

Teaching with AI: How AI Supports Planning, Differentiation, and Engagement

Using AI as a Support Tool, Not a Replacement

Introduction

Artificial intelligence is becoming part of everyday educational practice, but its role in special education must be intentional and informed. This resource provides an overview of how AI tools are commonly used to support educators in daily instructional tasks. It highlights shared capabilities across many AI platforms, including planning support, material adaptation, and idea generation. The information provided is intended to help special education teachers make informed, responsible decisions about when and how AI may be used to support instruction while remaining aligned with IEP requirements, privacy considerations, and inclusive practices.

Purpose

The purpose of this resource is to support special education teachers in understanding how commonly available AI tools can assist with instructional planning, differentiation, and student engagement. This guide emphasizes the use of AI as a supportive aid to enhance teacher efficiency and access to instructional ideas while maintaining professional judgment, ethical responsibility, and individualized decision-making

Section I: Foundational Framework

The Role of AI: A Supportive Aid, Not a Replacement

Artificial intelligence is becoming an integrated part of everyday educational practice, but its role in special education must be intentional and informed. This resource emphasizes that AI should be used as a supportive aid to enhance teacher efficiency and provide access to instructional ideas while maintaining professional judgment, ethical responsibility, and individualized decision-making. While AI can assist with daily tasks, it is critical to distinguish it from legal definitions of technology used by students. Under the Assistive Technology Act of 2004 (PL 108-364), an assistive technology device is defined as “any item, piece of equipment or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities”. While AI may support the educator’s workflow, it does not replace the mandated assistive tools required for student functioning.

The integration of AI into the classroom is guided by the principle that technology supports, but does not replace, professional judgment. Educators must use AI intentionally, ensuring it is never used as a substitute for direct instruction. Because AI tools generate content based on patterns rather than human intuition, teachers must remain “in the loop” to review all outputs for IEP alignment and compliance. AI should be viewed as a partner in the planning process—offering alternative approaches when students are not making progress—while the teacher remains the final authority on what is appropriate for the learner.

Key Considerations for Implementation

To ensure responsible use, educators must adhere to the following implementation guardrails:

- **Protect Student Privacy:** Always follow district policies and ensure student confidentiality is maintained.
- **Verify Accuracy and Alignment:** Review all generated materials to ensure they are accurate, relevant, and aligned with specific student goals.
- **Check for Bias:** Proactively screen all AI outputs for bias and ensure the use of inclusive language.
- **Maintain Individualization:** Determine what professional revisions are needed to ensure instruction remains appropriately individualized for each student.

Section II: Common Capabilities of AI Tools

Capability Area	Description of Support	Examples of Practical Use
Instructional Planning Support	AI tools can assist with brainstorming lesson ideas, outlining instructional sequences, and suggesting activities aligned to learning objectives. This support may be helpful when planning new units, revising instruction, or generating alternative approaches for diverse learners.	● Brainstorming lesson objectives and instructional steps for a specific skill or standard ● Generating multiple ways to introduce or reinforce a concept ● Outlining lesson structures for small-group or individualized instruction ● Creating draft pacing ideas for short units, intervention blocks, or reteaching ● Identifying alternative instructional approaches when students are not making progress
Differentiation and Material Adaptation	Many AI tools can support differentiation by simplifying language, adjusting reading levels, or offering alternative ways to present content. Teachers can review and refine these adaptations to better meet	● Simplifying directions while maintaining instructional intent ● Adjusting reading passages to different levels

	individual student needs and support access to instruction.	● Rewriting content using more concrete or student-friendly language
Resource and Material Development	AI tools may assist in creating practice activities, examples, discussion prompts, or visual supports that teachers can adapt for classroom use. These materials should always be reviewed to ensure accuracy, appropriateness, and alignment with instructional goals.	● Creating practice questions or review activities ● Generating examples or non-examples of a concept ● Drafting checklists, task sequences, or visual supports
Student Engagement and Idea Generation	AI tools can suggest strategies, prompts, or activities designed to increase participation and engagement. This may be useful when instruction needs to be refreshed or when students require varied approaches to stay involved.	● Suggesting discussion or reflection prompts ● Generating interactive activity ideas ● Offering alternative ways for students to demonstrate understanding
Professional Reflection and Problem-Solving	AI tools can support professional thinking by offering alternative perspectives or strategies for addressing instructional challenges. This can assist teachers during planning, collaboration, or reflection on instructional practices.	● Brainstorming strategies for instructional challenges ● Exploring alternative approaches when a lesson is not effective ● Supporting collaborative planning discussions
Professional Communication Support	AI tools can assist educators with drafting and refining professional communication by helping organize ideas, clarify tone, and improve clarity. This support may be useful when responding to routine messages	● Drafting clear, professional responses to parent or caregiver emails ● Adjusting tone to be more neutral, supportive, or concise

	or preparing written communication for families, colleagues, or service providers. Teachers should always review and personalize messages to ensure accuracy, appropriateness, and alignment with school expectations.	● Rewriting messages for clarity or professionalism before sending ● Organizing information for team communication or documentation ● Preparing initial drafts for routine updates or follow-up messages
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Teacher Responsibility Note

While these tools provide a draft or "starting point," all materials should always be reviewed to ensure accuracy, appropriateness, and alignment with instructional goals. This support is intended to enhance, rather than replace, the teacher's professional thinking and collaboration.

Section III: Applying AI Tools in Practice

To ensure AI-supported ideas are effective, teachers must keep professional judgment and student needs at the center of the adaptation process. This section outlines a structured approach to action planning and provides case scenarios for reflection.

Action Planning Process

When integrating AI into your workflow, follow these three steps to maintain instructional quality:

1. **Identify a Task:** Choose one specific instructional task where support may be helpful, such as lesson planning, differentiation, or communication.
2. **Adapt Generated Ideas:** Consider how AI-supported ideas must be modified to meet unique student needs and specific instructional goals.
3. **Apply Professional Judgment:** Determine what specific revisions or professional adjustments are required before the material is used in the classroom.

Sample Case Scenario 1:

Scenario:

A 3rd-grade student with ADHD struggles to stay on task during small-group math instruction. You are planning a lesson on multi-step word problems.

AI Support Consideration:

- **Instructional Planning:** Use AI to generate multiple versions of word problems with varying complexity.
- **Differentiation:** AI can suggest visual supports, step-by-step prompts, or manipulatives to assist focus and understanding.
- **Professional Judgment:** Review AI suggestions for accuracy, developmental appropriateness, and alignment with IEP goals. Adjust as needed.

Reflection Prompts:

1. How do the AI-generated materials support this student's needs without replacing teacher guidance?
2. Which strategies still require teacher modeling or intervention?
3. Could colleagues' perspectives improve the adaptation or use of these AI-generated resources?
4. How will you ensure data privacy and confidentiality when using these materials?

Sample Case Scenario 2:

A 5th-grade student with a specific learning disability in reading struggles with summarizing informational text and recalling key details. You are planning a lesson on identifying main ideas and supporting details.

AI Support Consideration:

- **Instructional Planning:** Use AI to generate text passages with varying levels of complexity and accompanying comprehension questions.
- **Differentiation:** AI can suggest graphic organizers, visual supports, and sentence starters to scaffold summarization.
- **Professional Judgment:** Review AI-generated passages for accuracy, reading level appropriateness, and alignment with IEP goals. Modify as needed for individual student needs.

Reflection Prompts:

1. How do the AI-generated texts support this student's reading goals without replacing teacher instruction?
2. Which scaffolds are still needed to ensure comprehension and engagement?
3. Could collaboration with colleagues or reading specialists improve adaptation of AI materials?
4. How will you ensure student progress data and privacy are protected?

Critical Reflection Questions

Before finalizing any AI-generated material, new teachers should ask themselves the following:

- How does this support enhance, rather than replace, my professional decision-making?

- What adaptations are necessary to ensure instruction remains individualized?
 - How will I verify accuracy, relevance, and alignment with student goals?
 - What safeguards are needed to protect student privacy and confidentiality?
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AI Instructional Reflection Worksheet

Teacher: _____ | Date: _____ | Class/Grade: _____

1. Instructional Task

Identify the specific task for which you are seeking AI support: *(e.g., lesson planning, material differentiation, or professional communication)*

2. AI Suggestions & Resources

Briefly list the ideas or resources generated by the AI tool:

3. Adaptations & Professional Judgment

How will you modify or review these suggestions to fit your students' unique needs and IEP goals? *(Consider: reading levels, complexity of tasks, or specific visual supports)*

4. Evaluation & Safeguards

- **Accuracy:** How did you verify that the content is factually correct and relevant?
- **Privacy:** What measures were taken to ensure no personally identifiable student data was used?

5. Next Steps



What follow-up actions, student data collection, or collaboration with colleagues are needed?
