DADD Express
Volume 37, Number 1 • Spring 2026
Council for Exceptional Children
A publication of the Division on Autism and Developmental Disabilities, a unit of the Council for Exceptional Children
Focusing on individuals with autism, intellectual disability, and related disabilities

Evidence-based Practices

Using AI to Enhance Communication and Engagement Opportunities Through the UDL Framework

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Introduction: Why Focus on Communication

"Unhindered communication is the key prerequisite to quality education" (Zdravkova et al., 2022, p. 2). Artificial intelligence (AI) is no longer just a possibility as a formative educational tool—it is already part of schools and classrooms, with the potential to transform learning, expand opportunities for students with disabilities, and reduce teacher workloads (Kim, 2025). Teachers using AI weekly for tasks like creating materials report saving nearly six hours a week, which they reinvest into giving more personalized feedback, individualized lessons, family communication, and a better work-life balance (Gallup-Walton Family Foundation, 2025).

At the same time, another survey showed that special educator participants reported spending significant hours outside their contract time on job tasks, with many logging over 15 additional hours weekly (Jacobsen, 2025), underscoring the need for supports that reduce workload while strengthening evidence-based instructional practices (EBIPs). Communication is a natural focus for this work because it is foundational to autonomy, relationships, inclusion, and participants (Walker et al., 2022; Zdravkova et al., 2022). Students have the right to appropriate communication aids supported by EBIPs, such as augmentative and alternative communication (AAC) devices or picture supports to express needs, wants, and ideas (Peckham-Hardin et al., 2018). For many students with autism and intellectual and developmental disabilities (IDD), this requires strategies like social stories, modeling, visual schedules, systematic and explicit instruction, assistive technology (AT), and choice-making opportunities (Browder et al., 2014). While effective, these supports take time to create. AI offers teachers quick, adaptable tools to draft and individualize communication materials, aligning to EBIPs and through the lens of Universal Design for Learning (UDL) to provide students with multiple ways to engage, represent ideas, and express themselves.

Integrating AI into Current Instructional Practices Through the Lens of Universal Design for Learning

AI is not meant as a replacement for teaching but as a collaborative tool to help teachers quickly create communication supports such as visuals, sentence starters, social story scripts, or multiple-choice options (Ayers, 2025). While virtual reality (VR) and robotics show promising results for teaching communication, they are often not accessible in school, so in this article, I will focus on free (as of this publication), easy-to-use AI tools. As the saying goes, "You don't have to reinvent the wheel," and through the lens of Universal Design for Learning (UDL), AI can support teachers in offering multiple means of expression, representation, and engagement (Digital Learning Institute, n.d.). For example, text-to-speech or speech-to-text tools (e.g., Speechify, Natural Readers) align with representation; MagicSchool, Freckle, and ChatGPT can generate individualized supports to enhance engagement; and platforms such as WaveVideo, TinyWow, and Recraft allow students to express knowledge in creative ways (Saborío-Taylor & Rojas-Ramírez, 2024). Importantly, teachers remain the decision-makers, using AI to enhance—not replace—EBIPs and an inclusive learning environment.

Practical Classroom Strategies for Teachers

Strategy 1: AI-Generated Social Story Scripts

Social stories are widely used tools for teaching communication and social skills to students with IDD, but creating individualized stories can be time-consuming (Bozkurt & Vuran, 2014). AI tools (e.g., ChatGPT, Claude, MagicSchool) can help teachers quickly draft scripts for common situations (e.g., greeting peers, asking for help, joining a game, or walking in the hallway) that can then be tailored to student needs. Teachers can also use AI to generate accompanying visuals or augmentative and AAC device word lists, giving students multiple ways to engage and respond. AI reduces preparation time while allowing teachers to focus on adapting stories for their students, embedding communication training, and supporting inclusion through multiple means of engagement and expression. To ensure effectiveness, teachers should still follow best practices, such as

- Identify target behavior and criteria before drafting (Sam, 2016);
- Structure stories with a title, beginning-end-middle, and use a 2:1 ratio of descriptive to directive sentences (Gray, 2018);
- Match language to student level;
- Use positive first- or third-person statements, *WH*- questions, and visuals when possible (Como et al., 2024; Wright et al., 2016);
- Monitor progress and revise as needed; and
- Pre-teach key vocabulary using EBIPs.

Consider students' mode of communication to provide them with opportunities to engage, read along, and promote vocabulary and comprehension skills. Using AI to help create word lists for AAC devices can help reduce preparation time. The district- or school-assigned speech–language pathologist (SLP) should be able to provide support when implementing instruction with AAC devices.

Table 1. Using AI to Enhance Instructional Supports Through the Lens of UDL

UDL Principle	AI Strategy Example
Multiple Means of Representation	AI provides simplified text, picture-based supports, or translations.
Multiple Means of Engagement	AI generates interest-based conversation starters, role-play scenarios, or calming scripts.
Multiple Means of Action & Expression	AI creates sentence frames, AAC-compatible vocabulary, or differentiated writing supports.
Remember to modify or adapt the AI generated product to fit your individualized students' needs.	

Strategy 2: AI for Visual Schedule Supports

Consistent routines are key for classroom management, and AI can save teachers time by suggesting and creating visuals for schedules, calendars, or routines. For example, a teacher might prompt ChatGPT to "create a list of five visual prompts with short labels for getting ready to go home" and then pair the text with the appropriate visuals. These AI drafts should always be individualized for the specific student, not used as a one-size-fits-all. To ensure quality, review AI suggestions against best practices: select visuals that are age-appropriate and as realistic as possible, paired with text to promote reading, and arrange from left to right for horizontal readers or top to bottom for vertical readers (Lentini & Fox, n.d.; Turner, n.d.). Additionally, when students benefit from tactile/concrete objects for communication, adapt the AI prompt accordingly (e.g., "List five concrete objects for visual supports for going home."). AI-generated visuals reduce prep time and give teachers flexible tools to support student communication and engagement.

Table 2. Example of a Social Story Script Using ChatGPT

Step 1: Type in a Simple Prompt to ChatGPT	Step 2: Review the AI Output	Step 3: Modify Draft as Needed	Step 4: Adapt for Your Students
"Create a social story script for teaching a student about respecting personal space."	*"Sometimes I want to stand close to my friends. It is important to remember that everyone has a personal space bubble. Personal space means there should be some room between me and another person. When I stand too close, my friends might feel uncomfortable. When I give people space, they feel safe and happy. If I'm not sure, I can look at their face or ask, "Is it okay if I sit here?" Respecting personal space helps me be a good friend."*	Notice that the social story created by ChatGPT does not contain all components of an effective social story (e.g., does not address all the WH- questions), giving a good example of why critiquing and modifying the output is necessary for teachers to do. Remember, ChatGPT is providing a draft, not the final product.	Some things to consider when modifying or adapting a social story script include (a) Pair the script with visuals or icons for non-readers; (b) Shorten or expand the lines depending on student needs; (c) Practice through role-play with peers or staff; and (d) Provide ChatGPT with more context for more targeted outputs, such as the age or grade-level of the students you would like it to be geared towards.

Strategy 3: AI for Choice-Making

Making choices is a fundamental communication right and supports both classroom management and student autonomy. AI tools (e.g., MagicSchool, TeacherTool.AI) can quickly generate or expand on choice board options or lessons, comprehension checks, reinforcers, or core word use. Additionally, AI can recommend images to pair with each activity. To implement effectively, follow best practices, such as

- Begin with only two or three options and expand choices as the student progresses;
- Ensure boards are always accessible; and
- Include student interests to maintain engagement.

When used this way, AI-created choice boards align with UDL by offering multiple means of representation and expression while reducing prep time.

Table 3. Free Teacher-Friendly AI Tools and Uses

Free Teacher-Friendly AI Tool	Uses
Speechify	Text-to-Speech
MagicSchool	Creating choice boards, individualized supports, lesson plans
Diffit	Creating visuals/texts at different levels.
ChatGPT	Creating communication supports
Canva Magic Write	Creating visuals
TeacherTool.AI	Creating choice boards
NotebookLM	Summarizing documents; creating podcasts, videos, and mind maps.
AI for Education	Provides a free curated prompt library for different educational contests and tasks that can be copied and pasted into chatbot tools, such as ChatGPT
Brisk Prompt Library	Provides a free curated prompt library for different educational contests and tasks that can be copied and pasted into chatbot tools, such as ChatGPT

***Note.* AI tools are constantly changing, which means that their uses and abilities may be different, they may change in price, or they may no longer be active.**

Final Considerations for Teachers

AI can save time and expand access to communication supports, but teachers remain the decision makers. Always protect student privacy by avoiding identifiable information and reviewing AI outputs for accuracy, cultural relevance, and clarity before classroom use. AI should complement—not replace—evidence-based strategies such as modeling, reinforcement, and individualized and explicit instruction. When starting out, begin small: try one AI-generated script, schedule, or visual, and then revise as needed to ensure quality. Keeping materials short and consistent helps prevent AI from overproducing or overwhelming students. Above all, use AI through a UDL lens to ensure students have multiple ways to connect, communicate, and participate in inclusive classrooms. ■

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