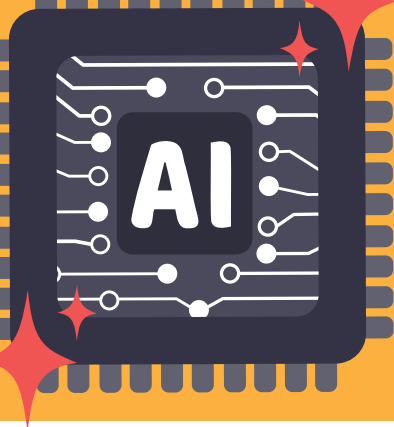# What AI Can and Cannot Do

Companies are racing to incorporate artificial intelligence into their products, and the EdTech industry is at the front of the line. When it comes to learning, what is the problem for which AI is the solution? Do children need this? Thoughtful questions become even more important when society-wide transitions are happening as quickly as they are today. Start by remembering what AI can and cannot do.

EdTech Products Powered by AI Can:

- Generate a human-sounding response to a query or prompt. These systems imitate the form of language and so appear intelligent.
- **Automate** a variety of teaching and learning tasks: lesson-planning, grading, answering student questions, writing. Teachers must review and vet all output.
- Generate incorrect information (AI is said to **"hallucinate"** or be **"BS"**).
- Generate racist, sexist, or violent output—because they are built on data scraped from the Internet, which includes racist, sexist, or violent content.
- Include guardrails that attempt to improve safety and reliability but that are inconsistent in their efficacy. Notable failures include: **encouraging suicide**; generating dangerous advice to people with **eating disorders**; and offering information that "sounds right" but is **patently inaccurate**.

EdTech Products Powered by AI CANNOT:

- Be relied upon to provide truthful information. A student or teacher using an "AI tutor" or "AI teaching assistant" can't know when it will err, or if they will be able to identify an error.
- Understand a student's particular social, emotional, academic, linguistic, or other **context**.
- Understand the meaning of the words it reads or generates.

AI
What is AI?

Artificial intelligence (AI) is a marketing term for automation systems that use large amounts of data to: make decisions (e.g., credit approvals); classify (e.g., facial recognition); recommend (e.g., news feeds, product recommendations); access human labor (e.g., Uber); and generate synthetic content (e.g., ChatGPT). See **Bender** & **ISO**.

Generative AI (e.g., ChatGPT, DALL-E, Claude) systems are complex statistical models that can generate text, images, video, and audio based on data from large training sets.

screen time
action network
at fairplay

Take Action!

What AI Can and Cannot Do
How Can We Be More Thoughtful About the Use of AI in Schools?

AI

BEFORE ADOPTING ANY GENERATIVE AI PRODUCT, ASK

- What are your pedagogical values, goals, and practices?
- Can the product you're considering advance your values, goals, and practices? How?
- What problem does the product purport to solve? Is it a problem for you?
- What pedagogical or administrative task does the product automate?
- What are the implications of the automation?
  - Who may benefit from the automation, and how?
  - Who may be harmed by the automation, and how?
  - Who is responsible for correcting false information generated by the automation?
  - What are the negative consequences—for curriculum and teaching, assessment, student privacy—that may be associated with this automation?
  - If you adopt this product, what strategies can you implement to prevent the possible negative consequences? How may these strategies be effective? How may they be ineffective?
- What alternative (including non-digital) solutions align with your values, goals, and practices?
- How do their implications compare with those of this product?

"...the construction and operation of AI algorithms is largely outside of public view and without any public accountability. Nevertheless, school people are being pushed, both by marketers and government entities, to be seen to be in the forefront of this alleged digital revolution."
—Alex Molnar

Resources

- AI in the Workplace (Bender, 2023)
- Issues to Consider Before Adopting a Digital Platform (Boninger & Molnar, 2020)
- Neil Postman's 6 Questions (LibrarianShipwreck, 2013)

Visit **bit.ly/screensandlearning** for the full Screens & Learning Action Kit!
References for the Action Kit: **bit.ly/screensandlearningreferences**

screen time action network *at fairplay*