

AI-Augmented Teaching

Category: Artificial Intelligence in Education

AI-augmented teaching is the use of artificial intelligence to extend educators' capacity while preserving their professional judgement, responsibility and relationships with learners. AI may help generate options, organise information or identify patterns, but the educator determines educational purpose and acts on contextual knowledge.

Augmentation differs from replacement: it treats AI output as provisional support within a human-led process. Effective use aligns technology with pedagogy and subject knowledge, and requires educators to review both outputs and consequences ([Mishra et al., 2023](#)).

Augmentation Principles

1. **Purpose:** Start with a defined teaching or learning need rather than the availability of a tool.
2. **Complementarity:** Allocate tasks according to the respective strengths of educators, learners and AI.
3. **Professional oversight:** Check accuracy, tone, accessibility and disciplinary appropriateness before use.
4. **Relational practice:** Protect dialogue, care and the educator's knowledge of individual learners.
5. **Evaluation:** Gather evidence of learning, workload and equity, then revise or discontinue the use.

Examples in Practice

A lecturer may use AI to propose contrasting seminar questions from a set reading. The lecturer checks every question, adds disciplinary nuance and selects those that reveal misconceptions. During the seminar, discussion remains responsive to the students rather than following a machine-generated script.

Why It Matters

Thoughtful augmentation may free time for explanation, feedback and learner support, but efficiency is not itself an educational outcome. Human oversight is essential because teachers remain accountable for inclusion, accuracy and the quality of learning experiences. Augmentation should strengthen, rather than standardise, responsive professional practice across different disciplines and teaching contexts ([Miao & Cukurova, 2024](#)).

Further Reading

6. Mishra, P., Warr, M., & Islam, R. (2023). [TPACK in the age of ChatGPT and generative AI](#). Journal of Digital Learning in Teacher Education, 39, 235–251.
7. Miao, F., & Cukurova, M. (2024). [AI competency framework for teachers](#). UNESCO.
8. U.S. Department of Education, Office of Educational Technology. (2023). [Artificial intelligence and the future of teaching and learning](#). U.S. Department of Education.

Related Terms: AI-Assisted Learning | Human-Centred AI in Education | AI Pedagogy | Teacher Agency