AI Capability for Curriculum Design Teams

A practical briefing aligned to the CloudPedagogy AI Capability Framework (2026 Edition)

---

1. What this brief is for

This brief is for **curriculum design teams** responsible for shaping programmes, modules, learning outcomes, assessment strategies, and learning activities in contexts where artificial intelligence is now part of how students learn and work.

It is intended for:

- curriculum designers and educational developers
- programme and module design teams
- academic developers and learning designers
- staff involved in programme approval and review

This is not a guide to AI tools or platforms.
It is a **capability briefing** designed to support intentional, coherent curriculum design when AI is present across learning, assessment, and student practice.

---

2. Why AI capability matters in curriculum design

AI is already influencing:

- how students generate ideas, drafts, and plans
- how they study, revise, and seek feedback
- how learning outcomes are interpreted and demonstrated
- how assessments are completed and evaluated

For curriculum design teams, the challenge is no longer whether students will use AI, but whether curricula are **designed with AI in mind** or left to adapt informally.

Without AI capability at design stage:

- learning outcomes may become misaligned with assessment
- assessment tasks may unintentionally reward substitution over learning
- expectations around AI use may remain implicit or inconsistent
- programme coherence may erode over time

AI capability allows curriculum teams to design **future-fit, defensible, and educationally sound curricula**.

---

3. Common risks and blind spots in curriculum design

Across institutions, recurring issues appear when AI is not addressed deliberately in curriculum design:

- **Outcome–assessment mismatch**: assessments no longer reliably measure intended learning.
- **Implicit assumptions**: unspoken expectations about AI use left to staff or students to infer.
- **Patchwork design**: AI considerations addressed unevenly across modules.
- **Over-correction**: reactive redesigns driven by fear rather than pedagogy.
- **Equity gaps**: tasks that advantage students with higher digital confidence.
- **Design fatigue**: repeated local fixes instead of coherent programme-level design.

These issues are design problems, not disciplinary ones.

---

4. Applying the six domains of AI capability in curriculum design

The AI Capability Framework supports curriculum teams in embedding AI awareness without diluting academic standards.

---

1. AI Awareness & Orientation

Curriculum designers need a shared understanding of how AI affects learning processes.

This includes:

- recognising which learning outcomes are most affected by AI support
- understanding common AI limitations that influence student work
- avoiding assumptions that AI use is uniform or predictable

This domain informs **design judgement**, not technical detail.

---

2. Human–AI Co-Agency

Curriculum design defines where learning responsibility sits.

For design teams, this means:

- clarifying where human reasoning, creativity, and judgement are essential
- designing tasks that require meaningful student agency
- ensuring AI supports learning rather than replacing it

Explicit co-agency strengthens educational integrity.

---

3. Applied Practice & Innovation

AI capability enables curriculum innovation when used intentionally.

This may include:

- designing assessments that value interpretation, reflection, and synthesis
- integrating AI-aware learning activities where appropriate
- encouraging experimentation within shared design principles

Innovation is most effective when it is **designed, not improvised**.

---

4. Ethics, Equity & Impact

Curriculum decisions shape inclusion and fairness.

Design teams should consider:

- whether AI-aware designs support diverse learners
- how access, confidence, and support vary across student groups
- the broader impact of curriculum choices on graduate capability

Ethical curriculum design anticipates impact rather than responding after the fact.

---

5. Decision-Making & Governance

Curriculum design sits within formal approval and review structures.

AI capability in this domain involves:

- documenting how AI considerations informed design decisions
- aligning curriculum choices with institutional guidance
- ensuring defensibility to reviewers, examiners, and accrediting bodies

Good governance strengthens confidence in design innovation.

---

6. Reflection, Learning & Renewal

Curriculum design is iterative.

AI capability is strengthened when teams:

- review how AI-aware designs perform in practice
- share insights across programmes and faculties
- update designs as contexts and expectations evolve

This domain supports sustainable curriculum quality.

---

5. Practical actions for curriculum design teams

The following actions support AI capability at design stage:

- **Audit learning outcomes**
  Identify where AI use meaningfully affects outcome demonstration.

- **Review assessment coherence**
  Check whether tasks still align with intended learning in an AI-rich context.

- **Make expectations explicit**
  Design guidance for staff and students into curriculum documentation.

- **Design for judgement**
  Emphasise tasks that require reasoning, evaluation, and reflection.

- **Support staff capability**
  Provide shared principles and examples rather than isolated fixes.

- **Document design rationale**
  Record how AI considerations shaped curriculum decisions.

---

6. Signals of mature AI capability in curriculum design

Curricula with strong AI capability typically show:

- clear alignment between outcomes, teaching, and assessment

- explicit and consistent expectations around AI use

- assessments that foreground human judgement

- reduced reliance on reactive redesign

- confidence during programme approval and review

- shared design language across teams

These signals reflect **design maturity**, not restriction.

7. How this brief fits within the AI Capability Framework

This brief applies the **AI Capability Framework (2026 Edition)** to curriculum design work.

To deepen this approach, curriculum teams may explore:

- the full AI Capability Framework (PDF)
- the Application Handbook for structured design processes
- Practice Guides focused on teaching and curriculum
- facilitated curriculum design workshops

The Framework provides structure.
Curriculum teams provide **pedagogical intent and coherence**.

About CloudPedagogy

CloudPedagogy develops practical, ethical, and future-ready AI capability across education, research, and public service.

This brief is part of the **AI Capability Briefs** series, supporting role-specific judgement and decision-making using the **CloudPedagogy AI Capability Framework (2026 Edition)**.

Framework: https://www.cloudpedagogy.com/pages/ai-capability-framework