

# Arts & Creative Pedagogy Kit

## *Te Pā Tūwatawata*

A resource for arts educators, teachers, and community facilitators — connecting Māori visual motifs, kōwhaiwhai design principles, and creative writing practice to the politics of AI and Indigenous data sovereignty.



koru



takarangi

Koru · Kōwhaiwhai · Takarangi

This kit contains: a guide to Māori visual symbolism for educators · six arts activities linked to course modules · concrete poetry exercises · kōwhaiwhai design worksheets · creative writing prompts · assessment guidance

## Part One: Māori Visual Symbolism for Educators

This section provides teachers with the knowledge they need to introduce Māori visual motifs with accuracy, depth, and respect. It is not a substitute for engaging directly with Māori artists and cultural advisors — but it provides a foundation for classroom use.

### The kōwhaiwhai tradition

Kōwhaiwhai are the painted patterns found on the heke (rafters) and tahuhu (ridgepole) of wharehenui (meeting houses). They are not merely decorative: they encode the whakapapa of the iwi, tell stories of ancestors, and protect the people who gather beneath them. The colours — red, black, and white — carry cosmological meaning drawn from the Māori creation narrative.

Colour	Māori	Realm	Meaning in kōwhaiwhai
Red	Whero	Te Whai Ao	Coming into being — mana, life force, rangatiratanga, blood, warmth
Black	Mangu	Te Korekore	Potential — the void, earth, the long darkness before creation
White	Mā	Te Ao Mārama	The realm of light — purity, peace, the physical world, the sky

### Five key motifs

#### Koru — Koru

Meaning: New life, growth, renewal, perpetual movement

The koru is the most fundamental element of kōwhaiwhai. Its spiral form is derived from the unfurling shoot of a silver fern frond — the pītau. The koru's circular outer form 'conveys the idea of perpetual movement,' while the inner coil 'suggests returning to the point of origin' (Te Papa Tongarewa). It is used in this course as the symbol of Module 1: whakapapa — everything returns to its origin.

#### Kōwhaiwhai — Kōwhaiwhai rafter pattern

Meaning: Whakapapa, genealogy, the law of the ancestors

The full kōwhaiwhai pattern — as painted on the rafters of a wharehenui — represents the genealogy of the people below. The tahuhu (ridgepole) pattern is the direct ancestral line; patterns on the heke (rafters) represent branching whakapapa. The manawa (heart) line runs through the design, connecting all elements. In this course, kōwhaiwhai is the symbol of Module 4: tikanga and the genealogy of law.

### **Niho taniwha — Niho taniwha (taniwha teeth)**

Meaning: Protection, warrior strength, boundary

The niho taniwha pattern is a row of triangular teeth — sometimes described as dog-tooth or herringbone. The taniwha is not simply a monster but a guardian of boundaries. This pattern appears at the borders of cloaks and carvings, marking the threshold between protected and unprotected space. In this course, niho taniwha is the symbol of Module 3: Aī and raupatu — who has the right to cross this threshold?

### **Unaunahi — Unaunahi (fish scales)**

Meaning: Abundance, sustenance, connection to the moana

The unaunahi pattern mimics the overlapping scales of a fish. It is associated with Tangaroa, the sea, and with abundance — the idea that the ocean provides when relationships are maintained. Each scale interlocks with the ones around it: no part works alone. In this course, unaunahi is the symbol of Module 5: ethical design — each layer of a system carries responsibility for the whole.

### **Takarangi — Takarangi (double spiral)**

Meaning: Balance, creation, past and future inseparable

The takarangi is a double spiral — sometimes described as two koru facing each other. It represents the creation narrative: Ranginui (sky father) and Papatūānuku (earth mother) in the long embrace. It is the balance of opposites: light and dark, past and future, whānau and the world. In this course, takarangi is the symbol of Module 6: he anamata rangatira — the double spiral of ancestors and descendants.

Pedagogical note: The use of Māori motifs in educational materials requires care. These patterns are not merely decorative — they carry spiritual and genealogical significance. Teachers should: (a) explain the meaning before using any motif; (b) avoid treating them as interchangeable decoration; (c) where possible, engage a local kaumātua or Māori arts practitioner to deepen the learning. Students should understand that recreating these motifs is an act of learning, not appropriation — provided it is done with understanding and respect.



## Part Two: Six Arts Activities

Each activity is paired with a course module and draws on its motif. Activities can be used at the start of a session (as a warm-up), mid-session (to consolidate concepts), or as extended projects. They are designed for secondary school and tertiary learners, with notes on adaptation.

### MODULE 1 • KORU

#### Map the whakapapa of a dataset

Type: Visual mapping · collage · diagramming · Duration: 45–60 min

Materials: Large paper or poster board, coloured markers, sticky notes, old magazines/newspapers for collage

#### Instructions:

1. Choose a dataset you interact with daily (your school's timetable system, a social media feed, a health app).
2. In the centre of your paper, draw or write the dataset's name. This is your koru's centre.
3. Working outward in a spiral, add: Where was this data collected? By whom? Who uses it? Who profits? Who is harmed?
4. Use red for power (who controls), black for what is hidden or unknown, and white for what is openly visible.
5. Give your diagram a title that includes the word 'whakapapa' — e.g., 'Whakapapa o Instagram'.

Discussion: Compare diagrams. Whose data has the most hidden (black) elements? What patterns emerge?

Adapt: For younger students: use a simpler dataset (school ID card, library card). For advanced: trace a specific AI training dataset.

### MODULE 2 • PĀ TŪWATAWATA

#### Design a digital pā

Type: Architectural design · diagramming · group work · Duration: 60–90 min

Materials: Large paper, pencils, rulers, coloured markers

#### Instructions:

1. In groups of 3–4, design a 'digital pā' — a community-owned digital platform for your community.
2. Draw the pā as concentric circles: innermost = whānau data (most protected), middle = hapū / community data, outer = publicly accessible.

- 3. For each circle, decide: Who can access this? Who governs it? What tikanga applies? What is tapu here?
- 4. Draw the palisade (tūwatawata) — the outer wall. What does it protect? What does it let in?
- 5. Present to the class: what is this pā for? Who built it? Who lives in it?

Discussion: How does designing from the inside out (from whānau outward) change what you build, compared to designing from the outside in (from the platform outward)?

**Adapt:** For younger students: focus on a specific scenario (health data, school records). For advanced: write a governance charter to accompany the diagram.

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### MODULE 3 · NIHO TANIWHA

## Draw the taniwha at the threshold

Type: Visual art · printmaking · linocut (optional) · Duration: 60 min drawing / 90+ min for printmaking

Materials: Drawing paper, pencils, ink. Optional: lino blocks, cutting tools, printing ink, brayers.

### Instructions:

- 1. The niho taniwha motif marks a boundary. Your task: draw the taniwha at the threshold between a Māori community's data and the AI companies that want to extract it.
- 2. Your taniwha is not a monster — it is a guardian. It needs to be powerful, detailed, and specific.
- 3. Include in your image: (a) what the taniwha is protecting (the community, the data, the language); (b) what it is facing (the AI company, the algorithm, the data extraction machine); (c) the threshold itself — what does the line between them look like?
- 4. Use only black, white, and red.
- 5. Optional: transfer your drawing to a lino block and print multiples — a protest poster for data sovereignty.

Discussion: What makes a taniwha powerful? Is your taniwha winning? What would it take for it to win?

**Adapt:** For younger students: use the niho taniwha pattern as a border for a written statement about data rights.

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### MODULE 4 · KŌWHAIWHAI

## Paint a rafter of law

Type: Pattern design · painting · research · Duration: Two sessions of 60 min

Materials: Long strips of paper or card (approx 10cm × 60cm), red/black/white paint or markers, pencils

### Instructions:

- 1. Research: find three tikanga principles relevant to data governance (mana, tapu, kaitiakitanga, utu — or others you discover).

- 2. Each principle becomes one section of your kōwhaiwhai strip. Design a visual motif for each: what does mana look like as a pattern? What does tapu look like?
- 3. The manawa line (heart line) runs the full length of your strip — this is the continuous line of tikanga connecting all three principles.
- 4. Paint your strip in red, black, and white only.
- 5. Present your rafter to the class: explain which principle is in each section and what the pattern means.

Discussion: If the wharenui of data governance had rafters painted with tikanga, what would the full set of rafters look like?

Adapt: For younger students: pre-draw the kōwhaiwhai outline and ask students to fill it in with colour and meaning.

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## MODULE 5 · UNAUNAHĪ

### Design an ethical system in layers

Type: Systems design · collage · layered paper art · Duration: 60–75 min

Materials: Multiple sheets of paper or acetate, pencils, scissors, coloured markers

#### Instructions:

- 1. Unaunahi works in layers — each scale overlaps the next, and the whole is stronger for it. Your task: design an ethical AI system in layers.
- 2. Layer 1 (bottom): Community — who the system serves, what they need, what their rights are.
- 3. Layer 2: Data — what data is collected, how consent is obtained, what is tapu.
- 4. Layer 3: Algorithm — what decisions the system makes, who audits it, what can be appealed.
- 5. Layer 4: Governance — who controls the system, how decisions are made, what accountability looks like.
- 6. Draw each layer on a separate sheet. Stack them. Hold them up to the light: what shows through?

Discussion: If you remove one layer, does the system collapse? Which layer is most important? Which is most often missing from real AI systems?

Adapt: For a digital version: use slide software, with each slide being one layer. Animate the layers building up.

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## MODULE 6 · TAKARANGI

### Concrete poetry — two spirals

Type: Concrete poetry · creative writing · typography · Duration: 45–60 min

Materials: Paper, pencils, pens. Optional: word processor with curved text.

#### Instructions:

- 1. The takarangi is two spirals: one is the past (the ancestors, the whenua, the language), the other is the future (the anamata rangatira we are building).
- 2. Write a concrete poem in the shape of a double spiral. The left spiral (in black ink) speaks in the past tense — the ancestors, what was taken, what has been protected. The right spiral (in red ink) speaks in the future tense — what we are building, what we demand, what will be.
- 3. The words must be written along the curve of the spiral — so the form and the meaning reinforce each other.
- 4. At the centre where the two spirals meet: write the one word that connects past and future. (Sovereignty? Mana? Tino rangatiratanga? Land? Language?)
- 5. Share your poem aloud: read from the past spiral to the centre, then from the centre outward on the future spiral.

Discussion: What did you choose for the centre word? Why? What does it mean that past and future share the same centre?

Adapt: For younger students: provide a pre-drawn double spiral outline and ask students to fill the curves with words.



## Part Three: Concrete Poetry & Political Language

Concrete poetry makes the visual form of the text carry meaning alongside the words themselves. It is a tradition with deep roots in avant-garde and political art — from the Brazilian Noigandres group of the 1950s to the protest poetry of the 1960s and 70s. This section provides models and exercises for using concrete poetry to teach data sovereignty.

### Model poem: Raupatu matihiko

*The following poem is offered as a classroom model. Read it aloud, then ask: How does the form reinforce the meaning? What would be lost if it were written as a standard paragraph?*

they took	<i>the land</i>
then they took	<i>the fish</i>
then they took	<i>the language</i>
then they took	<i>the children</i>
then they built a machine	
and the machine took	<i>the words</i>
and the words made	<i>the model</i>
and the model spoke	<i>in our tongue</i>
and called it	<i>innovation</i>
we call it	<i>raupatu</i>
we call it	<i>matihiko</i>
we call it	
what it has always	
been:	

— The Kiwi Dialectic

### Writing prompts

#### Spiral prompt

*Write a poem in which each line is slightly longer than the last — like a koru unfurling. The first line is one word (the thing that was taken). The last line is a full sentence (what you are building instead).*

#### Threshold prompt

*Write a poem in two columns. The left column: everything the AI company takes. The right column: what it gives nothing back. In the space between: what belongs to us.*

#### Whakapapa prompt

*Write a poem that traces the whakapapa of one piece of data — from the person who generated it to the corporation that now owns it. Each line moves one step along the chain.*

### **Takarangi prompt**

*Write a poem in two spirals (see Activity 6). Left spiral: te reo Māori words for what colonialism took. Right spiral: English words for what we are rebuilding. Centre: one word in both languages — the same word, twice.*

## Part Four: Assessment Guidance

These are not assessment criteria in a conventional sense — they do not grade students against a predetermined standard. They are heuristics for facilitators to reflect on whether the learning is taking hold. They are inspired by Freirean praxis: the test of learning is not what you can recall, but what you do.

Conscientização	<b>Critical consciousness</b>	Can the student name the structural conditions that produce digital colonialism? Do they connect the specific (AI companies extracting Māori data) to the general (how colonial extraction works)?
Mana	<b>Authority and dignity</b>	Does the student's work reflect an understanding that Māori communities have inherent authority over their own knowledge? Or does it still frame Māori data sovereignty as a 'request' to be granted?
Tino rangatiratanga	<b>Self-determination</b>	Does the student's work contribute to, or imagine, a state of greater self-determination? Does it end in action — or only in description?
Hoahoa tika	<b>Ethical practice</b>	In the student's creative work and in their conduct, do they practice the values they are learning? Is the classroom itself a site of mutual aid?
Whanaungatanga	<b>Relationships</b>	Has the student built genuine relationships with the ideas and people in this course? Can they speak about tikanga, whakapapa, and sovereignty with accuracy and care — not as outside observers, but as people who have been changed by learning?

### Sources

Te Papa Tongarewa — Kōwhaiwhai patterns — <https://collections.tepapa.govt.nz>

Kura Plan — Kōwhaiwhai design education — <https://www.kuraplan.com/nz>

Te Mana Raraunga — <https://www.temanararaunga.maori.nz>

Landcare Research — Kōwhaiwhai — <https://www.landcareresearch.co.nz/about-us/our-locations/te-rauhitanga/kowhaiwhai>

Wikipedia — Koru symbolism — <https://en.wikipedia.org/wiki/Koru>

The Kiwi Dialectic — course site — <https://robertmccallnz.github.io/kiwi-dialectic-te-pa-minisite/>

The Kiwi Dialectic — Substack — <https://www.kiwidialectic.com>

