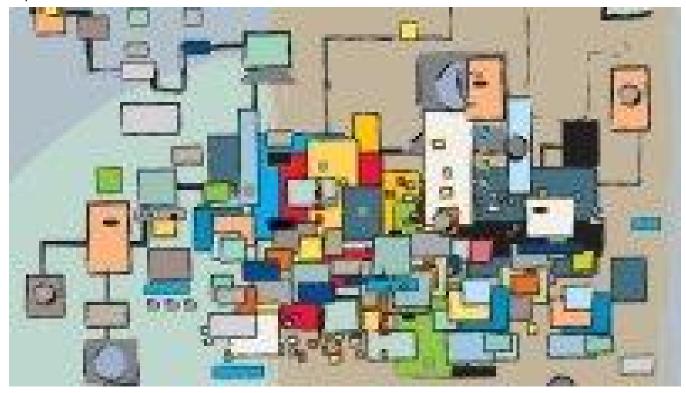
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7 Essential Questions About AI for Teachers to Consider

Teachers—and students—can use these questions to explore how learning will change with access to generative artificial intelligence.

By Diana Neebe

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Camille Chisholm / The iSpot

Like many of my fellow educators seeking to better understand generative AI, I often find myself swirling from one eddy to the next in a swift-moving stream of information. It's easy to get lost in the articles speculating about how school changes with AI or to get stuck in the existential spiral over what AI means for the future of our profession. Perhaps the sheer breadth and quantity of articles popping up offers us an indication of how much our world is changing, and how quickly. This can feel overwhelming, even to the most innovative among us.

As we look to the school year ahead, I propose that we engage in the same process we ask of our students when charged with understanding complex concepts: lean into essential questions to guide our thinking, and start with the end in mind. Once we have considered the bigger picture,

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we'll be more effective at navigating the logistics (which are sure to shift on us midflight). Below, I offer a set of essential questions to support educators in thinking about AI in the classroom.

GRAPPLING WITH AI

Generative AI is already part of our students' educational journey; it snuck in the back door last spring and is sitting in our classrooms, participating in our homework and chiming in on our assessments. Many of us have felt the sneaking suspicion that our connection to students' thinking was suddenly mediated by a robot. AI already touches our day-to-day, and it will continue to be a critical component in how this generation of students approaches learning—especially independent learning.

It is our job as educators to ensure that our students enter the world beyond school knowing how to use this (and other) technology safely, ethically, and responsibly. Though I share the passion of early adopters looking to immediately integrate AI, and I empathize with those feeling nostalgic for a simpler time in education, I worry that at either pole we miss the central tension we must grapple with in this moment. Our charge is equal parts practical and philosophical: We must examine how learning changes with access to AI.

7 ESSENTIAL QUESTIONS ABOUT THE ROLE OF GENERATIVE AI IN EDUCATION

Like any good teaching, the questions that follow came from deep collaboration with trusted colleagues (hat tip to Hannah Crowder and Lisa Harper). Because we were feeling a bit cheeky, we started by asking ChatGPT what questions teachers should ask about ChatGPT. The AI-generated questions weren't great, but they offered a springboard for us to dialogue—and that was great.

- 1. Why do we learn to do something a machine can do?
- 2. What is original thought? How might breakthroughs in thinking in your discipline be supported or impeded by AI?
- 3. How do you imagine the relationship between AI, human creativity, and innovation?
- 4. How might reliance on AI affect human decision-making, problem-solving, and critical thinking?
- 5. What unique aspects of human learning can and cannot be replicated by AI?
- 6. How might uneven access to fee-based AI services exacerbate existing inequities among students?
- 7. Based on all of the above questions, what do you think students need to learn in order to use AI safely, ethically, and responsibly—and what does it look like for teachers to model these practices? (ISTE Standards for Educators, 2.3)

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None of these questions have an easy or right answer. At the core of each is the challenge of defining what kind of people we want to be in relation to the technology that surrounds us. What is possible now that wasn't before? And what is harder now that wasn't before? We can begin to answer these questions for ourselves, and ought to consider them with our colleagues, but most important, we need to create the space to explore these questions with our students. After all, it's their education.

HELPING STUDENTS REFLECT ON AI

When we start with the end in mind, we start, always, with our students. This is a generation of children whose education has been disrupted and reshaped, first by a pandemic and now by a seismic shift in technology. They will remember a before-AI and an after-AI. Knowing what is possible, what kind of scholars, innovators, artists, problem solvers, and thinkers do they wish to become? And what support do they need to get there?

Let's start by leveling with our students. Contrary to headlines projecting the end of the essay and most high school tasks, let's acknowledge how AI makes this a much more challenging time to be a student. This new technology that seems capable of just about anything is in their backpacks and back pockets. Previous generations would have had to go out of their way to take a shortcut on an assignment, but the shortcuts are readily available to these students and often built into the platforms they regularly access. They will have to exercise impulse control, which, if we're being honest, is not something children and adolescents are known for.

Our students will need multiple opportunities from multiple angles across their curriculum to reflect on, consider, write about, and discuss the big questions that AI sparks. As they work to formulate their own opinions, they will likely need a framework with which to evaluate their real-time decisions as they engage in their coursework.

At my school, that framework, for now, is process versus product. As a rule of thumb, we are allowing students to access AI to support the process of learning—generating practice problems, explaining difficult concepts, offering adjacent models—but not to assist in the crafting of the product that is submitted, unless the teacher specifies otherwise.

Teaching and learning in the early days of generative AI is going to be tricky, for all of us. There are few public guardrails. There's no clear road map. The truth is, we don't know what's going to happen with AI—how it will shape and transform education, society, humanity. However, chatbot or not, let's not forget: Our students are hardwired to learn. Curiosity is our birthright as human beings and meaning-making our survival instinct. No sophisticated algorithm can replace that.