

Amplifying Your Teaching with AI Tools in Early Childhood Education

BY DR. ANGELA ELKORDY

AI tools can be incredibly helpful in optimizing your time as you manage your classroom or early childhood classroom or program. Large Language Models (LLMs) like ChatGPT are powerful partners in your work, especially when used strategically. They excel at responding to detailed prompts that can help streamline your workload, clarify your vision, and improve communication.

Already, so many AI-enabled tools are available that it's hard to know where to start. A good strategy is to start with one or two tools, explore their capabilities, then experiment and iterate. Remember, AI does not replace human cognition, but it can augment, enhance, and elevate your ideas. However, it's not likely that you'll get a final product that meets your needs right away. The AI can anticipate your needs based on your input and its predictive algorithms - but does not know, for example, your context or your learners. After an initial time investment, you'll likely discover that these tools enhance your efficiency, allowing you to dedicate more valuable time to what truly matters—engaging with young learners and fostering their development.

One way to invest this regained time is by diving deeper into your teaching and pedagogy. If you're like most early childhood professionals, you love watching children learn and thrive, and you're always thinking about ways to augment, extend, and enhance instruction. In this article, I'll share practical ways to use AI to support your teaching in three key areas:

1. Curriculum Development & Adaptation
2. Lesson Planning & Learning Activities
3. Instructional Materials & Classroom Organization

In each section, ready-to-use examples are provided, including LLM-based prompts and specialized educator AI tools to help you save time, spark new ideas, and level up your teaching by augmenting, enhancing, and elevating your thinking.

1. AI FOR CURRICULUM DEVELOPMENT & ADAPTATION

When it comes to curriculum, AI can help you align content with learning standards, modify lessons for different student needs, and generate fresh ideas that complement what you already have in place. If you want to modify, enhance, or analyze existing materials, upload them to the ChatGPT prompt area by clicking on the + sign.

Aligning Curriculum with Standards:

- *"Review this early childhood literacy curriculum and align it with the Illinois Early Learning and Development Standards (IELDS). Suggest developmentally appropriate assessments to measure learning outcomes."*
- *"Analyze this curriculum and create a table mapping its alignment with IELDS. Recommend small modifications to strengthen alignment with key standards."*

Modifying for Different Learning Needs:

- *"Adapt this early childhood math curriculum to better support children with sensory sensitivities, ensuring accessibility while maintaining engagement."*
- *"Revise this literacy curriculum to provide additional scaffolding for emergent bilingual learners while maintaining alignment with IELDS."*
- *"Modify this social-emotional learning (SEL) curriculum to better support neurodivergent children, ensuring inclusivity and accessibility."*

Creating Adaptive Learning Pathways:

- *"Propose an adaptive learning pathway within this science curriculum that introduces early science concepts through loose parts and sensory play."*
- *"Suggest ways to structure an inquiry-based curriculum for toddlers that incorporates hands-on, exploratory learning aligned with early childhood development principles."*

Using Specialized AI Tools:

- **MagicSchool:** Helps generate curriculum-aligned lesson plans and instructional supports: <https://www.magicschool.ai/>
- **Eduaide:** Provides research-backed activity ideas aligned with early childhood learning standards: <https://www.eduaide.ai/>

2. AI FOR LESSON PLANNING & LEARNING ACTIVITIES

LLMs and specialized AI tools can help you differentiate instruction, generate new activities, and adapt existing lesson plans to better meet the needs of your learners.

Using an LLM like ChatGPT:

- **AI-Powered Sensory Bin & Learning Center Ideas**
If you have a sensory table, dramatic play area, or block center, AI can generate fresh, developmentally appropriate ideas based on what's already in your classroom.

Example: Instead of listing materials manually, **take a picture** of what's available and ask AI:

- *"What kind of sensory bin activities can I create using the items in this image?"*

- *"How can I use these loose parts to support fine motor development and early math skills?"*
 - *"Suggest five different activities for the text Little Leena learns about Ramadan with materials in this picture."*
- **Why This Works:** AI helps maximize what you already have, providing creative, play-based learning ideas without requiring extra prep time.
 - **Generating Thematic Learning Units:**
 - *"Create a one-week early childhood unit on 'Weather Wonders' with developmentally appropriate activities in literacy, math, and sensory play."*
 - *"Create a month-long unit on gratitude for 1st grade on developmentally appropriate SEL skills, including the family and community in Chicago."*
 - **Modifying and Differentiating Activities:**
 - *"I have a circle-time song about the seasons. How can I modify it for children who are nonverbal?"*
 - *"Modify these Read-Aloud follow-up activities to accommodate three different levels, e.g., beginner, advanced, and ELLs)"*
 - **Personalizing Activities:**
 - *"My student, Leena, loves balloons. Suggest an outline for a phonics lesson for her that includes phonemic awareness and a game."*
 - *"Zayd, a preschooler, loves chocolate and is an ELL. His primary language is Spanish. Write a short, funny story for him that ends with sharing that scaffolds English development while honoring his Spanish heritage."*

Using a Specialized AI Tool:

- **MagicSchool:** Helps generate curriculum-aligned lesson plans and instructional supports: <https://www.magicschool.ai/>
- **Curipod:** Generates **interactive, AI-powered lesson slides:** <http://curipod.com>

3. AI FOR INSTRUCTIONAL MATERIALS & CLASSROOM ORGANIZATION

AI can help you create custom teaching materials, design classroom visuals, and automate documentation and reflection.

Using an LLM like ChatGPT:

- **Creating Printable Learning Materials:**
 - *"Generate a set of alphabet tracing worksheets with a jungle animal theme."*
- **Designing Interactive Visual Schedules:**
 - *"Create a simple morning routine visual schedule for a preschool classroom with illustrations and step-by-step cues."*
- **Enhancing Storytelling & Language Development:**
 - *"Write a short story for toddlers about a curious squirrel who learns how to share."*
 - **Bonus Idea:** Have children draw a picture and use AI to generate a custom story inspired by their illustration!
- **Classroom Organization & Documentation:**
 - AI can summarize observational notes, track developmental milestones, and generate parent communication templates.
 - *"Summarize these three anecdotal observations into a progress update for a child's learning portfolio."*

Using Specialized AI Tools:

- **Canva for Education:** Generates visually engaging worksheets, classroom decor, and printables: <https://www.canva.com/education/>
- **Natural Reader:** Allows teachers to clone their voices to read text.
 - <https://www.naturalreaders.com/>

FINAL THOUGHTS: START SMALL AND EXPERIMENT

AI is not here to replace teachers—it's here to support and enhance the work you already do. The key is to start small:

- 🔗 Choose **one or two AI tools** to explore.
- 🔗 Experiment with **a few practical prompts**.
- 🔗 Use AI to **save time on planning**, so you can focus on **teaching and engaging with children**.

With the right strategies and tools, AI can help early childhood educators work smarter - not harder - while bringing more creativity and personalization into their classrooms.

Please join Dr. Angela Elkordy's webinar and discussion, April 8, 1-2:30 pm CT, to learn more about these strategies, ask questions, and share your ideas! [Click here to register](#).

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