3D literacy and environmental identities

Tuhia ki te Ao: Write to the natural world
(funded by the TLRI NZ)

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Teaching vignette

• What does this tell us about literacy practice in relation to ecology/nature?
• How can we build on this?
Reflections

• Under-articulated sense of place
• But feeling for place – prompted by image
• Culture and hybrid identities – the importance of connection to place
• Note – ‘Here’ the digital is difficult and clunky
• A sense of place as a starting point for informing environmental identity
Disciplinary responses to ecological crisis
This town does not actually exist, but it might easily have a thousand counterparts in America or elsewhere in the world. I know of no community that has experienced all the misfortunes I describe. Yet every one of these disasters has actually happened somewhere. (Carson, 1963, 22)

- Where have all the sparrows gone?
- What happened to the blizzard of insects?
- How did an acorn become an attachment? And a conker become cut and paste?
- How do we write nature back in?
The Oxford Junior Dictionary – cut and replace

Under pressure, Oxford University Press revealed a list of the entries it no longer felt to be relevant to a modern-day childhood. The deletions included acorn, adder, ash, beech, bluebell, buttercup, catkin, conker, cowslip, cygnet, dandelion, fern, hazel, heather, heron, ivy, kingfisher, lark, mistletoe, nectar, newt, otter, pasture and willow. The words taking their places in the new edition included attachment, block-graph, blog, broadband, bullet-point, celebrity, chatroom, committee, cut-and-paste, MP3 player and voice-mail.
Stories we live by… (*Ecolinguistics*, Stibbe, 2015)

‘Many writers have noted that Western attitudes toward nature and the environment tend to come well after their interest in individual rights and the market economy.’

Ministry of Education (Keown et al 2005)

Cultural hybridity or appropriation and fundamental clash of values?

• Kaitiakitanga

• ‘New Zealand is the product we are selling.’
What are the arguments which underpin the project?

- Education for Sustainability optional at secondary level
- Integrate sustainability into learning areas
- Concern over literacy achievement and narrow and technical responses
- Develop a holistic and situated model of literacy learning (3D literacy)
- Recognition that literacy and identity are linked and part of being culturally responsive
- Show how literacy in different learning areas can inform bicultural environmental identities
Key influences

- 3D literacy learning
- Ecological learning
- Informed environmental identities
- Bicultural understandings of the environment
Key Research Question

• How can integrating ecological sustainability within secondary school learning areas inform students’ bicultural environmental identities and benefit their 3D literacy achievement?
The design over two years

- Two schools – James Cook and Hobsonville Point
- One year 9 class each year
- Three teachers in three learning areas (English, Social Sciences, Arts)
- Teaching of a six week unit from an ecological perspective – refined and reworked in the second year
- Student produced images of environmental identity
- Observations, interviews, focus groups, collection of student work leading to…
  narrative accounts of teacher vignettes, unit plans, student profiles and an evaluative tool for 3D Literacy learning.
Crompton and Kasser argue that it is at this level of values and identity that environmental communication must aim since only a change of identity can make a real difference to people’s behaviour. 2009: 7

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world as interconnected – hopes and threats.
Literacy in 3D (adapted from Green 1988, Green & Beavis, 2012)

- The operational dimension: competence in identifying and using the technical features of writing and multimodal design. E.g. Understanding rhyme.
- The enviro-cultural dimension: knowing how to recognise, select from and apply available cultural forms and practices for cultural and environmental effect. E.g. Reading and writing eco-poetry.
- Eco-critical dimension: Understanding how these forms and representations might be critiqued, contested and transformed for different cultural and environmental purposes, interests and contexts. E.g. Discussing and representing how far eco-poetry challenges thinking about human relationship to nature.
<table>
<thead>
<tr>
<th>Literacy Dimension</th>
<th>Content Literacy: English</th>
<th>Content Literacy: Arts</th>
<th>Content Literacy: Social Sciences</th>
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<tbody>
<tr>
<td><strong>Operational:</strong></td>
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<td>Competence in identifying</td>
<td>Word level: spelling, (morphology; homonyms)</td>
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<td>and using the technical</td>
<td>Sentence level: punctuation; grammar, linguistic and rhetorical</td>
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<td>features of writing and</td>
<td>Text level: Form, layout, coherence, cohesion,</td>
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<td>multimodal designs</td>
<td>Design: multimodal features appropriate to form.</td>
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<td>for meaning in a range of</td>
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<td>contexts.</td>
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<td><strong>Enviro-cultural:</strong></td>
<td>Knowledge of a range of key textual forms, practices, texts and authors and awareness of</td>
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<td>their relationship to, and representation of, culture and environment. Knowledge of key</td>
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<td>cultural texts/authors e.g. Shakespeare; Grace; Wendt; Tawhare; Frame, Wedde. Key</td>
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<td>environmental texts: Carson; Snyder.</td>
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<td>Ability to write and design for audience, purpose, context and genre in a range of forms</td>
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<td>which represent aspects of culture and environment e.g. poetry (nature poetry; eco-poetry),</td>
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<td>pepeha, short stories; novels; drama; adverts; newspaper articles, websites; blogs...</td>
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<td>Understanding could be expressed orally, in writing, or in multimodal production.</td>
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<td><strong>Eco-critical:</strong></td>
<td>Critical analysis of texts and their cultural and environmental</td>
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<td>significance and value. Understanding in relation to texts of relevant enviro-cultural</td>
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<td>contexts and their political, cultural and historical significance and shaping. Discrimi-</td>
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<td>nation and discernment in relation to the uses of linguistic and rhetorical features and</td>
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<td>textual forms. Creation and/or transformation of textual forms to achieve enviro-cultural</td>
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<td>effects/aff ects.</td>
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3D Literacy – with an ecological shift…
critique of the Act opposition 2 relevance?
Realisation of exclusion property as a critical concept
What is an Aotearoa take on it?
What is the environment impact of this term/value?
Bicultural aspect of ownership and understanding of property
who is the ad aimed at and who does it exclude/exploit.
Understanding alternate market values.
reconceptualising Shakespeare
KORU LITERACY

Word level: spelling, (morphology, homonyms); vocabulary range including key Te Reo words and concepts.
Sentence level: punctuation, grammar, linguistic and rhetorical techniques, Te Reo phrases.
Text level: Form, layout, coherence, cohesion, Te Reo forms.
Design: multimodal features appropriate to form.

Critical analysis of texts and their cultural and environmental significance and value. Understanding in relation to texts of relevant enviro-cultural contexts and their political, cultural and historical significance and shaping. Discrimination and discernment in relation to the uses of linguistic and rhetorical features and textual forms. Creation and/or transformation of textual forms to achieve enviro-cultural effects/affects.

Knowledge of a range of key linguistic and textual forms, practices, texts and authors and awareness of their relationship to, and representation of, culture and environment e.g. use of Te Reo and associated enviro-cultural meanings; Key texts e.g. Shakespeare, Grace, Wendt, Tuwhare. Ability to write and design for audience, purpose, context and genre in a range of forms which represent aspects of culture and environment e.g. poetry (nature poetry; ecopoetry), pepeha, short stories; novels; drama; blogs. Understanding could be...
Literacy

- Multimodality
- Culture and Identity
- Oral cultures, and place
- High stakes/high status
- Reading and writing
- Knowledge domains
Literacy = reading and writing the national language

• Literacy refers etymologically to ‘letters’ – written language

• Local diversity and global connectedness mean not only that there can be no standard, they also mean that the most important skill students need to learn is to negotiate regional ethnic or class-based dialects; variations in register that occur according to social context; hybrid cross cultural discourses; the code switching often to be found within a text among different languages, dialects or registers different visual and iconic meanings and variations in the gestural relationships among people, language and material objects. Indeed this is the only hope for averting the catastrophic conflicts about identities and spaces that now seem ever ready to flare up. The New London Group, 1996, p.69
Literacy = high stakes, high status, high anxiety

- Anxiety targeted at reading and writing the national language (PISA)
- Assessment
- Status and elite professions
- Theory, policy and practice gap
Literacies = a variety of knowledge domains

• Proliferating literacies: visual literacy, emotional literacy, financial literacy, media literacy, new media literacy, dance literacy, computer literacy, digital literacy…

• Ecological literacy, sustainability literacy, ecoliteracy, environmental literacy. How does each learning area develop ecological knowledge?
Literacy = multimodality

• Raising the status of other modes of making meaning
• Clarifying the focus on the development of particular modes in relation to particular learning areas
• Recognising that modes *develop in relation* to each other rather than in isolation
Literacy is linked to identity and culture

• Key aspect of multiliteracies agenda
• Diverse languages, registers linked to culture

• Multimodal does not necessarily mean technological – re-engaging the senses in relation to place
Oral cultures and place

- Connections to the land and to place are expressed in relation to spoken genres and stories
- Multimodal expression - more than reading and writing and deeply connected to cultural identity
Māori ways of knowing and making meaning which predate and now surround literate practice have been and still are embedded within everyday life in Māori communities. Māori literacy is expressed through such practices as: Waiata, karakia, pohiri, haka, whakatauki, pakiwaitara, whakairo, tukutuku, kowhaiwhai, whaikorero, karanga…

Tohungatanga: symbolism - the art of bringing about mana in physical vessels.
connecting a song to a rhythm
the rhythm to a melody
words to movement
adding actions
gesture that conveys the meaning of the song.
Gesture is an important element in Māori kapa (dance) and is often expressed in haka through pūkana (dilating of the eyes), whētero (the protruding of the tongue) and pōtētē (the closing of the eyes at different points of the dance).

Karetu states in his book Haka, “To the Māori mind the dance is mediocre or substandard if pūkana and whētero are absent.” (Karetu, 1993, p.)
Skolimowski (1985) cited in Bawden articulates the experience of all parts of learning coming together;

“Wholeness means that all parts belong together, and that means they partake in each other. Thus from the central idea that all is connected, that each is a part of the whole, comes the idea that each participates in the whole. The participation is an implicit aspect of wholeness.” (Bawden, 1991, p.)
Linking literacy back to place

- Linguistic features, expressions, forms and terms which are tied to physical place as well as culture
- Recognising different (opposing?) cultural readings of the meaning of a shared place and environment.
- Cultural hybridity and various place attachments expressed through literacy
Relating

• Valuing oral forms as part of literate practice and reconnecting to places - Pepeha
• Taking a multimodal and holistic approach
• Thinking nature and culture together
• Locating and informing ‘place’ in literacy practices – knowledge
• Trying to understand and counter the effect of the inequities of school environments and resources
Project position on literacy

- We are interested in how different learning areas foreground particular environmental and cultural literacy practices.
- We argue that access to the powerful literacy of written language is facilitated by respect for cultural diversity in communication and representation.
- We therefore work with a definition of literacy as multimodal.
- We pay particular attention to how multimodal literacy connects with local places, ecological concerns and environmental identities.
- Expanding our attention to indigenous oral practices may help us in our endeavour to remember the original deep connection of language to the more than human world.