

Reflection prompts: Artificial intelligence enabled professional learning

Introduction

These reflection prompts are designed to support school and trust leaders responsible for professional learning to think critically about the role of artificial intelligence enabled professional learning within teacher and trainee teacher development. They draw on research exploring the use of data-informed tools, simulations, robotics, and related technologies as professional learning environments, rather than as classroom interventions.

In addition to the research evidence, they are shaped by the [Education Endowment Foundation's A School's Guide to Implementation \(2024\)](#). They reflect the guidance around adopting behaviours that drive effective implementation, attending to contextual factors that influence success, and following a structured but flexible process. The prompts are informed by the EEF's four implementation phases – Explore, Prepare, Deliver, and Sustain – to provide a manageable and sequenced approach. While leaders may wish to consult the EEF guidance directly, its principles are embedded throughout this tool to support thoughtful planning, delivery, and review.

Phase 1: Strategic Alignment & Awareness

- What professional learning challenges are we trying to address that existing approaches do not fully meet?
- What assumptions are we making about how technology-mediated professional learning might help, and what evidence are we drawing on to test those assumptions?
- How does this strand on artificial intelligence enabled professional learning with align with our wider strategy, teacher development model, or trust priorities?
- How will we communicate clearly that this work is about how teachers learn, not about introducing new classroom technologies?
- What risks do we need to name early, for example around staff confidence, workload, trust, or initiative fatigue?
- How will we avoid positioning these artificial intelligence enabled professional learning approaches as a quick solution to what are complex needs?

Phase 2: Design & Preparation

- What specific outcomes do we want artificial intelligence enabled professional learning to achieve for teachers and pupils? How will we make those outcomes visible and meaningful?

- What guardrails are needed to ensure data-informed tools or simulations are used ethically, developmentally and not evaluatively?
- How will we build in time for reflection, dialogue, and interpretation, rather than assuming learning happens automatically through exposure to technology?
- How will we adapt our approach for different settings (e.g. early years, small schools, cross-phase teams) to maintain relevance and feasibility?
 - Who will we involve in co-designing the approach so that there is ownership across teams, phases, and career stages?
- How will we use a small-scale pilot to refine our approach before scaling and what indicators will we monitor during that pilot?

Phase 3: Launch & Communication

- How will we introduce this work in a way that builds trust and psychological safety, particularly where approaches may feel unfamiliar?
 - What messages will help staff understand the limits of the evidence, as well as the potential value?
 - How will leaders and facilitators model critical engagement, curiosity, and appropriate scepticism rather than uncritical enthusiasm?
- How will we integrate artificial intelligence enabled professional learning into learning and school routines rather than treating it as an add-on?
- How will we ensure that human support and professional dialogue remain central?

Phase 4: Evaluation & Iteration

- What teacher outcomes (e.g. teaching quality, confidence, reflection) and pupil outcomes do we expect, and how will we measure these realistically?
 - How will we avoid over-interpreting early gains in confidence or engagement?
- How will we evaluate the quality and consistency of artificial intelligence enabled professional learning across different year groups or departments?
- How will we capture teacher voice in a way that reflects honest engagement with the process?
 - What tools or forums will we use to involve teachers and trainees in reflective evaluation?
- How will we capture teachers' experiences in ways that inform improvement rather than compliance?
- What signs would suggest that the approach is supporting deeper professional reasoning, not just surface participation?
- How will we review whether the design is working equally well across different groups, roles, or settings?

Phase 5: Scaling & Embedding

- Before scaling or continuing the use of artificial intelligence enabled professional learning, how will we review what has been achieved and whether it's worth sustaining?
- How will we grow internal expertise so that artificial intelligence enabled professional learning doesn't rely on external partners or temporary funding?
- How will we revisit ethical, workload, and data considerations as the approach evolves?
- How will we keep artificial intelligence enabled professional learning aligned with evolving school priorities so that it remains meaningful, not marginal?
- As we expand artificial intelligence enabled professional learning, how will we sustain the quality of the human professional relationship so that trust and collaboration remain central?

Full reference: National Institute of Teaching. (2026). *The NIoT Evidence Toolkit*.

<http://evidenceportal.niot.org.uk/toolkit>