

AI-Supported Lesson Planning

Category: Artificial Intelligence in Education

AI-supported lesson planning uses artificial intelligence to assist educators in developing or reviewing a bounded teaching session. Possible support includes proposing questions, examples, learning activities, explanations or checks for understanding; the educator retains responsibility for the plan and its enactment.

Effective use begins with learning outcomes, learners and context, not with generated activities. AI suggestions must be checked for disciplinary accuracy, sequence, accessibility, cultural assumptions and realistic timing before adoption ([Miao & Cukurova, 2024](#)).

Planning Workflow

1. **Clarify:** Define the intended learning, prior knowledge, duration and relevant constraints.
2. **Generate:** Use AI to propose alternatives for explanation, practice, questioning or participation.
3. **Interrogate:** Check alignment, accuracy, inclusivity, cognitive demand and possible misconceptions.
4. **Adapt:** Revise suggestions using subject expertise and knowledge of the particular learners.
5. **Evaluate:** Gather evidence during and after teaching to improve the next plan.

Examples in Practice

Before a first-year economics seminar, a lecturer asks AI for contrasting examples of opportunity cost. She removes an inaccurate example, replaces unfamiliar cultural references and adds a short retrieval question. Student responses, rather than the generated plan itself, determine the following explanation.

Why It Matters

AI can reduce the time needed to explore alternatives and may help teachers anticipate different routes into a topic. Its benefit depends on expert adaptation: generic fluency can conceal factual mistakes, weak progression or assumptions that do not fit the class. A usable plan must also leave room for questions, unexpected responses and adjustment during teaching, with evidence carefully identified to inform the next lesson ([U.S. Department of Education, 2023](#)).

Further Reading

6. Miao, F., & Cukurova, M. (2024). [AI competency framework for teachers](#). UNESCO.
7. U.S. Department of Education, Office of Educational Technology. (2023). [Artificial intelligence and the future of teaching and learning](#). U.S. Department of Education.
8. 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.

Related Terms: Instructional Design | AI-Augmented Teaching | Lesson Study | Formative Assessment