



CHAPTER 4

Partnering with AI for Differentiation

PRACTICAL AND ETHICAL CONSIDERATIONS

Stepping into the world of AI can feel like the start of a new adventure. It is unfamiliar at first, and sometimes even a little intimidating. But like any meaningful shift in practice, it begins with curiosity. Before we can use AI in a way that supports real learning, we need to understand what it is, what it is not, and how to use it responsibly and ethically. This chapter will walk through what AI actually does and where it sometimes goes wrong, the kinds of tasks it can support in lesson planning and differentiation, and the ethical guardrails teachers must keep in mind, such as avoiding bias and protecting student privacy.



It will also explore how to balance AI's suggestions with teacher judgment, how to approach it with a mindset of curiosity rather than expertise, and how it can support sustainable teaching by reducing the workload that often makes differentiation feel overwhelming. At the center of it all is the reminder that AI may help with logistics, but it is teacher empathy and professional decision-making that give differentiation its power.

DEMYSTIFYING AI FOR EDUCATORS

Before exploring practical uses, let's take a step back to put your mind at ease: You do not need to be a tech wizard to make this work, and AI is not about to turn you into a classroom zombie who only follows machine instructions. These tools are much closer to everyday supports you already use than to anything out of a science fiction movie. Think of this part as a gentle orientation, one that clears up misconceptions and shows you that you are fully capable of putting AI to work without it taking over. By the end, you will see that the real expertise still belongs to you, and AI is simply here to lighten your load.

What AI Is and Why It Matters for Educators

Artificial intelligence in education is not about robots or futuristic machines. It refers to tools that generate language, ideas, images, or plans by recognizing patterns in enormous amounts of data. Think of it as a very advanced autocomplete. When you type a text message and your phone suggests the next word, that is a simple form of AI at work. Generative AI tools operate on the same principle but at a much larger and more sophisticated scale, pulling from vast collections of text, images, and other data to make an educated guess at what might be useful. They do not think, reflect, or understand in a human way, and they certainly cannot feel empathy, interpret subtle classroom dynamics, or truly know your students. What they can do is respond to prompts with drafts, explanations, or ideas that may not always be perfect but often give you a head start.

While this description may sound mechanical or even robotic, the output AI produces can be surprisingly helpful. It can summarize complex information in plain language, brainstorm lesson ideas in seconds, or draft outlines and rubrics that you can refine. I know this is a point I

have made before, but it deserves repeating because it is at the heart of everything in this book: AI is *not* a replacement for your professional judgment. It is better to think of it as a brainstorming partner who never runs out of ideas. Some will be useful, others you will set aside, but the value comes in having options you can sift through and shape into something that works for your students. What makes those ideas meaningful is the way *you* filter them through your knowledge of curriculum, standards, and, most importantly, your students.

In the day-to-day work of teaching, we are constantly adjusting for different needs, reworking plans, and trying to stay one step ahead of what our students require. AI supports that work by offering suggestions, organizing ideas, and providing a starting point when our own mental bandwidth is stretched. It does not replace thoughtful teaching. Instead, it helps us manage the complexity that good teaching already demands. This is exactly where indicator 2.5.a of ISTE Educator Standard 2.5 Designer comes to life, because the tool gives teachers new ways to create, adapt, and personalize learning experiences without adding hours to their workload. It functions as a flexible, on-demand assistant that can support the kind of work teachers already do with care and intention. At the same time, it has the ability to scan information and pull from research at a speed we simply cannot match, giving us access to ideas and insights that might otherwise take hours to find. Used well, this means you spend less time buried in preparation and more time focusing on the heart of teaching which is connecting with students and responding to their needs in real time. It also helps surface instructional possibilities teachers may not have considered, giving them a broader range of options to evaluate and refine.

In short, AI can provide capacity, but it cannot provide compassion. It can hand you options, but it cannot tell you which option is right for the child in front of you. That judgment belongs to the teacher. Recognizing that distinction is what makes AI a powerful partner rather than a potential distraction.

How AI Works and Where It Can Go Wrong

Most of the tools available to teachers today are trained using large datasets that include text from books, websites, articles, and public



forums. These tools are not retrieving answers from a specific source or database. If they did, that would cross into plagiarism, because they would be lifting text directly from another source. Instead, AI generates new responses by predicting patterns in language, which is why the content it produces is considered original rather than copied. To use one of these tools, you type in a prompt, such as a question or a request, that guides what the AI generates in response. The tool then predicts what might be a useful or appropriate reply, often producing language that sounds natural and conversational, even though it is not thinking or understanding in a human sense. It is doing pattern-matching at lightning speed, which is impressive but also imperfect (Kasneci et al., 2023).

Because of how these systems are built, they sometimes produce content that looks polished but is inaccurate. They may confidently provide outdated information, combine ideas that do not belong together, or even make up things entirely. At times, an AI tool might fabricate a source or weave unrelated details into something that sounds convincing until you read it closely. This type of error is often referred to as *hallucinating*, which is a colorful way of saying that AI can produce information that is false or misleading but still appears believable. Teachers need to keep this front of mind. AI is a generator of possibilities, not a fact-checker.

There is also the matter of nuance. AI tools do not know your students, your school, or your curriculum. They cannot read the room, sense frustration, or notice the energy shift when a student finally understands something. What they provide can be useful, but only when filtered through your professional judgment. The quality of the response often depends on the quality of the input. In short, AI works with what you give it. Clear and specific prompts usually lead to stronger results, while vague prompts tend to get vague answers. It is a bit like using GPS. Clear instructions get you to your destination quickly. Vague or incomplete directions might still get you there, but with a lot of wrong turns along the way.

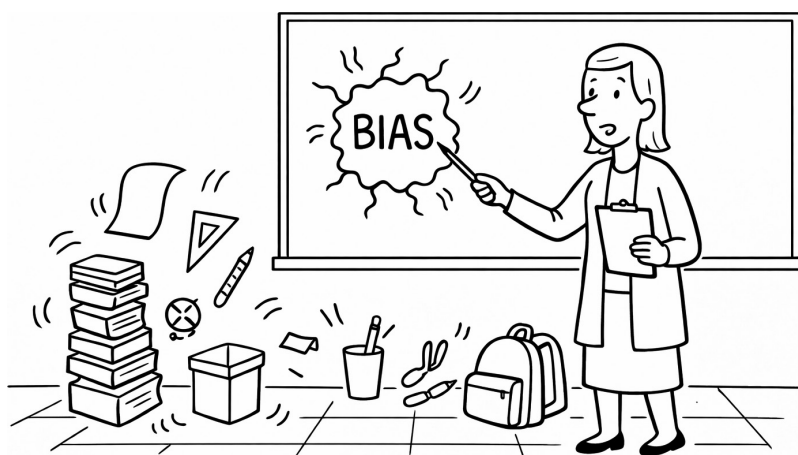
The process is simple but never perfect, therefore, prompt, review, adjust, and repeat as needed. Teachers already know this rhythm because it mirrors so much of our practice. It is a lot like grading essays or rearranging a seating chart. You may not get it right the

first time, and even when it works in the moment, it may still need adjusting later as situations shift or student needs change. Each pass makes it stronger and more tailored to the learners in front of you.

Using AI Responsibly: What Teachers Should Know

As helpful as AI can be, it comes with responsibilities. These tools are trained on data created by humans, and that data includes all the biases, assumptions, and inaccuracies that exist in the world. AI can unintentionally reinforce stereotypes or produce examples that are culturally narrow or inappropriate. It does not know your students' identities or lived experiences, and it certainly does not truly understand the responsibility teachers carry when selecting materials and language for the classroom. AI cannot feel empathy and use it as the building block for differentiation.

AI bias is not always dramatic or obvious. Sometimes it shows up in small ways, such as consistently using male pronouns in science examples or presenting culturally limited names in a word problem. These small patterns matter because bias creeps into instruction the same way clutter creeps into a classroom (Figure 4.1). To help teachers evaluate AI output through an equity lens, Table 4.1 offers a quick planning tool you can use when reviewing content.



Bias creeps into instruction the same way clutter creeps into a classroom

FIGURE 4.1 How bias subtly creeps into instruction

TABLE 4.1 Teacher Checklist for Identifying Bias in AI-Generated Outputs

WHAT TO LOOK FOR	WHY IT MATTERS	QUICK FIX FOR TEACHERS
Repeated use of one cultural group or identity.	Students may not see themselves represented.	Ask the AI to regenerate the example using varied names, contexts, or cultures.
Gendered assumptions (only boys in sports, only girls in arts).	Reinforces stereotypes.	Prompt the AI to create balanced or non-gendered examples.
Narrow world views in scenarios or stories.	Students benefit from understanding a variety of lived experiences. When examples reflect only a single community, students may miss opportunities for perspective-taking and real-world connections.	Ask for examples set in urban, rural, and suburban environments, or request global contexts to broaden exposure.
Academic levels that mismatch your learners.	AI may default to text or tasks that are too advanced or too simple. This can create barriers or reduce challenge for students who need appropriate scaffolds.	Ask the AI to rewrite the content at a specific grade level, provide multiple versions with varied complexity, or create a scaffolded pathway of tasks.
Idioms, dialects, or language patterns that do not match your students' lived experiences.	Students may lose comprehension if the phrasing, idioms, or dialect reflect a region or community they are unfamiliar with. This can happen when AI pulls wording from areas with different linguistic norms.	Ask the AI to use region-neutral wording or to rewrite the example using familiar expressions and straightforward academic language.
Climate or environmental references that do not apply to your students such as snow days, farms, or seasonal changes uncommon in your region.	Students may struggle to visualize or connect with examples located in unfamiliar settings. A snowstorm math problem may not be meaningful in Miami.	Ask the AI to adjust the scenario to your local environment or request a version that avoids climate-specific details.

Using a checklist like this supports ISTE Educator Standard 2.3 Citizen by encouraging thoughtful and ethical use of digital tools (indicator 2.3.a). It reinforces the idea that reviewing AI output is part of responsible planning and not an optional extra.

There is also the matter of privacy. Teachers should never enter student names, academic records, behavioral notes, or any personal details into AI tools. Known as *personally identifiable information* (PII), this type of information includes anything that can be used to identify a specific student, such as their name, student ID number, date of birth, address, or any combination of details that could trace back to them. Sharing PII may violate the Family Educational Rights and Privacy Act (FERPA), which protects the privacy of student education records (U.S. Department of Education, n.d.). Once something is typed into an AI tool, it may be stored, shared with third parties, or used to train future versions of the model. When teachers treat this information as completely off-limits in AI prompts, they are living out Standard 2.3 Citizen, which emphasizes careful management of personal data and protection of student information (indicator 2.3.d).

Some districts offer access to enterprise-level AI accounts that have stricter privacy protections. These accounts typically do not use your entries to train the model, and they may comply with specific school system policies. Even with these protections in place, however, PII should still be safeguarded. A secure platform does not remove the educator's responsibility to protect students' data. Data breaches and security lapses can still occur, even with reputable providers. A good rule is this: If you would not include it in a staff email or leave it on a shared printer, do not put it into an AI prompt.

Before using any AI tool, the following questions can guide your decision-making.

- Does this tool store data, and if so, for how long?
- Is this tool approved by my district or part of our enterprise platform?
- Does the company share data with vendors or partners?
- Can the company articulate how student information is protected?
- Is this tool known for strong data security practices?
- Am I comfortable explaining this choice to a parent or administrator?

These questions are not meant to overwhelm you. They are meant to help you slow down the decision long enough to make sure the tool is safe, appropriate, and aligned with district expectations. Most of the time, a little awareness goes a long way. When you take



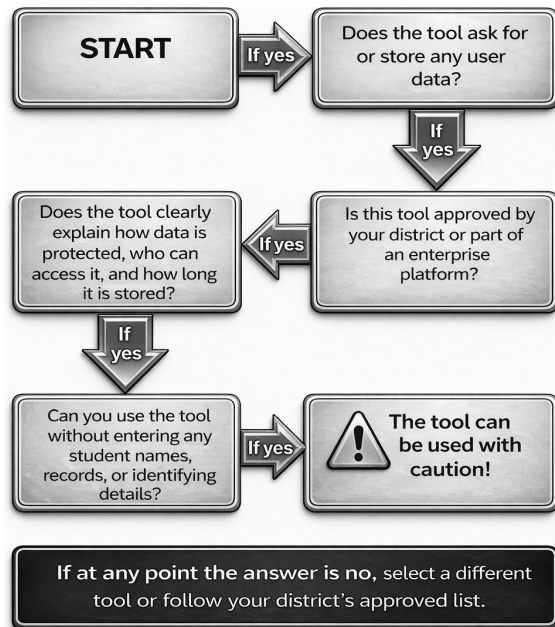
a moment to verify how a tool handles data and whether it meets school system requirements, you model responsible use and reinforce the culture of care you want students to learn from you.

While the questions above help you think about privacy in a practical way, it can also be useful to see the decision-making process in a simple visual format. Figure 4.2 summarizes the key steps you might take when evaluating an AI tool. It is not meant to replace your district's policies. It simply offers a clear picture of how to move from an initial idea to a more confident, informed choice.

Data Privacy Decision Flow for Educators

FIGURE 4.2

Steps to follow when evaluating an AI tool in conjunction with your district policies



Using AI responsibly is not about fear. It is about being thoughtful. Teachers already make judgment calls every day, and this is no different. We weigh risks, consider our audience, and stay aware of the bigger picture. AI is just one more area where professional judgment matters.

There is one final area worth addressing. Academic integrity is often discussed with students, but it also applies to how educators use AI. When you present at a staff meeting, create learning materials, or share planning documents with colleagues, it is important not to present AI-generated work as entirely your own. A simple

acknowledgment is enough. You can share that AI helped generate ideas, wording, or structure while making clear that your professional expertise guided the final decisions. This builds trust, reinforces ethical practice, and models responsible digital behavior for others, which reflects Standard 2.3 Citizen, which focuses on mentoring others in the safe, legal, and ethical use of digital tools (indicator 2.3.c).

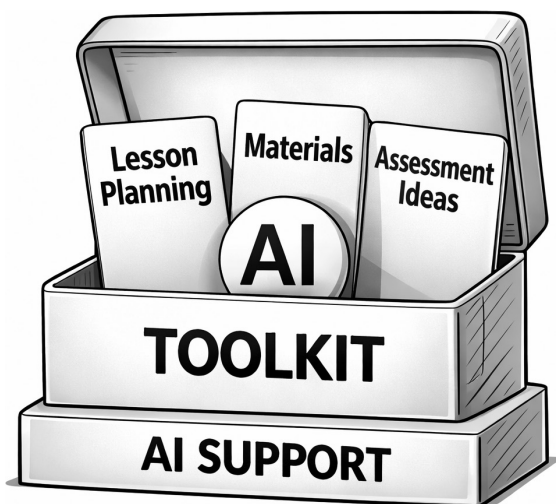
When educators approach AI with clarity, empathy, and care, students benefit from tools that are safer, more inclusive, and better aligned with meaningful instructional goals.

The Teacher's Toolkit

Teachers do not need to memorize a list of every AI platform on the market. In fact, new ones appear almost daily. Instead, it is more useful to think about categories of support: tools that help with lesson planning, tools that adapt or create materials, and tools that generate assessment ideas (Figure 4.3), the very kinds of tools that connect with the ISTE Educator Standard 2.5 Designer (indicator 2.5.b) when they are used to design authentic learning activities rather than just automate worksheets. The specifics will continue to evolve, and that is why I created TejadaEDU.com. The website is a living resource where teachers can see up-to-date examples of platforms that work well in classrooms. (See Appendix D, "Resources and Companion Website Guide," for more details on the website.) The focus in this section is on how to use AI wisely, regardless of which tool you choose.

FIGURE 4.3

Using AI as a flexible instructional toolkit



When considering whether a tool belongs in your planning toolkit, reflect on whether each option meaningfully supports your instructional decision-making. Ask yourself these questions:

- Does it actually save me time?
- Am I comfortable with the safety and privacy of using it?
- Am I still in control of the final decisions?
- Is the output accurate enough to be useful?
- Does it act like a helpful brainstorming partner for my planning?
- Does it provide enough value for its cost?
- Does it include intrusive advertising?
- Is the interface intuitive?

Each of these questions points to a practical habit of mind. Asking whether a tool saves you time means checking if the output actually moves your planning forward. If you spend more time fixing what the AI produces than you would have spent creating it on your own, then the tool is not saving you time and does not belong in your toolkit. Asking whether you are comfortable with the safety and privacy of using a tool is about more than trusting the company's name. Before you even create an account, take a moment to scroll to the bottom of the site and open the *Privacy Policy* and *Terms of Use*. These pages spell out whether the company stores your data, how long they keep it, and whether they share it with partners. Many tools also have a "Security" or "Trust Center" page that summarizes these practices in simpler language. If locating these pages feels confusing, use the site's search bar and type "privacy," which usually takes you there quickly. This small habit helps you avoid tools that quietly store far more information than you expect and gives you a basic sense of whether the platform treats user data responsibly. We already talked about FERPA, but it is worth repeating that privacy is never something to take lightly.

The question about being in control of the final decisions matters because no AI tool should dictate your instruction. It is easy to lean too heavily on a tool when it seems fast and convenient, but overreliance can dull the professional judgment that makes differentiation work. If you ever feel boxed in by a template or pressured to accept an output

without room to adjust, then the tool is not serving you. Accuracy is another important test. AI outputs can look polished but still be wrong, so you need to decide whether what you are given is reliable enough to build from. If it consistently gives you information that is off base, then it will only create more work for you. It also helps to be aware that inaccuracies sometimes tie back to bias, which is rooted in the data the tool was trained on. A platform that consistently provides narrow examples or skewed perspectives may not be unsafe, but it may still be unhelpful. When you spot these patterns, see if the tool improves when you prompt it to broaden its viewpoint. If it does not, it might not be the best match for instructional planning. Finally, asking whether the tool acts like a helpful brainstorming partner is about tone as much as it is about content. Good AI tools give you multiple ideas to consider, sparking options that you can then refine with your professional judgment. If the tool only gives you one rigid answer with no flexibility, then it may not be worth keeping in your toolkit.

Some AI sites provide built-in prompts that can give you a quick start, while others lock you into templates that feel rigid and limit your flexibility. It is worth testing different options to see which ones match the way you like to plan. You may find that one platform is better for generating reading passages while another is better at structuring assessments. It is fine to use different tools for different purposes as long as you stay in control of the final product.

There is also the question of access. Some platforms are free, while others require a subscription. Paid options often come with more customization or stronger feedback, but that does not always mean they are better for your planning needs. Free tools can still be powerful when you know how to phrase your prompts carefully, and in the next chapter we will take a closer look at prompt engineering to help you do exactly that. No matter which you choose, remember that the goal is not to automate planning but to support your thinking so you can focus on the students in front of you.

The key is to remember that the best toolkit is the one that works for *you*. Your needs as a teacher may shift from unit to unit, and the AI tools you choose can shift with them. If a tool saves you time, supports your differentiation planning, and keeps you in control of the decisions, then it belongs in your toolkit.





A MINDSET SHIFT, NOT A TECH MAKEOVER

As mentioned earlier, using AI in education is not about becoming a tech expert. It is about being open to a new way of thinking about support. The teachers who get the most value from AI are not necessarily the ones with the most technical knowledge. They are the ones who stay curious, who test things out, and who stay grounded in what they know works for students.

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Rethinking What Support Looks Like

Remember Ms. Williams, the teacher who once spent hours each weekend trying to adapt lessons for her students and still felt like she was falling short? She was not an early adopter. In fact, she wanted to stay away from AI entirely. It sounded too technical, too impersonal, and, to her, a little like cheating. She imagined it as something cold and scripted, the opposite of what good teaching should be. But one day, feeling overwhelmed and pressed for time, she decided to try using it to draft a complicated email she had been avoiding. What surprised her was not just how quickly the tool gave her something usable, but how human the tone sounded. It was not perfect, but it was enough to get her started. And that was all she needed to see that AI could be a partner. Not a replacement. Not a shortcut. Just a small way to lighten the load.

What changed for Ms. Williams was not her skill with technology. It was her willingness to rethink what support could look like. She did not suddenly become someone who loved digital tools. She stayed someone who loved teaching, and she realized that if AI could help her focus more on her students and less on formatting, searching, or starting from scratch, it was worth exploring. She now sees AI tools as planning partners.

Starting Small

A mindset shift does not require a dramatic leap into every AI feature available. You already do gymnastics with your planning, your pacing, and your patience. AI does not need to become another circus act. It begins with choosing one manageable place to try something

new. You can ask AI to rewrite confusing directions. You can use it to brainstorm a list of questions for a novel unit. You can test one prompt during your planning period to see if it helps you think in a new direction. When the task is small, the pressure stays low. You keep full control, and the tool becomes a gentle extension of your professional judgment rather than a commitment to technology.

Small steps make space for experimentation (Figure 4.4). They help you figure out what feels authentic to your practice and what does not. You can keep what supports you need and set aside anything that slows you down. The goal is not perfection. It is progress.

This is the mindset shift. It is not about learning every new platform or mastering every feature. It is about knowing what matters and being open to tools that help you protect it. You already make dozens of instructional decisions each day. You notice, you adjust, you try again. AI does not change that. It gives you a little more space to do it well.

FIGURE 4.4

Small steps toward confident AI use



You do not have to use AI the way someone else does. You do not have to adopt it all at once. You can start small. Ask it to rewrite directions. Use it to brainstorm questions. Try it for one lesson or one group. Keep what helps. Toss what does not. You are still the one in charge. The shift is not about technology. It is about confidence. You already have the instincts and insight your students need. AI just gives you another way to act on them.



SUSTAINABILITY AND PROFESSIONAL GROWTH

Teaching is demanding, and one of the biggest stressors is the never-ending cycle of planning, adapting, and grading. AI can draft first passes, summarize long texts, and organize ideas so you spend less time starting from scratch. That time savings is not a luxury. It is a practical way to reduce the workload that fuels burnout and to protect the energy you need for students. When you feel like every planning period is spent reinventing the wheel, the boost of a tool that gives you a starting draft can make a real difference in how much energy you bring into your classroom.

Sustainability also comes from knowing that you do not have to do all the research on your own. When you use AI to scan for strategies and summarize research as part of your own learning, you are working in the spirit of the ISTE Educator Standard 2.1 Learner by setting realistic professional learning goals and exploring innovations that strengthen your practice (indicator 2.1.a). AI can help you find strategies for differentiating instruction for different kinds of learners without hours of scrolling through websites or dense journal articles. If you want ideas for supporting a student who is new to English or a student who needs more challenge in math, you can ask AI for research-based approaches and then cross-check them with your own expertise. It gives you a head start without leaving you buried under piles of search results. Teachers who want to go deeper into the research can also use AI to highlight patterns across multiple sources, pointing out common recommendations and disagreements, which saves you from reading hundreds of pages before finding what is useful.

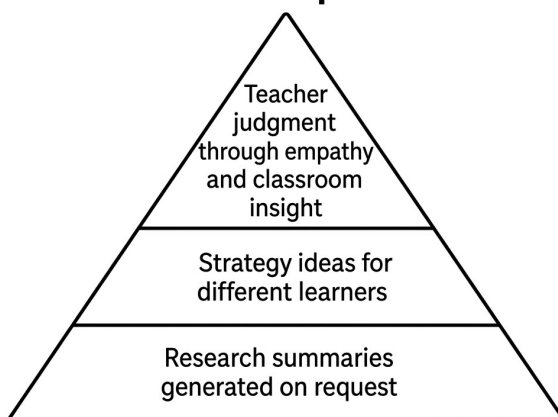
AI can also help teachers reflect. After a lesson you might type in a quick summary of how it went and ask AI to suggest reflection questions or ways to adjust for next time, as illustrated in Figure 4.5, which shows how AI supports reflection by combining research access, strategy ideas, and teacher judgment. This kind of support makes professional growth feel doable in the middle of a packed schedule. Instead of staring at a blank page in a reflection journal, you can get a list of questions that help you think more deeply about how your instruction reached different learners. Some teachers even use AI to

generate checklists for planning or to highlight areas where they may be overusing one type of strategy and underusing another. Over time, these small nudges add up to a habit of reflection that strengthens practice.

FIGURE 4.5

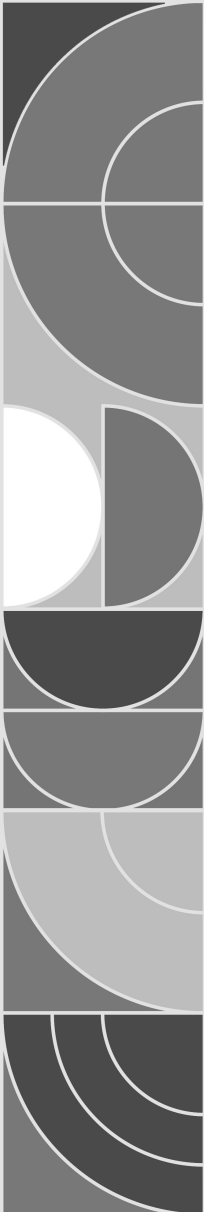
How AI supports reflection by combining research access, strategy ideas, and teacher judgment

How AI Helps Teachers Go Deeper



Another way AI supports professional growth is by making research more accessible. Many teachers want to read the latest studies on differentiation but do not have the time to sift through full academic journal articles after a long day at school. AI can provide clear summaries of research, break down findings into plain language, and even translate technical terms into classroom-ready insights. If you are interested in reading the latest from academic journals but are limited in time, there are AI tools that can generate short summaries or even turn those articles into podcasts you can listen to while driving to and from work. You can find examples of sites that do this on TejedaEDU.com; take a look and explore which ones fit your learning style. These supports mean that professional growth does not have to feel like an extra course you are taking on top of your teaching load. Instead, it becomes something you can weave into your daily routine.

AI can also keep you current with new strategies and instructional approaches. If differentiation for multilingual learners is a priority in your school, you can ask AI to scan for current practices and summarize them in ways you can test out immediately. If you are focusing on enrichment for advanced learners, AI can help you explore what other teachers and researchers are saying without you having to



spend hours combing through separate resources. It is like having a personal research assistant who does not get tired, though the responsibility to check accuracy and apply professional judgment always remains with you.

When you look at all of these possibilities together, AI becomes more than a way to shave minutes off your planning. It becomes part of how you sustain yourself as a professional. By easing the weight of repetitive preparation, by making reflection manageable, and by putting current research within reach, AI supports not just your instruction but your growth. This kind of sustainability matters because the healthier and more informed teachers feel, the more energy they have to devote to the empathy-driven work of differentiation.

In the next chapter we will turn this understanding into practice. You will see how AI can support differentiation from the very beginning of planning by helping you identify student needs, shape effective prompts, and design instruction that works in real classrooms.