AI Capability Framework Application Handbook

How to Apply the Six-Domain Framework to Design Engaging, Practical, and Responsible AI-Enabled Courses

Including a Full Worked Example: Generative AI for Climate Change & Sustainability

CloudPedagogy — 2026 Edition

www.cloudpedagogy.com

With a Worked Example: Generative AI for Climate Change & Sustainability

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SECTION 1 — INTRODUCTION

1.1 Purpose of This Handbook

The **AI Capability Framework Application Handbook** is designed to bridge the gap between:

- **The AI Capability Framework (2026 Edition)** — a 50-page conceptual and developmental structure; and
- **Real-world, practical AI courses and training programmes** across climate action, humanitarian response, higher education, public health, research, and public services.

While the Framework defines *what* responsible, creative, and ethical AI capability looks like, this Handbook explains *how to apply it* step by step.

Its purpose is to:

- provide a replicable **course creation method**
- demonstrate the full **translation from domain → module → lesson → activity → downloadable**
- show how to design learning that is **engaging, practical, innovative, and responsible**
- give educators and organisations a **ready-made system** for building AI literacy and capability at scale
- demonstrate the method using a complete worked example: **Generative AI for Climate Change & Sustainability**

This handbook is deliberately **application-focused**: it shows how to design courses **from the Framework**, not merely about the Framework.

1.2 How This Handbook Complements the AI Capability Framework

The 50-page Framework is foundational: it articulates the **six domains** of AI capability and the developmental logic underlying safe, intentional, and mature use of Generative AI.

However, practitioners, instructional designers, and domain experts often ask:

- *"How do we turn the Framework into an actionable course?"*
- *"How do we apply the six domains in specific areas such as climate, health, research, or teaching?"*
- *"How do we design activities and assessments that reflect the Framework's principles?"*
- *"What does a course built on this Framework actually look like?"*

This handbook answers those questions.

It acts as the **middle layer** of the ecosystem:

AI Capability Framework → Application Handbook → Practical Applied Courses

This structure ensures consistency, quality, responsibility, and creativity across all CloudPedagogy courses.

1.3 Who This Handbook Is For

This Handbook is designed for:

Educators & Instructional Designers

Creating curriculum, microcredentials, workshops, and CPD programmes.

Humanitarian, Climate, and Public Health Practitioners

Adapting AI to urgent, mission-driven domains with ethical complexity.

Researchers & Analysts

Using AI responsibly for synthesis, writing, and modelling.

Policy Professionals & Public Sector Workers

Building safe, transparent, and equitable AI-enabled workflows.

AI Literacy Leads & Organisational Innovators

Implementing large-scale capability-building initiatives using a structured developmental approach.

Students & Lifelong Learners

Understanding *how* AI courses are built and how responsible AI practice works in multiple domains.

1.4 Why Climate Change & Sustainability Was Chosen as the Worked Example

Several factors make climate change the **ideal primary example** for demonstrating the application process:

✓ Universality

Climate change affects all sectors and all learners, regardless of background.

✓ Accessibility

Learners generally understand the basics of climate issues, reducing cognitive load.

✓ Clear Mapping to All Six Domains

Climate communication, misinformation, public engagement, and scenario planning naturally activate all six domains.

✓ Low Ethical Risk

Compared to humanitarian crises, climate content is easier to demonstrate ethically and safely.

✓ Engagement

Climate topics naturally lend themselves to visually rich, practical, and innovative GenAI use cases.

This makes the climate example both **practical** and **pedagogically clean**, allowing the reader to clearly understand the Framework-to-course translation.

1.5 How to Use This Handbook

Readers can use this handbook in several ways:

- **As a practical method** for designing new AI-enabled courses
- **As a study guide** to understand how the Framework is applied
- **As a quality assurance tool** to evaluate the maturity of existing AI training
- **As an internal design system** for CloudPedagogy course creation
- **As a partner-facing tool** to demonstrate professional methodology
- **As a template** for domain-specific handbooks (e.g., AI in Public Health, AI in Research)

Each section builds systematically:

1. Summary of the Framework
2. Universal application method
3. Full worked example
4. Supplementary examples
5. Tools and templates
6. Next steps

1.6 The Practical and Responsible AI Imperative

Across all sectors, organisations face a dual challenge:

1. **Rapidly scaling AI adoption**, and
2. **Doing so responsibly, ethically, and strategically.**

This requires a learning system that is:

- practical enough for general users
- rigorous enough for professional environments
- ethical enough for public-good work
- innovative enough to keep pace with AI developments
- structured enough to ensure consistency across programmes

The **AI Capability Framework**, combined with this **Application Handbook**, provides that system.

It enables organisations to move from:

- **Tool use** to **capability development**
- **Ad hoc experimentation** to **structured innovation**
- **Individual improvisation** to **institutional strategy**
- **Risk-prone adoption** to **safeguarded, ethical design**

This Handbook embodies CloudPedagogy's core mission:
to transform how individuals and organisations build AI capability — responsibly, creatively, and with purpose.

SECTION 2 — THE SIX-DOMAIN AI CAPABILITY FRAMEWORK (SUMMARY RECAP)

This section provides a **concise, practical recap** of the Six Domains from the *CloudPedagogy AI Capability Framework (2026 Edition)*.
It is **not** a rewrite of the full 50-page Framework — instead, it highlights the essential components necessary for applying the Framework to course design.

The goal is to give readers a **clear, working understanding** of the domains so they can follow the universal method and the climate example later in the handbook.

2.1 Overview of the Six Domains

The **AI Capability Framework (2026 Edition)** defines six interrelated domains that form the foundation of responsible, creative, and impactful AI use. Each domain represents a **distinct capability**, yet all domains work together to support mature, ethical, and context-sensitive AI practice.

Below is a high-level summary of each domain.

DOMAIN 1 — Awareness & Orientation

Core Capability: Understanding how AI systems work, what they can and cannot do, and how to interpret AI outputs.

Focus Areas:

- Basic AI literacy (LLMs, data, model behaviour)
- Misinformation recognition
- Identifying hallucinations and uncertainty
- Assessing relevance, accuracy, and reliability
- Recognising when AI is inappropriate or risky

Why it matters:

Domain 1 provides the foundation for every other part of the learning journey. Without awareness and orientation, learners cannot engage in safe or effective AI use.

DOMAIN 2 — Human–AI Co-Agency

Core Capability: Designing intentional partnerships between human judgement and AI assistance.

Focus Areas:

- Identifying tasks suitable for AI support vs. human control
- Constructing responsible prompting strategies
- Human-in-the-loop workflows
- Defining roles, responsibilities, and boundaries
- Maintaining accountability over AI-assisted outputs

Why it matters:

Co-agency prevents over-reliance on AI, clarifies responsibilities, and ensures the human remains the decision-maker.

DOMAIN 3 — Generative Practice & Innovation

Core Capability: Using AI to create, prototype, iterate, and innovate in practical tasks.

Focus Areas:

- Creative content generation
- Drafting, prototyping, iteration cycles
- Scenario exploration and ideation
- Multimodal experimentation (text, images, data, etc.)
- Safe-to-fail experimentation in low-risk contexts

Why it matters:

Domain 3 enables learners to use AI *constructively* — for creativity, prototyping, and improved productivity — rather than passively or mechanically.

DOMAIN 4 — Ethics, Equity & Impact

Core Capability: Evaluating the ethical, equitable, and societal implications of AI use.
Focus Areas:

- Bias detection and mitigation
- Equity audits
- Ethical risk identification
- Anticipating unintended consequences
- Ensuring inclusivity and accessibility
- Avoiding harm, misrepresentation, or exclusion

Why it matters:
This domain ensures that innovation does not come at the expense of fairness, transparency, or vulnerable populations.

DOMAIN 5 — Decision-Making & Governance

Core Capability: Applying governance structures, oversight mechanisms, and decision protocols to AI-enabled work.
Focus Areas:

- Decision logs
- AI use statements
- Escalation protocols
- Risk thresholds
- Accountability frameworks
- When to seek human review or expert oversight

Why it matters:
Domain 5 strengthens institutional trust and transparency, ensuring AI use is predictable, documented, and appropriately governed.

DOMAIN 6 — Reflection, Learning & Renewal

Core Capability: Developing reflective and adaptive AI practices through iterative learning loops.

Focus Areas:

- Reviewing AI outputs and decisions
- Continuous improvement cycles
- Peer feedback and learning communities
- Updating approaches based on new insights or risks
- Critical self-evaluation of AI use

Why it matters:
Domain 6 supports long-term capability development, preventing stagnation and ensuring sustainable, responsible practice.

2.2 How the Domains Interact as a System

The six domains function as an **ecological system**, not a linear progression.

Key relationships:

- **Domain 1 → enables → Domain 2 & 3**
  You cannot co-design or innovate with AI without foundational awareness.

- **Domain 2 → moderates → Domain 3**
  Co-agency ensures generative practice remains safe, intentional, and aligned with human oversight.

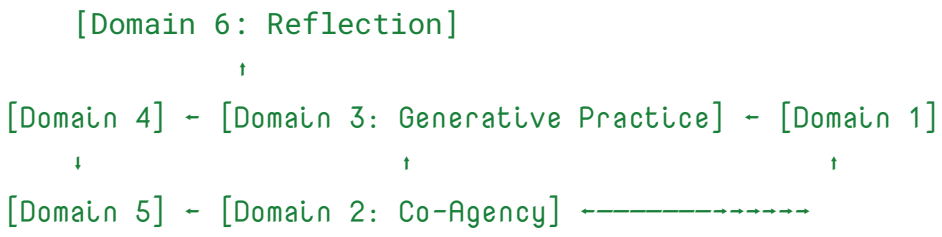
- **Domain 4 → sits across ALL domains**
  Ethics, equity, and harm avoidance influence every use of AI.

- **Domain 5 → governs → the whole system**
  Governance structures guide safe use, documentation, and accountability.

- **Domain 6 → reinforces → continuous improvement**
  Reflection ensures that mistakes turn into learning and practice evolves over time.

Visual (ASCII-style)

(Suitable for PDF rendering)



This illustration shows:

- cyclical reinforcement
- cross-domain interaction
- the centrality of ethics and governance
- reflection as a continuous feedback loop

2.3 Why This Framework Is Ideal for Course and Programme Design

When designing AI-enabled learning, generic “tool training” fails because:

- it does not teach responsibility
- it does not build durable skills
- it does not scale across contexts
- it becomes obsolete when tools change
- it leaves learners exposed to risks

The AI Capability Framework solves these issues by embedding:

✓ practical competence

✓ responsible practice

✓ creative innovation

✓ ethical grounding

✓ governance literacy

✓ reflective habits

Together, they provide a **holistic developmental spine** for course creation.

This means every course designed using the Framework is:

- practical
- safe
- meaningful
- creative
- aligned with organisational values
- adaptable
- future-proof

This handbook shows exactly how to achieve this.

2.4 Core Principles Guiding Responsible AI Practice

The Framework is grounded in the following principles:

1. Human-centred design

Human judgement remains central.

2. Transparency and clarity

AI-assisted decisions must be traceable and explainable.

3. Ethical foresight

Consideration of equity, harm, and unintended consequences is non-negotiable.

4. Innovation with responsibility

Encourage creativity while maintaining safeguards.

5. Contextual sensitivity

AI use must match the needs and risks of the domain (e.g., climate, humanitarian, health).

6. Continuous learning

AI capability grows through practice, reflection, and adaptation.

These principles shape the methodology described in the next section.

2.5 Visual Map: From Domains to Applied Learning Design

To support course designers, the following visual summarises how each domain aligns to a specific module focus:

```
Domain 1 → Foundation Skills
Domain 2 → Workflow Clarity
Domain 3 → Generative Creation
Domain 4 → Ethics & Justice
Domain 5 → Governance & Oversight
Domain 6 → Reflection & Improvement
```

This mapping becomes the basis for the **Universal Application Method** in Section 3 and the **Climate Course Example** in Section 4.

SECTION 3 — THE UNIVERSAL APPLICATION METHOD (STEP-BY-STEP)

This is the most important methodological section in the Handbook.
Here, you will find a **clear, replicable, seven-step process** that transforms the Six-Domain AI Capability Framework into a **fully structured, practical, engaging course** in any domain.

This method is designed to be:

- **Simple** (any educator or practitioner can use it)
- **Flexible** (works for climate, health, humanitarian, education, research, policy, etc.)
- **Scalable** (usable across all CloudPedagogy courses)
- **Responsible** (built on ethics, co-agency, governance)
- **Innovative** (encourages creativity and prototyping)
- **Practical** (outputs are hands-on, activity-based learning experiences)

By following these seven steps, you can build any new course directly from the Framework.

3.1 STEP 1 — DEFINE THE PURPOSE AND LEARNER NEEDS

Before mapping domains or designing lessons, clarify:

A. The Problem Space

Identify the real-world challenges your course must support.
Examples:

- Climate misinformation
- Humanitarian translation bottlenecks
- Health communication challenges
- Research writing pressures
- Higher-ed assessment redesign

B. The Target Learners

Define:

- Who they are
- Their current AI literacy
- Their roles and constraints
- Their existing practices
- Their risk exposure

C. The Intended Capability Growth

Use capability language:

- foundational literacy
- workflow design
- generative prototyping
- ethical reasoning
- governance judgement
- reflective practice

This anchors the course in *capability development*, not tool use.

3.2 STEP 2 — IDENTIFY REAL-WORLD USE CASES AND RISKS

Collect 3–6 **typical tasks** in the chosen domain that AI could support.

Examples from climate:

- Summarising climate science for the public
- Detecting misinformation
- Drafting sustainability reports
- Generating climate education materials
- Exploring local adaptation scenarios

Then identify **risks**:

- hallucinations
- biased content
- overconfidence
- ethical misframing
- unjust impacts
- misinterpretation of data
- harmful simplification

This creates the **use-case foundation** for the entire course.

3.3 STEP 3 — MAP USE CASES TO THE SIX DOMAINS

Using a simple mapping table, link each real-world use case to the most relevant domain.

Example (for climate):

Real-World Task	Primary Domain	Secondary Domains
Fact-checking climate content	Domain 1	Domain 4
Co-writing climate comms	Domain 2	Domain 3
Prototyping climate education materials	Domain 3	Domain 2
Reviewing justice implications	Domain 4	Domain 5
When to trust AI in climate briefing	Domain 5	Domain 1
Reflecting on AI-assisted outputs	Domain 6	Domain 2

This creates a **blueprint** for the course.

3.4 STEP 4 — TRANSLATE DOMAINS INTO PRACTICAL MODULES

Each of the six domains becomes one **practical module**.

The trick:
Module titles should always be **practical, action-oriented, applied**, not theoretical.

Examples (Climate):

- Domain 1 → *Understanding Climate Information with AI*
- Domain 2 → *Co-Writing Climate Communications with AI*
- Domain 3 → *Prototyping Climate Engagement Materials*
- Domain 4 → *Ethical and Just Climate AI Practice*
- Domain 5 → *AI Governance in Climate Workflows*
- Domain 6 → *Reflective AI Practice for Climate Action*

Course designers repeat this process for ANY domain:

- Public Health
- Humanitarian Response
- Research
- Education
- Policy
- Environmental Science
- Social Sciences

- Sustainability

This ensures **practicality**, **domain relevance**, and **capability alignment**.

3.5 STEP 5 — USE THE UNIVERSAL LESSON STRUCTURE

Each module should contain:

✓ Three applied lessons

Each lesson focuses on a hands-on skill:

1. Skill: Understanding
2. Skill: Co-working
3. Skill: Creating / Iterating OR Evaluating / Governing

✓ One hands-on activity

The practical application of the domain:

- evaluate
- generate
- prototype
- audit
- design
- govern

- reflect

✓ One downloadable tool

Aligned to the domain:

- Glossary
- Co-agency matrix
- Prompt pack
- Ethics checklist
- Governance log
- Reflection worksheet

This is the **CloudPedagogy signature pattern**.

3.6 STEP 6 — BUILD RESPONSIBLE AND INNOVATIVE CROSS-DOMAIN LINKS

A good course doesn't treat domains as silos.
You need explicit connections:

Link 1 — Awareness → Co-Agency

Students must understand risks before collaborating with AI.

Link 2 — Co-Agency → Generative Practice

Good workflows lead to better innovation.

Link 3 — Generative Practice → Ethics

Every creative output needs review:

- bias
- cultural accuracy
- climate justice
- equity

Link 4 — Ethics → Governance

If risk is high, an escalation protocol is needed.

Link 5 — Governance → Reflection

Governance logs feed reflection cycles.

Link 6 — Reflection → Renewal

Learners update prompts, workflows, and mental models.

This creates a **holistic learning ecosystem**.

3.7 STEP 7 — VALIDATE YOUR COURSE USING THE FRAMEWORK CHECKLIST

Before publishing, assess:

Domain 1 — Awareness

- Are learners taught to identify AI errors?
- Are hallucinations addressed?

Domain 2 — Co-Agency

- Are humans clearly the primary decision-makers?
- Are roles explicit in workflows?

Domain 3 — Generative Practice

- Do learners prototype something real?
- Are outputs iterated and improved?

Domain 4 — Ethics & Equity

- Are risks identified and mitigated?
- Do learners consider fairness and justice?

Domain 5 — Governance

- Are decision logs or oversight tools included?
- Is the escalation pathway clear?

Domain 6 — Reflection

- Are learners given a reflection task?
- Do they learn how to improve their AI practice?

If all six are met, the course is:

- responsible
- engaging
- practical
- innovative
- aligned with CloudPedagogy standards

3.8 VISUAL FLOW: FRAMEWORK → METHOD → FINISHED COURSE

Use this diagram (PDF-friendly):

```
AI CAPABILITY FRAMEWORK
        ↓
APPLICATION HANDBOOK (THIS DOCUMENT)
        ↓
UNIVERSAL 7-STEP METHOD
        ↓
PRACTICAL MODULES (6 DOMAINS)
        ↓
LESSONS + ACTIVITIES + DOWNLOADS
        ↓
FINISHED COURSE
        ↓
REFLECTION + ITERATION
```

This ensures that **every course you produce is consistent, high-quality, and deeply grounded in the Framework.**

SECTION 4 — WORKED EXAMPLE: GENERATIVE AI FOR CLIMATE CHANGE & SUSTAINABILITY

This section demonstrates **the full translation** from:

AI Capability Framework → Application Method → Real Course Design

The Climate Change & Sustainability course is used because it is:

- universally relevant
- low-barrier for learners
- rich in practical GenAI use cases
- naturally mapped to all six domains
- ethically manageable and pedagogically clean

By the end of this section, readers will understand how the Framework is applied in practice — and how they can replicate this process for any topic.

4.1 WHY GENERATIVE AI MATTERS FOR CLIMATE ACTION

Climate change is one of the most complex, multi-layered challenges facing society. Effective climate action requires:

- rapid communication
- public engagement
- data interpretation
- adaptation planning
- policy development
- community education
- emotional resonance

GenAI can support these processes by enabling:

✓ simplified explanations of complex science

✓ translation, localisation, and cultural adaptation

✓ rapid drafting of climate communications

✓ prototyping community engagement resources

✓ visual scenario exploration

✓ synthesising reports and articles

✓ creative ideation for campaigns

However, climate misinformation, hallucinated statistics, and ethically insensitive content are **major risks**.

The Climate course therefore needs to be:

- **practical** (hands-on skills)
- **innovative** (AI-supported creativity)
- **responsible** (aligned with climate justice, science accuracy, and global equity)
- **framework-grounded** (mapped clearly to the six domains)

This section shows how those goals are met.

4.2 OVERVIEW OF THE CLIMATE COURSE

Course Title

Generative AI for Climate Change & Sustainability: Practical, Responsible, and Innovative Approaches

Audience

- Students
- Educators
- Sustainability professionals
- Climate communicators
- NGO and public-sector staff
- Researchers
- Community organisers

Course Purpose

To equip learners with **practical, responsible, and innovative GenAI skills** for climate communication, engagement, and decision-making.

Course Outcomes

Learners will be able to:

1. Use GenAI safely to interpret climate information
2. Co-write climate communication with proper boundaries
3. Prototype climate engagement materials
4. Conduct ethical and equity checks for climate messaging
5. Apply basic governance to AI-assisted workflows
6. Reflect on and improve their AI practice over time

Risks Addressed

- Misinterpretation of climate science
- Hallucinated facts
- Oversimplification of nuanced topics
- Inadvertent bias
- Misinformation amplification
- Loss of trust due to unethical messaging
- Unclear decision-making boundaries

The Six-Domain Framework shapes the course to mitigate these risks.

4.3 DOMAIN-TO-MODULE MAPPING TABLE

This table shows how each Framework domain becomes one practical module.

Domain	Domain Purpose	Course Module (Practical Title)	Rationale
1. Awareness & Orientation	Accurate, safe interpretation of AI outputs	**Module 1: Understanding Climate Information with GenAI**	Climate misinformation is a core challenge; learners need foundational AI literacy + climate accuracy checks
2. Human–AI Co-Agency	Human-led workflows and clear roles	**Module 2: Co-Writing Climate Communications with AI**	Climate comms are sensitive — roles between AI and humans must be explicit
3. Generative Practice & Innovation	Creative prototyping and content generation	**Module 3: Prototyping Climate Engagement Materials**	Learners must create posters, messages, visuals, scenarios
4. Ethics, Equity & Impact	Understanding risks, fairness, and justice	**Module 4: Ethical and Just Climate AI Practice**	Climate justice is central — ethical risks must be explored deeply
5. Decision-Making & Governance	Oversight and accountability	**Module 5: Governance for AI-Supported Climate Workflows**	Climate workflows require oversight, especially for public messaging
6. Reflection, Learning & Renewal	Continuous improvement	**Module 6: Reflective AI Practice for Climate Action**	Climate communication evolves — learners must refine their practice

This mapping ensures the course is **practical**, **scaffolded**, and **fully aligned** with the Framework.

4.4 MODULE 1 (DOMAIN 1): UNDERSTANDING CLIMATE INFORMATION WITH GENAI

Domain Focus:
AI awareness, orientation, risk recognition, accuracy verification.

Lesson 1 — How AI Interprets Climate Information

- How LLMs “guess” using token prediction
- Why facts may be outdated or incorrect
- Examples of climate hallucinations
- How to interpret uncertainty sentences
- Distinguishing summarisation from evidence

Lesson 2 — Spotting Climate Misinformation

- Common climate myths in AI outputs
- How to fact-check AI’s claims
- Evaluating sources and references
- Distinguishing correlation vs causation

Lesson 3 — Simplifying Climate Science Responsibly

- Using GenAI to explain concepts for children, communities, and policymakers
- Maintaining accuracy while adjusting tone
- Avoiding misleading metaphors

Activity — Evaluate a Climate Explainer

Learners:

- Generate an AI climate explanation
- Identify errors, gaps, and biases
- Correct and improve the explanation

Download — Climate AI Literacy Glossary + Accuracy Checklist

4.5 MODULE 2 (DOMAIN 2): CO-WRITING CLIMATE COMMUNICATIONS WITH AI

Domain Focus:
Human–AI boundaries, role clarity, co-agency, accountability.

Lesson 1 — When to Use AI (and When Not To)

- Appropriate uses for climate comms
- When human judgement must take over
- Avoiding over-reliance
- Decision boundaries

Lesson 2 — Co-Writing Workflows for Climate Messaging

- Draft–Review–Refine cycles
- Prompting for accuracy, clarity, tone
- Annotating AI contributions
- Maintaining scientific correctness

Lesson 3 — Human Accountability in Climate Communication

- Who is responsible for the final output?
- Transparency in AI-assisted comms
- The “human holds authorship” rule

Activity — Co-Write a Climate Communication

Generate, refine, and human-edit a message for:

- a community group
- a school audience
- a local policymaker

Download — Human–AI Co-Agency Task Matrix

4.6 MODULE 3 (DOMAIN 3): PROTOTYPING CLIMATE ENGAGEMENT MATERIALS

Domain Focus:
Generative creation + innovation in low-risk contexts.

Lesson 1 — Using AI to Create Climate Posters & Visuals

- Generating images responsibly
- Avoiding sensationalism
- Visual storytelling for climate awareness

Lesson 2 — Prototyping Community Messages & Materials

- Drafting community engagement scripts
- Explaining local adaptation issues
- Designing workshop materials

Lesson 3 — Scenario Creation for Climate Education

- Imagining futures
- Safe-to-fail prototyping
- Using AI for imaginative exploration

Activity — Prototype a Climate Education Asset

Examples:

- a poster
- a lesson plan
- a short video script
- a scenario summary

Download — Climate Engagement Prompt Pack

4.7 MODULE 4 (DOMAIN 4): ETHICAL AND JUST CLIMATE AI PRACTICE

Domain Focus:
Ethics, equity, justice, harm avoidance, societal impact.

Lesson 1 — Climate Justice & AI

- Whose voices matter in climate debates?
- North–South inequities
- Misrepresentation in AI training data

Lesson 2 — Bias & Harm in Climate Messaging

- Biased framings of vulnerability
- Alarmist vs dismissive language
- Risks of oversimplification

Lesson 3 — Anticipating Unintended Consequences

- How climate misinformation spreads
- Political sensitivities
- Public trust impacts

Activity — Audit an AI Climate Message for Equity

Using your ethical checklist.

Download — Ethical Climate AI Checklist (Justice-Adapted)

4.8 MODULE 5 (DOMAIN 5): GOVERNANCE FOR AI-SUPPORTED CLIMATE WORKFLOWS

Domain Focus:
Oversight, documentation, governance, risk thresholds.

Lesson 1 — Decision Boundaries in Climate Comms

- When human review is mandatory
- What counts as “high risk”
- Regulatory and institutional expectations

Lesson 2 — Governance Tools for Climate AI Use

- Decision logs
- AI use statements
- Oversight templates
- Accountability flows

Lesson 3 — When to Escalate or Pause

- Criteria for escalation
- When to refuse AI assistance
- Safety-first principles

Activity — Create a Governance Flow for Climate Messaging

Download — Climate AI Governance Log Template

4.9 MODULE 6 (DOMAIN 6): REFLECTIVE AI PRACTICE FOR CLIMATE ACTION

Domain Focus:
Reflection, learning cycles, continual improvement.

Lesson 1 — Why Reflection Sustains Responsible AI Use

- Avoiding stagnation
- Keeping up with model changes
- Learning from errors

Lesson 2 — Creating Climate AI Feedback Loops

- Peer review
- Community feedback
- Automated checks

Lesson 3 — Building a Personal Improvement Plan

- Prompt refinement
- Workflow adjustments
- Ethical re-evaluation

Activity — Mini-Retrospective on a Climate AI Task

Download — Climate AI Reflection Worksheet

4.10 ASSEMBLED COURSE MAP (LESSONS, ACTIVITIES, DOWNLOADS)

A clean visual map suitable for PDF:

```
Module 1 – Domain 1: Understanding Climate Information
    Lessons: AI interpretation, misinformation, simplification
    Activity: Climate explainer accuracy check
    Download: Literacy glossary

Module 2 – Domain 2: Co-Writing Climate Comms
    Lessons: When to use AI, workflows, accountability
    Activity: Co-written message
    Download: Co-agency matrix

Module 3 – Domain 3: Prototyping Engagement Materials
    Lessons: Posters, community messages, scenarios
    Activity: Prototype asset
    Download: Prompt pack

Module 4 – Domain 4: Ethical & Just Climate Practice
    Lessons: Justice, bias, unintended impact
    Activity: Equity audit
    Download: Ethical checklist

Module 5 – Domain 5: Governance
    Lessons: Decision boundaries, governance tools, escalation
    Activity: Governance flow
    Download: Governance log

Module 6 – Domain 6: Reflection
    Lessons: Reflection, feedback loops, improvement
    Activity: Retrospective
    Download: Reflection worksheet
```

4.11 HOW THE CLIMATE COURSE EMBODIES PRACTICALITY, INNOVATION & RESPONSIBILITY

Practicality

- Every module solves a real climate communication task
- Activities generate useful, real-world artefacts
- Lessons emphasise immediate application

Innovation

- Learners use GenAI for prototyping, storytelling, exploration
- Creative multimodal tasks encourage experimentation
- Scenario development expands imagination and engagement

Responsibility

- Checks for misinformation, bias, justice, and harm
- Clear governance templates
- Continuous reflection and improvement

This climate example shows how the AI Capability Framework supports **engaging, responsible, future-ready AI learning**.

SECTION 5 — SHORT SUPPLEMENTARY EXAMPLES

This section provides **two concise, domain-specific examples** that demonstrate how the Six-Domain AI Capability Framework can be applied to other areas beyond climate change.

These examples reinforce a key message of the Handbook:

> **The Framework is universal — it applies to any profession, any discipline, and any AI use case.**

The two chosen examples are:

- **Humanitarian Crisis Response** — demonstrating complexity, high-stakes risk, and global equity
- **Public Health Communication** — demonstrating clarity, safety, trust, and public engagement

Each is intentionally concise (1 page) to show how easily the Framework adapts to new contexts.

5.1 HUMANITARIAN CRISIS RESPONSE — ONE-PAGE EXAMPLE

Domain 1 — Awareness & Orientation

Practical Module Title:
Understanding Crisis Information with Generative AI

Focus:

- Identify misinformation in emergency contexts
- Evaluate AI-generated health or safety guidance
- Understand translation risks and hallucinations

Activity Example:
Audit an AI-generated health advisory for accuracy, cultural sensitivity, and medical validity.

Domain 2 — Human–AI Co-Agency

Practical Module Title:
Designing Human-Led Workflows for Crisis Communication

Focus:

- Clarify when AI can assist translation, but humans must verify
- Define roles in rapid needs-assessment tasks
- Use co-agency prompting for official messaging

Activity Example:
Map the human–AI workflow for an AI-assisted refugee registration and identify where human approval is required.

Domain 3 — Generative Practice & Innovation

Practical Module Title:
Prototyping Humanitarian Engagement Materials with AI

Focus:

- Draft community messages
- Create simplified explainers for crisis-affected groups
- Generate scenario materials for training responders

Activity Example:
Prototype a community engagement message for a disaster-affected region.

Domain 4 — Ethics, Equity & Impact

Practical Module Title:
Ensuring Ethical and Do-No-Harm AI Use in Humanitarian Contexts

Focus:

- Avoid harmful miscommunication
- Address language and cultural bias
- Consider power dynamics and vulnerable groups

Activity Example:
Audit an AI-generated refugee assistance plan for equity and unintended harm.

Domain 5 — Decision-Making & Governance

Practical Module Title:
Governance for AI Use in Crisis Response Workflows

Focus:

- Decision logs
- Approval pathways
- Escalation protocols
- Responsible data use

Activity Example:
Create a governance protocol for AI translation during a rapid emergency response.

Domain 6 — Reflection, Learning & Renewal

Practical Module Title:
Reflective AI Practice for Humanitarian Teams

Focus:

- Learning from successes and failures
- Reviewing AI-assisted communications
- Encouraging team-level reflection

Activity Example:
Run a “mini retrospective” on an AI-supported logistics decision.

Summary

This one-page example demonstrates how the Six Domains can shape high-stakes humanitarian training.
The same logic used for the Climate course applies — but adapted to crisis risk, cultural sensitivity, and humanitarian ethics.

5.2 PUBLIC HEALTH COMMUNICATION — ONE-PAGE EXAMPLE

Domain 1 — Awareness & Orientation

Practical Module Title:
Understanding Health Information Generated by AI

Focus:

- Identifying inaccurate medical claims
- Recognising misleading statistics
- Evaluating simplifications of epidemiological concepts

Activity Example:
Check an AI-generated summary of a public health guidance document for accuracy.

Domain 2 — Human–AI Co-Agency

Practical Module Title:
Co-Writing Health Communications with AI

Focus:

- Using AI to draft clear health messaging
- Applying plain-language principles
- Ensuring scientific accuracy through human review

Activity Example:
Co-write a health advisory for a general audience and annotate where humans must intervene.

Domain 3 — Generative Practice & Innovation

Practical Module Title:
Prototyping Health Education Materials with AI

Focus:

- Creating infographics
- Drafting scripts for short videos
- Generating FAQs in multiple languages

Activity Example:
Prototype a health education poster or short animation script.

Domain 4 — Ethics, Equity & Impact

Practical Module Title:
Ensuring Ethical and Inclusive Health AI Practice

Focus:

- Avoiding harmful medical misinformation
- Ensuring inclusivity across languages and cultures
- Preventing bias in health messaging

Activity Example:
Audit an AI-generated health message for equity and accessibility.

Domain 5 — Decision-Making & Governance

Practical Module Title:
Health Communication Governance for AI Use

Focus:

- Oversight of AI-generated health information
- Risk categorisation for public messaging
- Escalation triggers for clinical topics

Activity Example:
Create a governance flow for an AI-assisted health communication workflow.

Domain 6 — Reflection, Learning & Renewal

Practical Module Title:
Reflective AI Practice in Health Communication

Focus:

- Reviewing outcomes of AI-supported messaging
- Drawing lessons from public response
- Updating workflows as evidence evolves

Activity Example:
Run a retrospective on an AI-supported health communication project.

Summary

This example shows the Framework applied to a context requiring **scientific integrity**, **public trust**, and **clarity of messaging**.

It reinforces the universality of the Framework's six domains and demonstrates how the same structure supports responsible AI use in public health.

SECTION 6 — TOOLS, CHECKLISTS, AND DESIGN TEMPLATES

This section provides the **practical design instruments** that course developers, educators, NGOs, public sector teams, and organisations will use to apply the Six-Domain AI Capability Framework.

These tools convert the Handbook from a conceptual guide into a **practical, repeatable design system**.
All templates are designed to be:

- **PDF-friendly**
- **Fillable** (for Word/PDF form versions)
- **Adaptable** to any domain
- **Aligned to the Six Domains**
- **Immediately usable** for course creation, curriculum mapping, or organisational workflows

---

6.1 SIX-DOMAIN COURSE BUILDER TEMPLATE

This template is the foundational tool for designing any course based on the Framework.

It follows the exact logic used in Section 3, but formatted as a concise design worksheet.

SIX-DOMAIN COURSE BUILDER

Course Title:
Domain / Field (e.g., Climate, Public Health, Humanitarian):
Intended Learners:
Primary Purpose of the Course:
Real-World Problems Addressed:

---

1. Use Case Identification

List 3–6 real-world tasks or problems in your domain.

Use Case	Risk Level	Notes
	Low/Med/High	

---

2. Map Use Cases to the Six Domains

Use Case	Primary Domain	Why This Domain?	Secondary Domains

---

3. Convert Domains into Practical Modules

Framework Domain	Practical Module Title	Intended Skill
Domain 1		
Domain 2		
Domain 3		
Domain 4		
Domain 5		
Domain 6		

---

4. Lesson and Activity Planning

Each module contains:

- 3 lessons
- 1 hands-on activity
- 1 downloadable resource

Use this table:

Module	Lesson 1	Lesson 2	Lesson 3	Activity	Download
M1					
M2					
M3					
M4					
M5					
M6					

---

5. Cross-Domain Alignment Checklist

Tick where appropriate.

Cross-Domain Link	Included?	Notes
Domain 1 → Domain 2 (Risk → Workflow clarity)	☐	
Domain 2 → Domain 3 (Workflow → Innovation)	☐	
Domain 3 → Domain 4 (Innovation → Ethics)	☐	
Domain 4 → Domain 5 (Ethics → Governance)	☐	
Domain 5 → Domain 6 (Governance → Reflection)	☐	
Reflection loops built into activities	☐	

6.2 PRACTICAL LESSON DESIGNER TEMPLATE

This tool helps educators design **one specific lesson** aligned to a Framework domain.

LESSON DESIGN TEMPLATE

Lesson Title:
Module & Domain:

1. Intended Learning Outcome

What capability will the learner develop?

2. Real-World Task

What specific real-world task or challenge does this lesson support?

3. Lesson Structure

- **Concept:** Key idea (2–4 sentences)
- **Demonstration:** Example, workflow, or model output
- **Application:** Learner action or guided practice
- **Reflection:** Short self-evaluation prompt

4. Inputs Required

- Prompts
- Model settings
- Data sources
- External resources

5. Outputs Expected

- Drafts
- Prototypes
- Decisions
- Evaluations
- Reflections

6. Ethical/Equity Check

Identify at least one potential ethical or equity risk.

7. Improvement Note

How the learner can refine their skills over time.

6.3 ETHICAL & EQUITY CHECKLIST

This checklist applies **Domain 4** and ensures responsible use of AI.

AI ETHICAL & EQUITY CHECKLIST

Tick all that apply.

A. Accuracy & Reliability

☐ Have I checked factual claims?
☐ Does this rely on trusted sources?
☐ Is uncertainty or ambiguity acknowledged?

B. Fairness & Representation

☐ Whose voices are centred?
☐ Whose perspectives are missing?
☐ Could the output misrepresent a group or context?

C. Bias & Harm Prevention

☐ Are there signs of model bias?
☐ Could this output cause confusion or harm?
☐ Have I removed discriminatory language?

D. Cultural Sensitivity

☐ Is this appropriate for the target audience?
☐ Does it assume cultural knowledge incorrectly?
☐ Is imagery or tone appropriate?

E. Environmental & Justice Considerations

☐ Does this content respect climate justice or social justice principles?
☐ Are vulnerable groups depicted respectfully?

F. Transparency & Documentation

☐ Have I declared AI assistance where relevant?
☐ Is authorship clearly human-owned?

A “No” answer requires revision before the content is shared.

6.4 HUMAN–AI CO-AGENCY WORKFLOW TEMPLATE

This template operationalises **Domain 2**.

CO-AGENCY WORKFLOW BUILDER

Task:

A. Task Breakdown

List steps required for the task.

Step	Human Role	AI Role	Risk Level	Notes
1				
2				
3				

B. Responsibility & Decision Points

- What decisions require human judgment?
- What must *not* be delegated to the AI?
- Where must human review be mandatory?

C. Transparency

- How will you communicate that AI was used?
- What authorship rules apply?

6.5 GOVERNANCE LOG TEMPLATE

A core tool for **Domain 5**.

AI GOVERNANCE LOG

Project / Course:
Date:
Owner:

A. Purpose of AI Use

Describe the task and justification.

B. Outputs Generated

Attach or summarise AI outputs.

C. Risk Assessment

Tick risk category:

- ☐ Low
- ☐ Medium
- ☐ High

D. Oversight Actions

☐ Human review completed
☐ Ethical check completed
☐ Corrections made
☐ Escalation triggered

E. Decision Trail

- Final decision
- Responsible person
- Notes

F. Lessons Learned

- What went well
- What needs improvement
- What to revise next time

6.6 REFLECTION CYCLE TEMPLATE

Supports **Domain 6**.

REFLECTIVE AI PRACTICE WORKSHEET

Task Completed:
Date:

A. What Went Well?

Identify strengths in your AI-supported workflow.

B. What Didn’t Work?

Note errors, frustrations, hallucinations, or risks.

C. What Surprised You?

Identify unexpected outputs or insights.

D. What Will You Do Differently Next Time?

List improvements for workflows, prompts, or governance.

E. What New Skills Do You Need?

Attach follow-up actions or training needs.

6.7 PROMPT LIBRARY FOR COURSE DESIGNERS

This is a **meta-prompt pack** for educators designing courses using the Framework.

A. Designing Modules

“Generate a practical module aligned to Domain [X] for the field of [insert domain].
Include 3 lessons, 1 activity, and 1 download idea.”

B. Designing Lessons

“Draft a lesson aligned to Domain [X] that builds practical capability in [task].
Include learning outcomes, an example workflow, and a guided practice component.”

C. Designing Activities

“Create a practical activity aligned to Domain [X] that allows learners to apply AI in a real-world scenario.”

D. Mapping Use Cases

“List real-use cases for [domain]. Map each use case to the most relevant capability domain.”

E. Creating Governance Tools

“Draft a governance checklist for AI-assisted [task] that aligns with Domain 5.”

F. Ethical Checks

“Analyse this AI output for ethical, equity, or justice concerns. Suggest revisions.”

6.8 VISUAL MAPS & DESIGN PATTERNS

These visuals can be rendered cleanly in PDF.

A. Six-Domain to Module Map

```
[Domain 1] → Foundation Skills
[Domain 2] → Co-Agency Workflows
[Domain 3] → Generative Practice
[Domain 4] → Ethics & Justice
[Domain 5] → Governance & Oversight
[Domain 6] → Reflection & Renewal
```

B. Course Assembly Pattern

```
6 Domains → 6 Modules
Each Module → 3 Lessons + 1 Activity + 1 Download
```

C. Responsible Innovation Cycle

```
Awareness → Co-Agency → Innovation → Ethics → Governance → Reflection →
Renewal (→ Awareness)
```

SECTION 7 — CONCLUSION & NEXT STEPS

This final section brings the Handbook together — summarising the core ideas, reinforcing the practical method, and presenting clear pathways for educators, learners, organisations, and partners to continue developing responsible, innovative, and future-ready AI capability.

7.1 SUMMARY OF THE UNIVERSAL METHOD

The AI Capability Framework Application Handbook provides a **complete translation pathway** from conceptual framework → applied method → real courses.

That pathway has seven essential steps:

1. **Define the purpose and learner needs**
   Identify real problems, real audiences, and desired capability growth.

2. **Identify real-world use cases and risks**
   Anchor the course in authentic tasks that matter in the domain.

3. **Map each use case to the Six Domains**
   Use capability logic to shape the learning architecture.

4. **Translate domains into practical modules**
   Create action-oriented module titles and module purpose statements.

5. **Use the universal lesson structure**
   3 practical lessons + 1 activity + 1 downloadable per module.

6. **Build cross-domain links for responsible innovation**
   Ensure ethics, governance, and reflection are embedded throughout.

7. **Validate using the Framework Checklist**
   Confirm the course is practical, innovative, safe, and aligned with the Framework.

Together, these steps ensure that every course built using this Handbook is:

- pedagogically strong
- ethically grounded
- engaging for learners
- aligned with organisational values
- flexible across multiple sectors
- deeply practical and future-proof
- consistent across the CloudPedagogy ecosystem

This method is now your primary **design engine** for all future CloudPedagogy courses and workshops.

7.2 HOW TO USE THIS HANDBOOK IN TEAMS & ORGANISATIONS

This document can support **individual designers**, **teams**, and **institutions**.

A. For Individual Course Designers

- Use the Six-Domain Course Builder to structure new courses
- Use the Lesson Designer for detailed planning
- Use checklists to ensure responsibility and accuracy

B. For Academic Departments & NGOs

- Use this Handbook as the standard design framework
- Build templates for internal CPD or training
- Ensure consistent quality across parallel courses
- Integrate governance logs into organisational oversight systems

C. For Digital Education Units & Innovation Teams

- Use this method to scale AI capability across faculties or divisions
- Use the climate example to demonstrate methodology
- Create domain-specific spin-offs (e.g., Health, Policy, Research)
- Support staff development and upskilling

D. For Partnerships, Accreditation, and Licensing

- Demonstrate the rigour & methodology behind CloudPedagogy content
- Provide partners with a structured system for ethical AI adoption
- Build partner-specific handbooks using this as the foundation

This Handbook is designed for **strategic adoption** across many layers of practice.

7.3 LINKS TO FREE COURSES, PAID BUNDLES & CLOUDPEDAGOGY RESOURCES

he Application Handbook sits within the wider CloudPedagogy learning ecosystem.
Each component plays a different role in capability development.

****Free Courses (Entry-Level Application)**

All mapped directly to the AI Capability Framework**

These free courses show the Framework applied across diverse, real-world domains:

- **Generative AI for Climate Change & Sustainability**
- **Generative AI for Equity, Inclusion & Social Justice**
- **Generative AI for Policy & Governance**
- **Generative AI for the Creative & Cultural Commons**
- **Generative AI in Global & Public Health**
- **Generative AI in Humanitarian Crisis Response**

These courses provide:

- clear, accessible starting points

- practical application of the Six Domains
- scenario-based, values-aligned learning
- sector-specific examples that demonstrate the Framework in action

Core CloudPedagogy Framework Suite

- **AI Capability Framework (2026 Edition)**
- **AI Capability Framework Application Handbook (this document)**
- **Quick Reference Guide for Course Designers**
- **Application Handbook — Executive Summary**
- **Self-Assessment Matrix**
- **Reflection Toolkit**
- **AI Interaction & Design Toolkit**
- **Governance & Ethics Templates**
- **Scenario-Based Workshop Guides**

Together, these resources create a connected, future-ready capability ecosystem.

7.4 INVITATION TO CONTRIBUTE & CO-CREATE

The AI Capability Framework is intentionally designed as a **living, adapting, evolving resource**.

CloudPedagogy welcomes:

- feedback from educators and practitioners
- case studies from organisations using the Framework
- suggestions for new modules or domain-specific handbooks
- examples of innovative AI-supported teaching or practice
- collaborative development opportunities
- pilot projects in universities, NGOs, research teams, and public sector bodies

By sharing insights, mistakes, and successes, the community strengthens the Framework and accelerates responsible AI capability worldwide.

This Handbook can evolve through:

- updated templates
- new case studies
- revisions aligned with model behaviour changes
- expanded sector-specific examples
- collaborative research with partners

Your insights will help shape future editions.

7.5 LICENSING & ACKNOWLEDGEMENTS

Licensing
