



AI Literacy for Educators: A K-12 School Resource



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Introduction

In an age when technology is rapidly transforming every facet of our lives, equipping our students and school staff with AI (artificial intelligence) literacy is not just a futuristic ideal but a present-day necessity for K-12 educators.

In a May 2023 [report](#) from the Office of Educational Technology, a division of the U.S. Department of Education, the authors write that "AI is moving fast and heralding societal changes . . . naturally, educators wonder if the rapid advances in technology could help." Given that many of the main priorities in K-12 education remain unmet—including delivering personalized learning at scale, improving equity and access for under-resourced students, and retaining teachers in the field—schools would be remiss not to explore the ways AI can help.

This eBook is a resource for educators, administrators, and other stakeholders in the education sector to help deepen AI literacy.

CONTENTS INCLUDE:

- **Key terminology** and concepts used in the field of AI and ML (machine learning)
- **Consideration** of the ethical implications of using AI
- **Practical applications** and best practices of AI in K-12 education

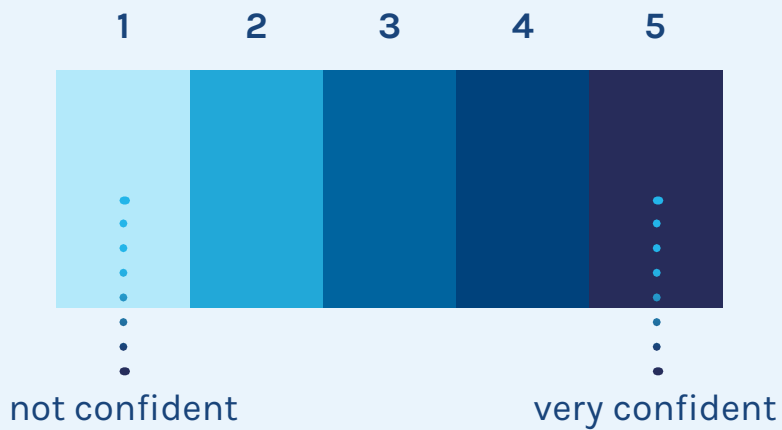
Educators need high-quality tools and insights to cultivate a generation of students who not only use AI but are also informed and responsible consumers of technology. By empowering educators and other school stakeholders to use AI in smart and responsible ways, they can save time usually spent on administrative tasks and focus instead on ways to make direct improvements to teaching and learning.



At this critical juncture in education, it is essential to recognize that AI digital literacy is not only an essential component of keeping current with shifting practices, but also **an important tool that can drastically change K-12 education as we know it.**

How confident are you about using AI?

Click to rate your confidence!





Defining AI Literacy

Achieving AI literacy requires a foundational understanding of digital literacy.

Digital literacy empowers individuals to confidently and efficiently navigate the digital tools and platforms that are integral to many of our daily functions, such as communication, education, and employment. AI literacy builds on digital literacy to encompass an understanding of artificial intelligence technologies: their applications, limitations, and social implications.

The American Library Association [defines digital literacy](#) as "the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills." It involves understanding how to use digital devices, the internet, and software to communicate, collaborate, and problem-solve. Digital literacy fosters the critical thinking skills necessary to evaluate the credibility of online information, navigate the internet safely, and protect personally identifiable information (PII). It also helps internet users understand cybersecurity best practices to mitigate the chances of data breaches and hacking.

AI literacy expands on the understanding of digital literacy to encompass AI systems and technologies. In the report from Digital Promise, "[AI Literacy: A Framework to Understand, Evaluate, and Use Emerging Technology.](#)" the authors write, "AI literacy includes the knowledge and skills that enable people to critically understand, evaluate, and use AI systems and tools to safely and effectively participate in an increasingly digital world." This "understand, evaluate, use" framework supports and simplifies AI literacy acquisition for both teachers and students.

AI literacy builds on digital literacy to encompass an understanding of artificial intelligence technologies: their applications, limitations, and social implications.



In "[What Is AI Literacy? Competencies and Design Considerations](#)," scholars at the Georgia Institute of Technology define AI literacy as "a set of competencies that enables individuals to critically evaluate AI technologies; communicate and collaborate effectively with AI; and use AI as a tool online, at home, and in the workplace."



Per that article, these competencies are:

- 1 Recognizing AI**
Distinguishing between technological artifacts that use and do not use AI.
- 2 Understanding "Intelligence"**
Critically analyze and discuss features that make an entity "intelligent," including discussing differences between human, animal, and machine intelligence.
- 3 Interdisciplinarity**
Recognize that there are many ways to think about and develop "intelligent" machines. Identify a variety of technologies that use AI, including technology spanning cognitive systems, robotics, and ML (machine learning).
- 4 "General" vs. "Narrow" AI**
Distinguish between general and narrow AI.
- 5 AI's Strengths and Weaknesses**
Identify problem types that AI excels at and problems that are more challenging for AI. Use this information to determine when it is appropriate to use AI and when to leverage human skills.
- 6 Imagine Future AI**
Imagine possible future applications of AI and consider the effects of such applications on the world.

AI Literacy Checklist

Check off the boxes below as you build on your AI competencies!

Recognizing AI

Understanding "Intelligence"

Interdisciplinarity

"General" vs. "Narrow"

AI's Strengths and Weaknesses

Imagine Future AI

How can technology be "smart"?

The term "artificial intelligence" succinctly captures what this technology does.

Machines and algorithms are programmed to think, learn, and execute tasks in a way that simulates human intelligence, hence the word "artificial." "Intelligence" refers to the "smart" capabilities of this technology: problem-solving, conversing, building, analyzing, predicting, and more.

Humans teach AI algorithms by exposing them to large quantities of data. They train the model what to do with this data: interpret inputs and produce outputs. Over time, this "learning" deepens as the AI increasingly understands which outputs are preferred over others, sharpening its ability to understand and apply its "intelligence."

For example, in 2010, Apple® first introduced Siri®. Its speech recognition function was well-developed, but it only understood "stiff," or precisely worded, user commands. Siri was unable to put follow-up questions in context with earlier questions, leading to irrelevant or confusing responses. Over time, Siri "learned" how to perform better to become the tool we know today. Now, we can ask Siri for information retrieval, entertainment recommendations, or even to make an adjustment to our thermostat.

The abilities of AI to replicate human-like intelligence often leads people to believe AI is an all-knowing, always-correct entity. And while AI can indeed simulate much of what the human brain does, its decisions "aren't driven by the same kind of nuanced and creative reasoning a human can perform," the article ["AI Literacy, Explained"](#) notes.

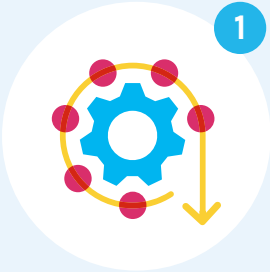


In that article, Hadi Partovi, the CEO of Code.org, elaborates: "[AI is] really advanced guesswork. AI right now is based on probability and statistics. It makes errors. It can spread misinformation. It can have bias. Understanding how it actually works underneath is important so that people recognize [its] weaknesses."

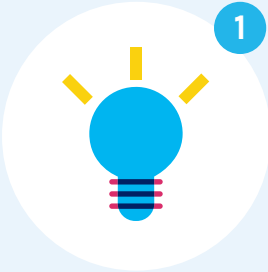
Both digital and AI literacy hinge on an ability unique to the human brain: the skills to think critically about, evaluate, and appraise information. The creative thinking and nuanced reasoning of the human brain are far more advanced than present-day AI capabilities.

What AI can do

What you can do



1 Process big data efficiently and accurately.



1 Understand what AI can do and how it works.



2 Learn algorithms for independent problem-solving, decision-making, or task performance.



2 Use AI for appropriate contexts and purposes.



3 Build intelligent systems that can operate without human intervention.



3 Evaluate the benefits and costs of AI to ensure responsible, ethical use.

Why AI Literacy Matters in K-12 Education

The education field is already thinking about ways AI will improve teaching and learning. Initial ideas include:

- Using **virtual reality** to bring career-connected learning opportunities and career simulations to classrooms
- **Personalizing** learning at scale
- Improving **teacher tools** (automating administrative tasks, grading, attendance, etc.)
- Generating **curriculum** and lesson plans
- Bringing **high-quality education** to under-resourced communities
- **Using data** to make policy decisions and improve student outcomes

While it's exciting to imagine the ways education can transform as AI innovations develop, AI literacy in education matters for another very important reason: today's students will be living in a world where artificial intelligence will be nearly everywhere. As professionals in charge of preparing students for everything that comes *after* their formal education is complete, educators have a responsibility to make sure their students can succeed in the "age of AI."

[Alex Kotran, CEO and co-founder of the AI Education Project](#), says to EdWeek, "Fast forward 20 to 30 years from now—the biggest determinant of whether somebody has had a pathway to prosperity or opportunity will be tied to whether they were given the opportunity to build AI readiness, whether their school had been thinking proactively about that."

Ensuring student success tomorrow means building AI literacy today.





The Language of AI

To speak knowledgeably about AI and computer science, there are fundamental concepts that are important to know.

While by no means comprehensive, this glossary clarifies some of the jargon often used in the field.

AI Glossary

ABCDEFGHIJKLMNOPQRSTUVWXYZ

▶ **Algorithm**

A set of instructions or rules that teach machines how to learn, analyze data, recognize patterns, and make decisions.

▶ **Artificial intelligence (AI)**

The science of making "smart" technology that can mimic human thinking.

▶ **Autonomous systems**

Tools and technologies that are advanced enough to operate with limited human oversight or involvement.

▶ **Bias**

Distorted outputs or potentially harmful information or outcomes generated by AI because of an algorithm containing human bias that skews AI training and learning.

▶ **Big Data**

Data sets that are too large or too complex to be analyzed using traditional data-processing applications.

▶ **Deep learning**

A method of AI that teaches computers to process data and information like the human brain to produce accurate insights and predictions.

▶ **General AI**

A type of AI that understands, learns, and applies knowledge across a wide range of tasks at a level comparable to human intelligence.

▶ **Generative AI**

AI technologies trained on deep learning models to generate text, images, and other content, typically in response to user prompts.

▶ **Large language model (LLM)**

Machine learning models that can understand, generate, and interact with human language. LLMs leverage neural networks to achieve high levels of language proficiency and are used for tasks such as translation, summarization, question-answering, and creative writing.

▶ **Machine learning (ML)**

The science of making computer systems that can learn and adapt from data without an explicit set of instructions or rules.

▶ **Model**

Software that has been trained on a specific set of data to perform certain tasks, e.g. identifying and filtering email spam, matching riders with ride-hailing services, and finding potential matches on dating apps.

▶ **Narrow AI**

AI systems that are designed and trained to perform only specific tasks or solve definite problems, operating within a limited and pre-defined scope and incapable of generalizing knowledge to other areas.

▶ **Natural language processing (NLP)**

A branch of AI concentrated on teaching computers to comprehend, generate, and manipulate human language (such as Siri® and Alexa®).

▶ **Neural network**

A machine learning model that makes decisions in ways inspired by biological neural networks in the human brain to identify information, consider options, and draw conclusions.

▶ **Reinforcement learning**

A technique used in machine learning that instructs software to make decisions that will achieve the most optimal outcomes—akin to human trial-and-error learning.

▶ **Training**

Feeding curated data to an algorithm to help the system refine its intelligence and produce accurate responses to user questions.

Understanding the basic terminology of AI fosters a deeper understanding of the technology at work. It also helps with the ability to know what kind(s) of AI can be most helpful in specific situations. For example, generative AI can help a teacher write an assessment, while analytical AI can study student performance data to support personalized learning.

As AI continues to rapidly advance, staying informed helps ensure skill relevance and can inspire new innovations.

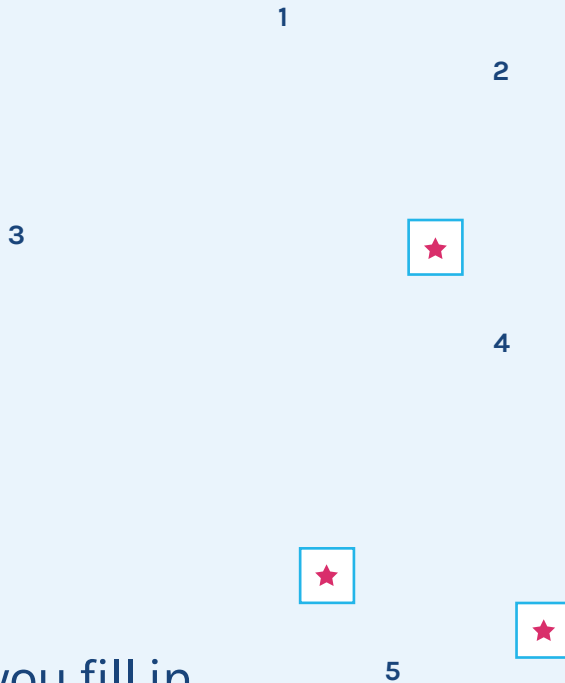
AI Crossword Puzzle

DOWN

1. Machines or software that function without human intervention.
2. ChatGPT, for example.
3. AI's predictive framework.

ACROSS

3. The field of training AI for pattern recognition.
4. A sequence of instructions to train AI.
5. Teaching an AI model what to do.



Can you fill in
all the blanks?

Answers: DOWN - 1. Autonomous Systems, 2. Generative AI, 3. Model; ACROSS - 3. Machine Learning, 4. Algorithm, 5. Training.



The Ethics of AI

Think about it...

If a driverless car experiences a brake failure and has to come to a stop as safely as possible, **how does it decide which method is safest?**

A machine was trained to study every feature in 200 Rembrandt paintings, then produced its own portrait in Rembrandt's style. **Who is the artist of the portrait?**

AI holds significant promise to transform nearly every corner of our lives. However, the integration of AI into daily life also brings critical ethical and social complexities to the forefront.

Addressing these implications is essential for ensuring that AI technologies are used responsibly and ethically.

Responsible users of AI should be conscious of how AI technology is developed, how it's used, how it's been tested for bias and fairness, and how it ensures privacy and data security.

The purpose of developing AI algorithms is to create systems and solutions that can perform jobs which typically require human intelligence. How that development occurs must meet ethical standards that ensure fairness, accountability, and transparency.



Privacy and Data Security

AI used in school settings typically requires access to large amounts of student data, which may include personal information, academic records, behavior patterns, IEP documentation, and more. The collection and use of such data raises privacy and data security concerns. Schools must ensure that data is collected and stored securely, with strict control over who has access to the systems. Transparency about data usage and obtaining consent from both students and parents are essential practices.

Additionally, to help ensure data remains safe, it's a best practice to bring AI to the data instead of pushing the data to external AI platforms. This approach ensures that sensitive student data remains within a secure, school-controlled environment that is protected by stringent data governance, security, and privacy controls to minimize the risks associated with third-party data handling.



Think About It...

Check out the case study below and reflect on the following questions.

In 2024, a large school district experienced a cyberattack motivated by "intent to sell student and employee data."

- Do you know which companies and websites (banks, retail websites, mobile payment apps, etc.) have saved and stored your PPI?
- Have you scaled down your PPI as much as you can by providing the above companies and websites with the least amount of information possible?
- How have you locked/secured that data? Is it password protected? Does it require 2-factor authentication?
- Can you "clean house"? Which companies and website no longer need your PPI? Can you delete it yourself?
- Plan ahead. Expect that at one point your PPI will be compromised. What will you do to mitigate the damage?

Bias and Fairness in AI

AI algorithms can perpetuate and even exacerbate existing biases based on the data they're trained on. This may lead to inequitable treatment of students based on race, gender, socioeconomic status, or other identifiers.

For example, developers and users of AI systems in education must be conscious of AI-perpetuated bias when using predictive analytics for student performance. Often, schools rely on predictive analytics to identify students who are at risk of failing a class or dropping out of school. The AI behind these analytics uses data from attendance records, grades, socioeconomic status, and behavior patterns to predict future student performance and recommend interventions.


If the training data used to develop these predictive models contains historical biases, the AI system will inherit and perpetuate those biases.

If students from certain racial or socioeconomic groups have historically received lower grades or fewer opportunities due to systemic inequities, the AI will likely predict a lower performance for current students with identifiers in those groups, regardless of their actual potential or current performance.

Likewise, schools might document behavioral issues more frequently for students of certain demographics due to unconscious bias among staff. If the AI system is trained on this biased data, it could unfairly flag students for likely disciplinary action.

To mitigate these biases, schools and AI developers must diversify the data they use to train AI to ensure it is truly representative and free of historical bias. And, as with all AI, human oversight is essential. While AI may *mimic* the intelligence of the human brain, it is *not* a human brain. AI predictions are guesses. These guesses should be reviewed by a human capable of a more nuanced understanding of student needs. As a school district, when considering education technology partners, choose those demonstrating responsible practices.



 It is essential for schools and districts to conduct their own due diligence when considering AI systems. Before implementing any AI tool, education organizations should:

- 1 Ask vendors for detailed documentation on how their AI systems are trained, including the datasets used.
- 2 Request transparency reports and audit results related to bias testing.
- 3 Engage independent third parties to evaluate the AI products for fairness and bias.
- 4 Continuously monitor the AI systems for bias after deployment and make necessary adjustments based on findings.

Think about it...

In 2014, engineers at a large corporation **created an algorithm** intended to help recruiters identify top engineering applicants more efficiently. The problem? **It had been trained predominantly on resumes of male candidates—and developed a bias against women.**

What types of bias might appear in AI algorithms used in education, and how might they impact student outcomes? **How can you help reduce bias in AI tools?**

AI Use in Education

The use of AI in educational settings should prioritize ethical considerations to ensure technology truly enhances teaching and learning without causing harm. Obtaining explicit consent from students and parents is essential before implementing AI systems and tools that collect and use personal data.

Additionally, schools should clearly communicate to students, families, staff, and other stakeholders how their AI systems work and how they use data to make decisions. In addition to building trust, transparency helps users understand the benefits and limitations of current AI technology.

Preparing for the potential long-term consequences and benefits of AI is crucial for schools to sustainably integrate AI technologies. Schools should always be anticipating technological advancements and foreseeing potential challenges. Continuously monitoring and evaluating the impact of AI on teaching and learning helps identify emerging issues and allows educators to adapt to evolving innovations.



Balancing Ethics and AI ROI in Schools

While there are many ethical considerations to keep in mind while adopting AI technology, the long-term return on investment (ROI) of AI tools in school settings is significant.

With responsible implementation, educators will benefit from:

Scalable personalization

AI can provide personalized recommendations and solutions tailored to individual student needs. This can improve student outcomes, leading to long-term benefits.

Cost savings

By automating processes and reducing the manual administrative burden, AI can lower operational tasks and give time back to teachers and staff. This saved time can be spent directly interfacing with students, taking advantage of professional development opportunities, learning new technologies, collaborating with PLCs, and more. Over time, this can lead to improved student outcomes, elevated excellence in teaching quality, and improved teacher morale.

Improved accuracy

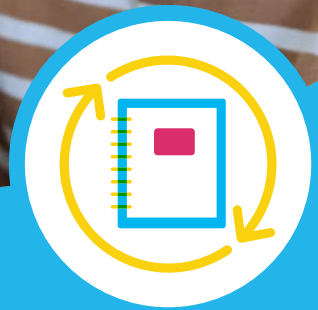
AI systems can analyze student performance data to provide more accurate assessments and personalized feedback.

Predictive analytics

AI can analyze historical data to predict student performance and identify students at risk of falling behind, dropping out of school, or engaging in worrisome behavior. Early intervention with those students increases their likelihood of staying in school.

One-to-one student support

Delivering real-time feedback, AI equalizes the amount of attention and support students receive. Rather than spending a disproportionate amount of time working with a particular student or group of students, teachers can be attentive to the entire class and know that personalized, individual support is available to every learner.



Creating an Effective AI Literacy Curriculum

All students, regardless of their interest in computer science, should develop essential AI skills and knowledge. As with digital literacy, these competencies are learned most effectively when they are integrated into existing content curricula.

Before students graduate high school, they should be familiar with:



Technical Skills

Software Utilization

- Can students use a variety of tools relevant to different disciplines (ex: data analysis for science, language processing for English?)

Tool Selection

- Can students select which AI tool is best suited for a specific project or task, displaying an ability to leverage technology intelligently?

Information Literacy

Effective Search Strategies

- Can students use AI to find the information they need, demonstrate advanced search techniques, and filter results?

Evaluating Sources

- Can students discern credible sources and verify the accuracy of information provided by AI systems?

Media Literacy

Content Analysis

- Can students understand and analyze AI-generated content? Can they recognize potential biases and misinformation?

Content Creation

- Can students make engaging and appropriate digital content using various AI tools?

Privacy and Security

Personal Information Protection

- Do students know how to protect their personal information and understand privacy settings in a variety of AI tools?

Security Practices

- Do students understand best practices for maintaining security in the digital space, such as recognizing phishing attempts and securing passwords?

Communication and Collaboration

AI in Communication

- Do students understand how to enhance their communication skills by integrating AI in their emails, social media posts, and video calls?

Collaborative Platforms

- Can students work effectively with others by using AI-enhanced collaborative tools to facilitate group projects and teamwork?

Critical Thinking and Problem Solving

AI for Problem Solving

- Can students effectively use technology to find solutions by incorporating AI tools into problem-solving exercises across subjects?

Evaluating AI Results

- Can students think critically about the outputs and implications of AI systems, including biases, errors, and misinformation?

Ethical Use

Intellectual Property

- Do students understand intellectual property rights and the importance of recognizing and citing other peoples' work when using AI tools?

Digital Footprints

- Do students understand how they create a digital footprint and the long-term impact of their online behavior? Do they use AI technologies responsibly and ethically?

Adaptability

Lifelong Learning

- Do students understand that AI will be constantly evolving and advancing, and they are responsible for their own learning to keep up with the technology?

Embracing New Technologies

- Are students fully prepared to become members of a rapidly evolving digital landscape and equipped with the necessary skills to learn new tools and technologies?

Weaving AI literacy into existing curriculum doesn't have to be a huge undertaking.

Easy, practical steps for implementation include:

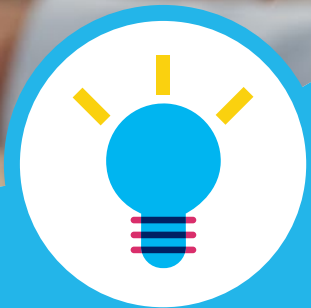
- Designing cross-disciplinary projects that require the use of multiple AI tools
- Incorporating AI into lesson plans by moving some activities to a digital platform
- Using AI tools to access information such as real-world data sets for math and science classes
- Introducing digital content creation tools to art classes
- Leveraging AI-powered language learning tools in foreign language classes
- Letting students experiment with AI tools that can compose music and analyze musical patterns

Integrating AI literacy into the existing curriculum ensures a holistic approach that helps students understand AI literacy not as an isolated skill but rather as an essential component of a modern education.

AI Literacy Rubric

How are your students doing?
Use the scale below to assess each category.

	Needs Improvement	Developing	Proficient	Exceeds Proficiency
1. Technical Skills				
2. Information Literacy				
3. Media Literacy				
4. Communication and Collaboration				
5. Privacy and Security				
6. Critical Thinking and Problem Solving				
7. Ethical Use				
8. Adaptability				



AI Best Practices

AI is poised to bring tremendous benefits to K-12 education.

To get the most from those benefits, educators, administrators, and other stakeholders should follow some key guidelines for best practices.

Prioritize Student Privacy and Data Security

- **Data Minimization:** Collect only the data necessary for the intended purpose.
- **Encryption and Security:** Partner with education technology providers that use strong encryption methods and robust security protocols to protect student data.
- **Access Control:** Limit data access to essential personnel only and ensure that consent is obtained before data sharing.
- **Transparency:** Clearly communicate how data is collected, used, and protected, ensuring students and parents understand and consent to these processes.

Ensure Equity and Accessibility

- **Inclusive Design:** Develop and choose AI tools that accommodate diverse learning needs and best serve the school's students and staff.
- **Resource Allocation:** Provide equal access to AI tools and the necessary technology to all students, addressing the digital divide.
- **Mitigate Bias:** Regularly evaluate AI systems for biases and take corrective actions to ensure fair treatment of all students.



Maintain Human Oversight

- **Augment, Don't Replace:** Use AI to support and enhance the efforts of educators, not to replace human interaction and judgment.
- **Continuous Monitoring:** Regularly monitor AI systems to ensure they are functioning as intended and making appropriate decisions.
- **Professional Development:** Train educators to effectively use AI tools and understand their limitations.

Promote Ethical Use

- **Ethical Guidelines:** Develop and adhere to ethical guidelines for AI use in education, focusing on transparency, accountability, and fairness.
- **Student Awareness:** Educate students about AI, its benefits, and its ethical implications, fostering a culture of responsible AI use.
- **Stakeholder Involvement:** Involve teachers, students, parents, and the community in discussions about AI implementation and its impact.

Focus on Pedagogical Value

- **Educational Goals:** Ensure that AI tools are aligned with educational goals and curricula, enhancing learning outcomes.
- **Feedback and Adaptation:** Use AI to provide real-time feedback and adapt learning experiences to meet individual student needs.
- **Balanced Approach:** Combine AI-driven personalized learning with collaborative, project-based, and experiential learning methods to develop a well-rounded educational experience.

Foster a Growth Mindset

- **Encourage Exploration:** Allow students to explore and experiment with AI technologies, fostering curiosity and innovation.
- **Skill Development:** Integrate AI literacy into the curriculum, teaching students critical thinking, problem-solving, and ethical considerations related to AI.
- **Future Readiness:** Prepare students for future careers by equipping them with skills relevant to an AI-driven world, such as coding, data analysis, and AI ethics.

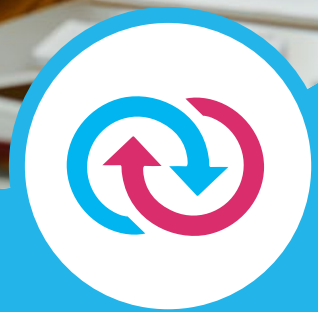


Pop Quiz!

Answer True or False.

You should collect and store as much student data as you can.	True False
Once implemented, AI tools can be trusted to operate fairly and equitably.	True False
AI does not "replace" teachers, but rather supports and enhances teaching.	True False
Schools and districts should develop ethical guidelines for AI use and hold all stakeholders accountable to those standards.	True False
All AI tools can support educational goals and curricula.	True False
AI literacy benefits not just classroom learning, but students' post-graduate lives as well.	True False

Answers: 1. False 2. False 3. True 4. True 5. False 6. True



Integrating AI in K-12 Education

Sometimes it feels like every day brings a new tech tool for educators to learn. In "[Designing for Education with Artificial Intelligence: An Essential Guide for Developers](#)," the writers note, "Just as educators are gaining familiarity with text-oriented chatbots, industry is advancing and releasing multimodal capabilities that add new layers to the potential risks."

But modeling AI use for students doesn't have to be fancy or complicated. In fact, there are many systems that use AI that are free and readily available to help students and teachers.

Both [ISTE](#) (the International Society for Technology in Education) and [Teach AI](#) have robust libraries of AI resources for schools and educators. These organizations are committed to empowering teachers and classrooms with technology tools that center student needs, are agile and responsive to feedback as the technology changes, and improve the educational experience for everyone.

Subject-Specific Examples of AI in Education

Subject	Resource	Use Case
Math	Adaptive learning platforms	Can provide personalized instruction, including targeted practice and real-time feedback
Science	Virtual labs	Students can conduct hands-on experiments without needing physical lab equipment
Language Arts	AI writing assistants	Can help students consider grammar, style, and originality
Social Studies	AI-driven simulations	Can bring game-based learning on history, civics, and government to students
Art	Diffusion models	Students can make AI-generated images using this generative AI algorithm that creates art from text-based prompts

Leveraging AI for Student Engagement

Research has clearly established that the most significant factor influencing student learning is engagement. AI can analyze student data to identify individual learning styles, strengths, and areas for improvement, creating personalized learning paths that cater to each student's unique needs. Adaptive learning platforms and personalized feedback can increase student motivation and engagement, customize content to enhance student understanding, and provide support for diverse learning needs without placing more burdens on the teacher.

Interactive and immersive learning experiences use virtual reality (VR), augmented reality (AR), and gamification to make abstract concepts tangible. Gamified learning activities can adapt to student performance, keeping them engaged and motivated by providing adequately challenging material.

Intelligent tutoring systems can help alleviate systemic inequities by making personalized support available to all, supplementing classroom instruction. With real-time feedback, students receive personalized attention whenever they need it.

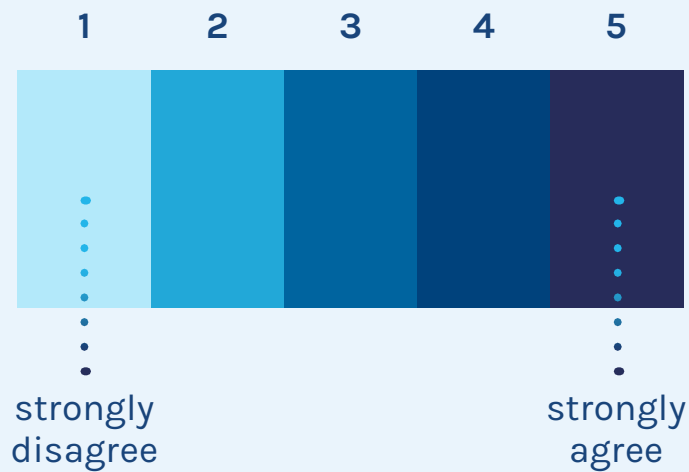


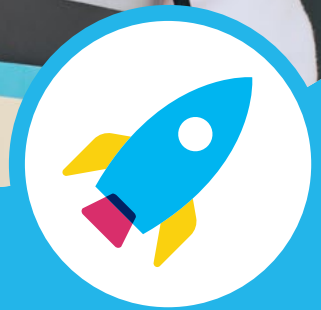
What Could AI Do for Your School?

- Identify and improve systemic inequities
- Personalize learning at scale
- Give time back to teachers and administrators
- Bring students on digital field trips to any country and historical moment with VR (virtual reality)
- Address and improve efficiencies in school operations such as facilities and IT management, bus schedules, and food services
- Create lesson plans and assessments
- Guide career exploration and postsecondary planning
- Tutor students one-to-one with real-time feedback


Pause and Reflect:

I feel more confident about my AI literacy





The Future of AI in Education



AI offers unprecedented opportunities to enhance teaching, learning, and school operations.

As we lean into this technological revolution, it is imperative to cultivate AI literacy in all stakeholders in the school community: students, educators, staff, administrators, and families.

This eBook has explored various facets of AI in education, including why it's essential to understand how AI works, why social and ethical implications are inevitable with AI use, what AI best practice looks like, and how educators can leverage AI in their classrooms to help build their students' AI literacy.

Understanding AI is no longer optional; it is necessary to adequately prepare students for their K-12 and post-education lives. In a school setting, when educators implement AI tools effectively, they can create engaging and personalized learning environments that foster critical thinking, problem-solving, and preparedness for a world where AI touches nearly every aspect of life and work.

Implementing AI in education requires strong ethical principles underpinning its use. Ensuring fairness, accountability, and transparency in AI systems helps prevent damage from biases and promotes equitable access to technology.

The future of AI in education is filled with possibilities. Though at times it may feel daunting, embracing AI in K-12 education empowers both educators and students to confidently navigate a complex digital world.

As we move forward, we should remember, too, that AI is a tool, not a replacement for humans and their work. In his New York Times article, "[In the Age of A.I., Major in Being Human.](#)" David Brooks writes, "AI will probably give us fantastic tools . . . At the same time, AI will force us humans to double down on those talents and skills that only humans possess. The most important thing about AI may be that it shows us what it can't do, and so reveals who we are and what we have to offer."

The transformative power of AI in education will likely re-create the concept of "schooling" as we currently know it. AI holds the potential to reshape the essence of learning, making it more personalized, inclusive, and equitable. By harnessing the abilities of AI, we can break down systemic barriers, ensure equitable funding and resource allocation, and create an education system where every student is seen, celebrated, and supported as the unique learner they are. **While the journey will have challenges, ethical stewardship and responsible use can turn AI into a force for positive change.**



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