


Te Pā Tūwatawata

Teacher's Handbook

A radical pedagogy guide for teaching AI, Māori data sovereignty, and digital futures. Grounded in Freire, Graeber, and Kropotkin — situated in Aotearoa New Zealand.



Six modules · Bilingual (te reo Māori / English) · Free and open

Whero (Red)

Te Whai Ao — coming into being, mana, life force

Mangu (Black)

Te Korekore — potential, the void, the earth

Mā (White)

Te Ao Mārama — light, purity, the physical world

PART ONE — PEDAGOGICAL FRAMEWORK

Why radical pedagogy?

This course is not neutral. It does not pretend to present 'both sides' of whether corporations should be able to extract Māori data without consent. It takes a position: that data sovereignty is a right, that digital colonialism is real, and that education is itself a political act.

That position draws on a tradition of radical pedagogy — a tradition that includes Paulo Freire's critique of the banking model of education, David Graeber's anarchist insistence on the creative power of ordinary people, and Pyotr Kropotkin's argument that mutual aid — not competition — is the engine of human flourishing. And it is grounded in kaupapa Māori, which understands education as inseparable from land, language, and sovereignty.

Freire: Education as consciousness-raising

"Education either functions as an instrument which is used to facilitate integration of the younger generation into the logic of the present system and bring about conformity or it becomes the practice of freedom."

— Paulo Freire, *Pedagogy of the Oppressed* (1968)

Freire's key insight was that education is never neutral. The 'banking model' of teaching — in which students are empty vessels to be filled with knowledge by an expert — reproduces the social relations of the dominant class. It teaches passivity, acceptance of authority, and the idea that knowledge flows from top to bottom.

The alternative — which Freire called *conscientização* (consciousness-raising or critical consciousness) — starts from the lived experience of students. It asks: what do you already know? What contradictions do you live inside? How does your experience connect to broader structures of power? The teacher is not an authority but a co-investigator.

In this course, Freirean pedagogy means:

- Beginning each module with students' existing knowledge of data, AI, and digital technology
- Naming the contradictions directly — not euphemising 'data extraction' as 'innovation'
- Treating Māori knowledge frameworks (whakapapa, tikanga) as intellectual equals to Western theory
- Ending each module with action — what does this knowledge demand of us?

Graeber: Against bureaucratic bullshit, for creative power

"The ultimate, hidden truth of the world is that it is something we make, and could just as easily make differently."

— David Graeber, *The Utopia of Rules* (2015)

Graeber's anthropology is a resource for teaching about AI and data for two reasons. First, he took seriously the violence of bureaucratic systems — the way that paperwork, forms, and databases are instruments of power that reduce people to administrative categories. Second, he insisted that ordinary people are creative, that they make culture and meaning in their everyday lives, and that this creativity is the real source of social value.

When we teach about AI and Māori data, both of these are relevant. The data extraction economy reduces people to data points — it is, in Graeber's sense, a bureaucratic violence. But Māori communities have always been creative: building infrastructure, languages, governance systems, and economies. This course asks students to see that creativity as the alternative to extraction.

Kropotkin: Mutual aid as the basis of sovereignty

"In the animal world we have seen that the vast majority of species live in societies, and that they find in association the best arms for the struggle for life."

— Pyotr Kropotkin, *Mutual Aid: A Factor of Evolution* (1902)

Kropotkin's mutual aid framework is directly applicable to the question of Indigenous data sovereignty. He argued — against social Darwinism — that cooperation, not competition, is the dominant mode of life in both nature and human societies. The capitalist economy, he showed, appropriates the fruits of collective human creativity and concentrates them in private hands.

Te Pā Tūwatawata is, in this sense, a Kropotkinist project: it refuses to accept that Māori communities must depend on corporate infrastructure, and instead builds collective, cooperative alternatives. This is not nostalgia — it is the future.

Kaupapa Māori: Education grounded in land and sovereignty

Kaupapa Māori theory — developed by scholars including Graham Smith and Linda Tuhiwai Smith — argues that education must be rooted in Māori language, values, and ways of knowing. It is not a 'culturally responsive' add-on to Western curricula; it is a complete alternative epistemology.

Key kaupapa Māori principles for this course include:

- Tino rangatiratanga — self-determination: students should emerge from this course with greater agency, not just greater knowledge
- Taonga tuku iho — cultural aspirations: te reo Māori, tikanga, and Māori knowledge are not problems to be solved but resources to be drawn upon

- Kia piki ake i ngā raruraru o te kāinga — socioeconomic mediation: this course explicitly addresses inequity and structural disadvantage
- Āta — growing respectful relationships: the classroom itself should embody the values it is teaching

PART TWO — SIX LESSON PLANS

How to use these lesson plans

Each lesson plan below corresponds to one module of the Te Pā Tūwatawata course. They are designed for 60–90 minute sessions but can be condensed or expanded. Each includes: learning objectives, suggested opening activity (based on Freirean generative themes), key concepts, discussion questions, and an action step.

MOTIF: Each module uses a distinct Māori motif from the kōwhaiwhai tradition. Colours follow the sacred palette: Whero (red), Mangu (black), Mā (white).
Print the Student Activity Sheets (separate PDF) as companion handouts.

MODULE 1 OF 6

Whakapapa o te raraunga

The whakapapa of data

Tohu — Koru

Unfurling fern frond — new life, growth, renewal. The koru reminds us that everything has an origin, and that origin matters.

Learning objectives

- Understand whakapapa as a relational framework for thinking about data
- Identify the genealogy and context of a dataset
- Connect historical colonial data extraction to contemporary AI practices

Opening activity (Freirean generative theme)

Ask students: 'Think of one piece of data about you that exists in a database right now. Where did it come from? Who holds it? What decisions does it influence?' Share in pairs, then discuss: whose data is most tracked, and why?

Key concepts (te reo Māori / English)

Whakapapa o te raraunga

Mana raraunga

Raupatu matihiko

Data ontology

Pātai — Discussion questions

1. How does whakapapa challenge the Western idea that data is just a neutral fact?

- 2. Find one example of colonial data collection from Māori history. What was it used for?
- 3. Is there a difference between a colonial land survey and an AI model trained on Māori language data? Argue both sides.

Action step

Ask students to map the whakapapa of one dataset they interact with regularly (e.g., their school's attendance system, a social media algorithm). Where does the data come from? Who benefits?

MODULE 2 OF 6

Te Pā Tūwatawata hei tauira

Te Pā Tūwatawata as a model

**Tohu — Pā
tūwatawata**

Palisaded village — concentric circles of protection and governance. Sovereignty radiates outward from whānau to hapū to iwi, not downward from the state.

Learning objectives

- Understand Te Pā Tūwatawata as a concrete infrastructure initiative
- Explain the CARE Principles and how they differ from FAIR
- Analyse the relationship between infrastructure ownership and sovereignty

Opening activity (Freirean generative theme)

Show students a map of where their data lives. Ask: who owns the cables that carry your messages? Who owns the servers that store your photos? Where are they located? Who has access? Then: what would it mean for your community to own that infrastructure?

Key concepts (te reo Māori / English)

CARE Principles

Tikanga Māori

Kaupapa Māori

Indigenous data sovereignty

Pātai — Discussion questions

1. What is the difference between participating in a governance process and actually having authority?
2. How do the CARE Principles change who benefits from data?
3. Is it possible to build sovereign digital infrastructure without significant capital? What alternatives exist?

Action step

Research one Indigenous-led digital infrastructure project (Te Hiku Media, First Nations Technology Council in Canada, etc.). Present to the class: what did they build, how, and who governed it?

MODULE 3 OF 6

AI me te raupatu matihiko

AI and digital extraction

Tohu — Niho taniwha

Taniwha teeth — protection, warrior strength, resistance. The taniwha is not a monster but a guardian. These teeth ask: who has the right to cross this threshold?

Learning objectives

- Explain how large language models are trained and what data they consume
- Identify structural parallels between colonial land extraction and AI data extraction
- Critically evaluate the 'public data' justification used by AI companies

Opening activity (Freirean generative theme)

Play a short audio clip of an AI voice model speaking in te reo Māori (easily found online). Ask: How did this system learn te reo? Who taught it? Who consented? Who profits from this capability?

Key concepts (te reo Māori / English)

Large language model (LLM)

Training data

Tapu

Digital colonialism

Pātai — Discussion questions

1. What is the difference between a Māori community publishing its language online for community benefit, and a corporation using that publication to train a commercial AI?
2. Find one AI company's data practices policy. Does it mention Indigenous data? What does it say?
3. If you were an iwi data governance body, what would your policy on AI training data be?

Action step

Write a one-page data sovereignty policy for an imaginary iwi, covering: what data can be used for AI training, under what conditions, governed by whom, and with what benefit-sharing arrangements.

MODULE 4 OF 6

Tikanga, ture, mana whakahaere

Tikanga, law, and governance

**Tohu —
Kōwhaiwhai**

Rafter painting — the genealogy of law. As kōwhaiwhai on the tahuhu encodes the history of the iwi, tikanga encodes the ancestral logic that governs what is permitted.

Learning objectives

- Identify key tikanga principles relevant to data governance
- Assess the adequacy of New Zealand's Privacy Act 2020 for Māori collective rights
- Describe what mana whakahaere looks like in practice

Opening activity (Freirean generative theme)

Read aloud the following sentence from New Zealand's Privacy Act 2020: 'An individual has a right to be given access to personal information about that individual held by an agency.' Ask: What does this framework miss? (It protects individuals – but what about collective rights? Communities? Future generations?)

Key concepts (te reo Māori / English)

Tikanga Māori

Kaitiakitanga

Mana whakahaere

UNDRIP

Privacy Act 2020

Pātai — Discussion questions

1. How does kaitiakitanga differ from ownership? What practical difference does that make for data governance?
2. What would a tikanga-based data ethics review process look like for a government agency?
3. Is the Treaty of Waitangi a useful instrument for advancing Māori data sovereignty? Why or why not?

Action step

Draft a one-page tikanga-based protocol for a specific scenario: a university researcher wants to use health data from a Māori community for a study on diabetes prevention. Who would need to give consent? What conditions would apply? Who would own the results?

MODULE 5 OF 6

Hoahoa tika

*Ethical design***Tohu —
Unaunahi**

Fish scales — abundance, connection to the moana. Ethical design works in layers: each element interlocking with the next, every layer responsible for the whole.

Learning objectives

- Apply hoahoa tika principles to a real AI design challenge
- Distinguish between ethics washing and structural change
- Design a community consent architecture for a hypothetical AI system

Opening activity (Freirean generative theme)

Show students a real 'AI ethics charter' from a major tech company (Google, Microsoft, Meta — all have them). Read it together. Ask: what does it promise? What does it not promise? Who enforces it? What happens if they break it?

Key concepts (te reo Māori / English)

Hoahoa tika

Consent architecture

Ethics washing

Benefit-sharing

Pātai — Discussion questions

1. What is the minimum that a tech company would need to do for its AI ethics policy to be more than ethics washing?
2. How do you design tapu-aware access controls for a health database? What does 'tapu' mean technically?
3. If a community has veto power over an AI system, what mechanisms would make that veto meaningful?

Action step

In groups, design a 'hoahoa tika scorecard' for evaluating AI systems. What questions would you ask? What evidence would you require? Test it on a real AI product.

MODULE 6 OF 6

He anamata rangatira

*Sovereign digital futures***Tohu —
Takarangi**

Double spiral — the past and future inseparable. One spiral is the ancestors; the other is the anamata rangatira we are building now. Sovereignty is not a destination but a continuous turning.

Learning objectives

- Articulate a vision of Māori digital sovereignty
- Identify existing institutions and initiatives that contribute to that vision
- Develop a personal or collective action plan

Opening activity (Freirean generative theme)

Ask students to imagine it is 2050. Māori communities in Aotearoa have achieved full digital sovereignty. What does everyday life look like? What technology do you interact with? Who owns it? Who governs it? Write for five minutes, then share.

Key concepts (te reo Māori / English)

Anamata rangatira

Digital sovereignty

Te Hiku Media

Intergenerational accountability

Pātai — Discussion questions

1. What does Te Hiku Media's approach to te reo Māori AI teach us about what is possible when communities own their own infrastructure?
2. What are the biggest obstacles to Māori digital sovereignty, and who benefits from those obstacles remaining in place?
3. If you had \$10 million to invest in Māori digital sovereignty, where would you put it?

Action step

Course capstone: write a 500-word manifesto for Māori digital sovereignty, grounded in at least three of the concepts from this course. Share with the class. Collectively: what do we demand?

APPENDIX — KEY SOURCES

Primary resources

- Te Mana Raraunga — Māori Data Sovereignty Network — <https://www.temanararaunga.maori.nz>
- Kāhui Raraunga — Māori Data Governance Model — <https://www.kahuiraraunga.io/maoridatagovernance>
- Te Pā Tūwatawata initiative — <https://tepatuwatawata.io>
- CARE Principles for Indigenous Data Governance — <https://www.gida-global.org/care>
- Te Hiku Media — community-owned te reo Māori AI — <https://tehiku.nz>
- This course (GitHub) — <https://github.com/robertmccallnz/kiwi-dialectic-te-pa-minisite>
- The Kiwi Dialectic — <https://www.kiwidialectic.com>

Theoretical texts

- Freire, Paulo. *Pedagogy of the Oppressed*. Continuum, 1970.
- Graeber, David. *The Utopia of Rules*. Melville House, 2015.
- Graeber, David. *Debt: The First 5,000 Years*. Melville House, 2011.
- Kropotkin, Pyotr. *Mutual Aid: A Factor of Evolution*. Heinemann, 1902.
- Smith, Linda Tuhiwai. *Decolonizing Methodologies*. Zed Books, 1999.
- Smith, Graham Hingangaroa. 'The Development of Kaupapa Māori: Theory and Praxis.' PhD thesis, University of Auckland, 1997.
- Kukutai, Tahu & Taylor, John (eds). *Indigenous Data Sovereignty: Toward an Agenda*. ANU Press, 2016.
- Couldry, Nick & Mejias, Ulises A. *The Costs of Connection*. Stanford UP, 2019.

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