4.2 Recommendations

Second paragraph:

"Opportunities to develop competencies occur in social, **environmental, cultural and economic** contexts."

Managing self:

"Managing self is about making good decisions whilst recognising that we are part of a wider interdependent world."

"They act appropriately and are aware of the effects that their words and actions may have on others and on the environment. They take responsibility for their actions."

Relating with others:

"Relating to others is about interacting effectively with a diverse range of people and the natural world around them."

Participating and contributing:

"They understand the importance of balancing rights, roles and responsibilities and take action to ensure the quality, well-being, and sustainability of social, natural and built, and economic environments.

They understand the importance of balancing rights, roles, and responsibilities and taking action to ensure the quality and sustainability of social, natural and built, cultural and economic environments."

Thinking:

"Students who have well-developed **systems** thinking and problem-solving skills are active seekers, users and creators of knowledge. They reflect on their own learning, draw on personal knowledge and intuitions, ask questions, **draw connections** and challenge the basis of assumptions and perceptions **in a changing world that will sustain people and other life.**"

2.4.3 Recommended Key Competency

Key Competencies are about drawing on knowledge, skills, attitudes and values needed to participate in and contribute towards society. Living Sustainably is a critical competency that students will require in order to face future realities of the 21st century.

A suggestion for possible wording as follows:

Living sustainably:

Living sustainably is about the ability to act in ways that support the health and well-being of all living things for present and future generations.

Students will understand the interconnectedness between lifestyle choices and their impacts on others and the environment.

Students engaged in sustainable living practices will develop the knowledge and skills to:

- conserve and enhance biodiversity;
- become informed and responsible consumers;
- recognise that the need to maintain the quality of natural resources can be opportunities for innovation and enterprise;
- understand the links between a sustainable environment and a vibrant economy;
- analyse how decisions are made and become involved in the decision-making process;
- plan and design innovative built environments that nurture people and nature.

Living sustainably encompasses the values of social justice, peace, human rights, and an equitable sharing of resources across the globe. Students will develop competency in this area by thinking holistically and creatively to find solutions for a sustainable world.

2.5 Designing a School Curriculum

2.5.1 Key discussion points

The document needs to provide clearer direction on implementation of the five themes outlined on page 26. This could be shown as a one page diagrammatic demonstration of how all sections (Values, Key Competencies etc) and Learning Areas are integrated through a theme. A good example is needed to encourage a balanced approach to curriculum design and implementation. This could further be supported with a half to one page for each theme showing proposed learning outcomes, and should be located before the Learning Areas to demonstrate the importance of integrated approaches. It is expected that by neglecting to show how teaching around themes can be done using all sections of the new New Zealand Curriculum, little change from current practice will occur.

On a practical note for finalising the draft, the diagram suggested above would also allow for the themes to be individually tested against each section of the document to identify gaps and inconsistencies.

The language used to promote cross curricular, integrated themes clearly suggests that this is optional. It is also more likely to be accepted at primary level, since the existing formal assessment structures could create more problems at secondary level. Greater support for developing integrated approaches at secondary level is required.

The curriculum needs to be validated with models that show how the themes can link into other aspects of delivery and application. Post implementation it would be useful to have separate documents for each of the five themes to allow for more in-depth unpacking, and greater uptake by teachers.

2.5.2 Recommendations

- Shift the Designing a School Curriculum section to immediately before the Learning Areas.
- Include a diagrammatic model of how ALL sections of the curriculum can be thematically integrated across levels (including secondary), using sustainability as an example.

- Strengthen the language around integrated teaching that implies it is an expectation, not an option.
- Put plans in place for post-implementation support documents based on each of the five themes to provide more in-depth development and application of integrated approaches to curriculum delivery.

Part three: Beyond implementation

The current *Environmental Education Guidelines for New Zealand Schools* (Ministry of Education, 1999) are now out of date. In their place, Education for Sustainability Guidelines need to be developed that:

- Demonstrate how sustainability can be woven into the Vision, Principles, Values,
 Key Competencies and Learning Areas.
- Highlight the successes of a variety of case studies along with existing school
 activities to be used as models. Support with in-service teacher training,
 interactive workshops and pre-service training that includes Principals, senior
 managers and Heads of Department.
- Include assessment guidelines and models, especially for NCEA.
- Provide guidance to Boards of Trustees and communities on their roles and potential input.
- Highlight opportunities and pathways to future careers based on sustainability.



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Draft Curriculum Feedback Ministry of Education PO Box 1666 Thorndon Wellington

28 November 2006

To Whom It May Concern:

Please find enclosed a copy of WWF – New Zealand's report "Response to the Draft new Zealand Curriculum" as our submission on the Draft New Zealand Curriculum. A copy was also sent to the Minister on 20 October 2006. Accompanying it is a copy of a letter that was sent to the Minister in support of our submission from Stephen Tindall on 27 November 2006.

Yours truly,

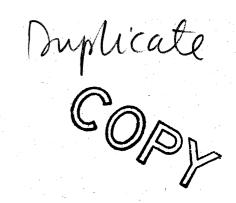
Jo Breese

Chief Executive.

& Breeze



for all New Zealanders



November 15, 2006

Minister of Education Parliament Buildings Wellington

Dear Minister

This letter is to support WWF – New Zealand's submission on the Draft New Zealand curriculum.

We all know that education is an investment in New Zealand's future. As we head into the 21st Century, that future is increasingly likely to be shaped by our environment – access to sufficient clean water, changing weather patterns, and quality of soil to produce food are just a few examples. Therefore it is essential that what is taught and learnt in schools prepares young New Zealanders to be able to make the best decisions based on sound understanding of the broader notion of sustainability.

By embedding sustainability into the curriculum, the government will be placing the ambulance at the top of the cliff, or even doing away with the ambulance at all. Neglecting to address sustainability in schools will certainly lead to status quo – and as stated in the Stern Report on Climate Change, the evidence is clear that this is not a desirable option either economically or environmentally.

Sustainability education in schools leads to significant social benefits as well. I have witnessed first hand the impact of an environmental education programme that integrates the whole curriculum, and the benefits to student learning, motivation and esteem, and community relations. Learning about the environment, and participating in action to care for it connects children with their natural heritage, and helps build identity as New Zealanders.

The curriculum review is a significant opportunity to set a sustainable path for New Zealand, the benefits to our economy, society and environment are too important to ignore. I strongly urge the government to adopt the changes to the Draft New Zealand Curriculum as recommended by WWF and other leaders in Education for Sustainability.

Yours sincerely

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Stephen Tindall

Trustee