



ARTIFICIAL INTELLIGENCE

Guidance for K-12 Classrooms



MISSISSIPPI
DEPARTMENT OF
EDUCATION

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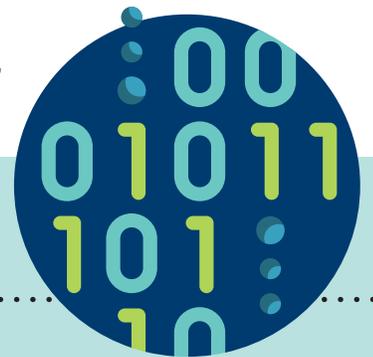
WHAT IS ARTIFICIAL INTELLIGENCE?

Artificial intelligence (AI) is the ability of a computer or computer-controlled robot to mimic human tasks that require learning, problem solving, and recognizing patterns to make predictions. Developers program AI to learn from data and then use that information to solve problems, make predictions, and emulate human thought-processes.

AI is powered by **machine learning**, which is the process that allows machines to learn from data independently. Through machine learning, computers can pull in large amounts of data in the form of images, video, text, and audio and learn to recognize patterns and make predictions.

Machine learning processes often use **large language models** that can understand and generate human language. These models, known as **generative AI**, produce content such as text, images, and audio. Google Genesis and Open AI ChatGPT are examples of generative AI that utilize machine learning and large language models.

While AI may seem like the newest tool in the world of technology, it's been working behind the scenes for decades. Today, we are surrounded by AI in our personal and professional lives, including Google search assistant, virtual assistants (e.g., Siri and Alexa), predictive text, facial recognition, medical procedures, and countless other applications.



AI IN EDUCATION

1967

1998

2024

SAINT

Student-Aligned Instruction (SAINT), the first intelligent tutoring system, was designed to teach basic Math and English Language Arts skills.

ALEKS

Assessment and Learning in Knowledge Spaces (ALEKS) was created as an adaptive assessment tool for personalized math instruction.

TODAY'S CLASSROOM

As AI has grown, so has its uses in education. Below are examples of commonly used classroom AI tools:

- Dictation (speech-to-text)
- Grammar and spelling suggestions
- Plagiarism checkers
- Live captions and translations for presentations, videos, or audio recordings
- Background noise cancellation or reduction for video or audio recordings
- Adaptive texts or assessments
- Predictive text
- Text-to-speech
- Design suggestions (such as in Google Slides or Microsoft PowerPoint)
- Real-time fluency trackers
- Translation tools for text, speech, and images { 5 }

HOW CAN AI IMPACT THE CLASSROOM?

As with any technology, the tool, device, or process itself is not right or wrong, good or bad. Rather, educators' and students' purpose and intent when using the technology determines its benefits and appropriateness. It is important to understand the potential for the misuse of AI tools, while simultaneously balancing the benefits of incorporating AI in the classroom.

AI-powered tools can:

OPPORTUNITIES

- » Adapt to students' needs for mastery of content and provide personalized learning experiences.
- » Act as a personal tutor that helps students learn at a comfortable pace and understand complex concepts.
- » Provide basic accommodations or support to students (e.g., text-to-speech or translations), freeing up teachers to focus on providing more intensive and individualized support.
- » Stimulate discussions, spark curiosity, and unlock creativity.
- » Create opportunities for students to solve problems and analyze, synthesize, and share their thinking.
- » Increase teacher productivity and student productivity.
- » Serve as a brainstorming partner for teachers to enhance lessons in their classrooms.

CAUTIONS

- » Create opportunities for cheating or plagiarizing material.
- » Provide inaccurate information.
- » Suggest information, activities, or assessments that do not adequately meet the rigor or intent of a content area standard.
- » Reinforce unfair biases through the tool's structure and design or by drawing information from data sets that lack balance.
- » Invite over reliance that may limit critical and original thinking.
- » Generate harmful or inappropriate images or disinformation.
- » Blur the boundaries surrounding content ownership, copyright, and licensing.
- » Increase data privacy and security risks depending on the technology provider's privacy and data sharing policies.

AI

ACCURACY & BIAS

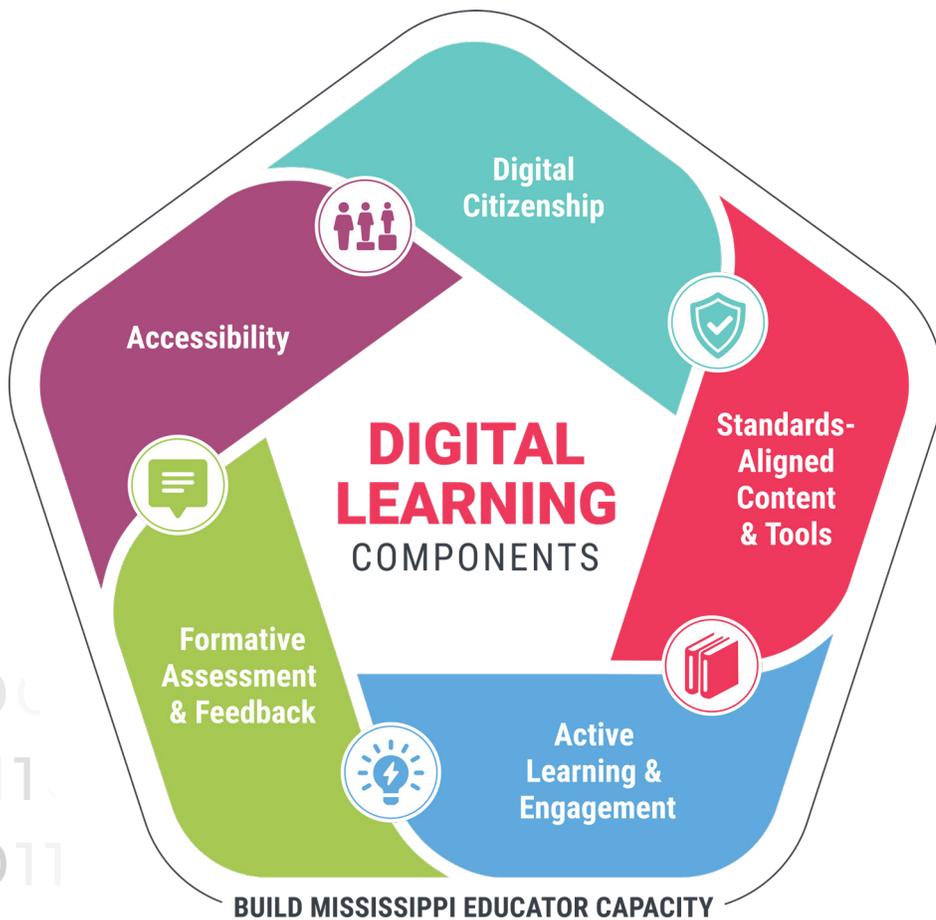
AI is only as accurate as the data it processes. AI's machine learning models draw from large data sets, often gathered from the Internet, which are not guaranteed to be accurate, as not all information on the Internet is factual. Generative AI tools like Google Genesis or Open AI ChatGPT are not specifically coded to provide accurate information. Instead, they predict the type of information needed to best fit a prompt. Additionally, AI tools reflect the biases in the data processed by the machine learning model and any biases that may be programmed into the model itself. Even rules created to eliminate bias may result in their own form of bias. Therefore, educators and students should be trained in the proper use of AI, complete rigorous accuracy checks, and guard against the potential for biased results.



HOW CAN AI BE LEVERAGED IN THE CLASSROOM?

It is important to note that AI-powered tools can never replace the human element of teaching. Educators are integral to the instructional process. They support students' learning journeys by building relationships, developing critical thinking and creativity skills, responding to student needs, providing timely feedback, and fostering ethical values. AI-powered tools can enhance classroom instruction by helping educators design personalized learning experiences and provide scaffolded support for students. In addition to instructional uses, educators and students can use AI tools, such as virtual assistants, to improve organization, productivity, and communication.

The following sections are arranged according to the five components of digital learning found in the [Digital Learning Instructional Guide](#). These five components represent areas of instructional enhancements within the learning environment, as shown in the graphic below.



Each of the five sections presents strategies for students, teachers, and administrators on the utilization of AI in the classroom.

1

AI and Digital Learning: Digital Citizenship

The first and most essential component for ensuring proper use of AI and other digital tools is developing digital citizenship skills. **DIGITAL CITIZENSHIP** includes teaching students how to be safe, kind, and responsible in a digital world, as well as how to critically analyze resources and use those resources appropriately. Instruction on digital citizenship topics should not be a one-and-done lesson each year. Instead, educators should discuss and model these skills whenever technology tools are used in the classroom.

Students, teachers, and administrators can use the following strategies to support the appropriate use of AI tools in the classroom.

STUDENTS

Know and follow the acceptable use policies developed by the school district that outline ethical student use of AI tools.	
Adhere to plagiarism and academic integrity guidelines by not directly copying information provided by AI tools and passing it off as original work.	Use generative AI tools to find information or sources about a topic, then check the validity of the information and sources.
Cite all sources used to complete assignments, including information acquired from AI tools.	Apply spam filters in email systems to help catch phishing, scam, and malware attempts.
Ask teachers about the expectations for using AI to complete classroom assignments to avoid cheating.	Employ citation generators to create properly formatted citations for a variety of sources used to complete classroom assignments.
Discuss what responsible AI use looks like inside and outside of the classroom.	Understand the accuracy of AI tools depends on the quality and quantity of the tool's training data.



TEACHERS

Know and follow the acceptable use policies developed by the school district that outline ethical educator use of AI tools.

Adhere to plagiarism and academic integrity guidelines by not directly copying information provided by AI tools and passing it off as original work.

Set clear expectations for students to use AI to complete classroom assignments to avoid cheating.

Use generative AI tools to find information or sources about a topic or lesson, then check the validity of the information and sources.

Cite all sources used to create instructional content, lesson plans, or other communications, including any information acquired from AI tools.

Be familiar with age restrictions and privacy policies of AI tools.

Require students to submit work to plagiarism checkers to determine the originality of written assignments.

Have conversations with students about the following:

- » Acceptable use policies developed by the school district that outline ethical student use of AI tools.
- » What responsible AI use looks like both inside and outside of the classroom.
- » How AI tools work, including how the quality and diversity of data sets affect the results provided by AI tools.
- » Copyright laws, intellectual property, and fair use regarding AI tools.
- » How to cite all sources used to complete assignments, including information acquired from AI tools.

Apply spam filters in email systems to help catch phishing, scam, and malware attempts.

Employ password generators to create safer passwords.



ADMINISTRATORS

Review current academic integrity guidelines and consider how they can relate to the use of AI tools, including generative AI.

Adhere to plagiarism and academic integrity guidelines by not directly copying information provided by AI tools and passing it off as original work.

Cite all sources used to create instructional content or other communications, including any information acquired from AI tools.

Offer guidance and support to staff on protecting student privacy, including COPPA and FERPA guidelines, regarding student use of digital tools and data shared with AI platforms.

Allocate time during the day for teachers to share ideas and plan learning experiences that require higher-order thinking skills, which AI systems struggle to reproduce.

Use AI tools to develop ideas and communication points to engage parents and the community in promoting digital citizenship initiatives.

Facilitate professional development sessions to support educators in integrating AI-powered digital citizenship resources into their teaching practices such as:

- » Practical strategies for teaching online etiquette, respectful communication, and adherence to digital citizenship norms.
- » Facilitating discussions about digital identity, reputation management, and the long-term implications of online actions.
- » Fostering collaboration and consistent language about online safety and responsibility.



AI

DIGITAL CITIZENSHIP

Digital Citizenship is a broad term that covers all aspects of acceptable behavior when using technology tools, including:

- Using digital tools and interacting with others safely, kindly, and responsibly.
- Feeling comfortable using the Internet, software/apps, AI tools, and devices.
- Finding a healthy balance in time spent on various digital and non-digital activities.
- Recognizing the impact of media use on emotional well-being.
- Being able to critically analyze news, information, and other media, including determining credible sources and proper use of copyrighted materials.

It is imperative that educators receive ongoing professional development to support their own digital citizenship skills and those of their students. **Topics such as when and how to use AI tools, citing sources, and critical analysis of information generated by AI tools should be discussed prior to any application of AI in the classroom.**

For more digital citizenship resources, visit mdek12.org/DLResources.



STRATEGIES TO DETER CHEATING AND/OR PLAGIARISM

Before educators can introduce strategies to deter cheating, it is helpful to pause and determine what cheating or plagiarism looks like for each assignment, student, and context. Educators should consider what assistance AI tools can provide and when that assistance crosses the line into cheating or plagiarism (i.e., the work or ideas are no longer original to the student). Once this boundary has been established, clearly articulate the criteria to students and families. (For more information, review [Matt Miller's blog](#), "AI in the classroom: What's cheating? What's OK?") Additionally, educators can employ the following strategies to deter students from using AI tools to cheat on assignment or plagiarize material.

Reiterate rules and expectations for appropriate AI use. Before the assignment begins, review both appropriate and inappropriate uses of AI tools for the specific assignment. Be explicit with the websites or tools students can use to complete the assignment and how students should cite any information or support provided by these tools. Discuss the consequences of cheating and plagiarism. Educators can consider making students acknowledge these rules, expectations, and consequences in writing as the first part of any assignment.

Know the writing style of students. Have students submit writing samples frequently to become familiar with their writing style. This will enable educators to quickly recognize if student work that deviates from their typical style is submitted.

Require students to document the writing process. Have students submit multiple unedited drafts of their work and reflections on the writing process. These drafts can be written without technology (i.e., paper and pencil) or electronically. If writing at home, educators can also require that students use a screen recording tool to document the writing processes. If writing in class, educators can circulate the room or use monitoring software to observe the writing process.

Consider how learning is being assessed. Educators should rethink how they assess students' understanding, knowledge, or skills. When possible, replace multiple choice questions with alternative assessments such as:

- » Creating real-world, hands-on projects that require students to apply their knowledge in a practical context, thus making it difficult for AI to provide the answers.

- » Using a variety of question types that require critical thinking and problem-solving skills, including questions that are open-ended, seek students' opinions supported by evidence, and include context-specific scenarios.
- » Asking students to create their own visual responses, such as charts, graphs, infographics, images, videos, or graphic organizers, that are difficult for AI tools to generate.
- » Requiring students to work collaboratively to co-construct knowledge, present information, and field questions with peers.

Educators can also provide writing prompts that do not require students to provide generic responses or basic facts. Instead, craft writing prompts specific to a context, concept, or information discussed in the classroom, require the student to express or identify motivations or emotions, or are based on individual experiences.

Review version history. Google Docs and Microsoft Word both have options to review the editing history of a document. By reviewing the version history, educators can see the edits made to a document, including if large amounts of text were copied and pasted instead of typed out.

Activate lock down browsers. When available, use lock down browsers to restrict students from finding answers to questions or writing prompts while the assignment is activated. Educators may also consider placing time restraints on activities to keep students focused on the current assignment.

Enter the assignment into an AI tool and evaluate the results. Gain an understanding of the answers that can be generated if/when students enter the prompt or question into an AI tool. Consider sharing these responses with students and discussing the accuracy of the responses. Have students evaluate the responses for accuracy, tone, and writing style.

Use AI detection tools and plagiarism checkers. AI Classifiers are detection tools that evaluate text to determine if it is AI-generated (uses predictable patterns and uniform sentences) and return results as likely or unlikely AI-generated. Some examples of these tools are [AI Content Detector](#) and [GPTZero](#). Educators should note that in most cases, these tools do not accurately detect AI-generated material, especially material that contains only a few hundred words. Additionally, these tools can falsely identify the writings of English Language students as generated material simply because their writing skills are still developing. In contrast, plagiarism checkers scan for exact or close matches of keywords, phrases, and sentences. Plagiarism checkers such as Google's [Originality Reports](#) and [Turnitin](#) are useful for these reviews. Turnitin also now features AI classifier detection.



2

AI and Digital Learning: Standards-Aligned Content and Tools

With careful evaluation, educators and students can use AI tools to help curate **STANDARDS-ALIGNED CONTENT AND TOOLS**. Educators should carefully review material or tools for alignment, rigor, and grade-level appropriateness.

Students, teachers, and administrators can use AI tools to enhance, engage, or extend learning in the following ways.

STUDENTS

Generate a list of appropriate digital tools to complete a task and compare the features of each tool.

Brainstorm ways to connect content to personal interests or career opportunities.

Act as an interactive learning assistant that can offer clarification and support for complex topics or problems.



TEACHERS

Act as a thought partner to create lessons, activities, and assessments that align to grade-level Mississippi College- and Career-Readiness (MCCR) Standards, such as:

- » Curate complementary digital instructional materials that foster cross-curricular learning experiences.
- » Align lesson goals, activities, and assessments to the skills being assessed.
- » Rewrite an existing lesson plan to focus on a specific skill, goal, or activity (e.g., focus on vocabulary development, include a project-based learning activity, etc.).

Act as a thought partner to create lessons, activities, and assessments that support personalized learning, such as:

- » Recommend complementary digital instructional materials in a variety of modalities (i.e., text, video, audio, images) to assist students with learning content.
- » Assist in creating lessons that incorporate areas of personal interest for students (e.g., a 5th grade math lesson that incorporates order of operations and sports, a popular book character, or cultural event).

Identify digital tools aligned to lesson targets or skills being assessed that can engage, enhance, or extend the learning.

ADMINISTRATORS

Support teachers as they use AI tools to help plan lessons aligned to MCCR Standards, such as:

- » Deconstructing standards, including identifying subskills.
- » Identifying common student misconceptions.
- » Making content relevant to students.
- » Critically analyze the generated or suggested content for accuracy and rigor.

Act as a thought partner to identify ways to support teachers in aligning resources to the MCCR Standards, such as:

- » Brainstorm ideas for tailored professional development opportunities.
- » Develop checklists to determine standards alignment of instruction and assessments during lesson planning or classroom observations.

Develop family and community engagement ideas and opportunities to explain to school goals related to MCCR Standards and how families can encourage learning at home.

Generate ideas for standards-related learning opportunities for school-wide initiatives or projects.



3

AI and Digital Learning: Active Learning and Engagement

AI tools can be used to incorporate creativity, communication, critical thinking, and collaboration skills into learning experiences, providing increased opportunities for **ACTIVE LEARNING AND ENGAGEMENT**.

Students, teachers, and administrators can use AI tools to facilitate classroom engagement in the following ways.

STUDENTS

Assume a particular position or personality and engage the tool to debate a topic.

Create images to illustrate a story the student has written.

Act as a character from a book, a person from history, an animal, or an object, in a specific setting (e.g., place, occupation, time, etc.), and have a conversation with the character.

Auto draw, paint, or doodle animations to accompany an assignment.

Generate story elements such as character names, settings, items, etc.

Assist with musical tasks, such as an assisted melody, duet playing, or singing.

TEACHERS

Create extension activities for a text.

Generate writing prompts for stories, essays, articles, and more.

Create personalized learning paths for students tailored to their individual needs.

Assist with musical tasks, such as an assisted melody, duet playing, or singing.

Recommend complementary digital instructional materials in a variety of modalities (i.e., text, video, audio, images) that present authentic, real-world problems and rigorous tasks and help make connections across content areas.

Auto draw, paint, or doodle animations to accompany an assignment or task.

Assist with writing classroom newsletter content.

Develop learning activities incorporate opportunities for students to use AI tools.

ADMINISTRATORS

Create a school culture that fosters the use of AI tools to promote student engagement, such as:

- » Offer workshops, training, or online resources to help teachers understand how to effectively integrate AI tools.
- » Allocate time during the day for teachers to collaborate and brainstorm ideas for using AI to support student engagement in their lesson planning.
- » Create a collaborative space for teachers to share experiences, best practices, and resources related to effective use of AI to support student engagement in the classroom.
- » Recognize and celebrate the successes of teachers who effectively integrate AI tools or activities into their teaching practices.

Generate ideas to improve engagement at professional learning communities or other professional learning opportunities:

- » Propose meeting themes or ways to align activities to school-wide initiatives or goals.
- » Develop team building activities and/or icebreaker activities.
- » Create agendas that include multiple opportunities for collaboration and discussion.

Develop social media posts, family letters, invitations, or other newsletters to share with the school and/or community.

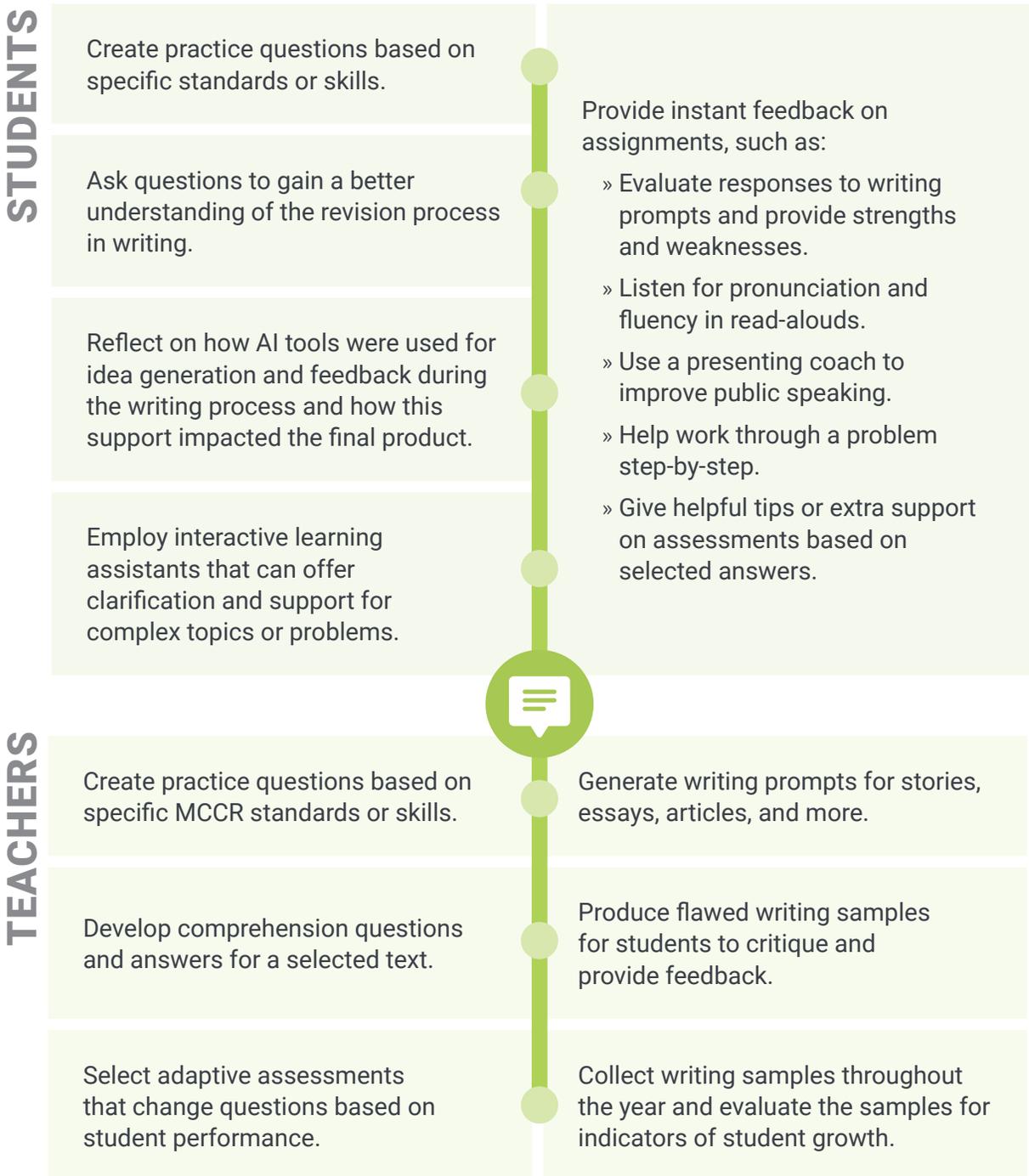


4

AI and Digital Learning: Formative Assessment and Feedback

Formative assessments help educators and students understand where students are in their learning journey and should inform instructional decisions for educators. Feedback provides students with actionable steps that lead to improvement. Various AI tools can support educators and students by redesigning **FORMATIVE ASSESSMENT AND FEEDBACK** opportunities.

Students, teachers, and administrators can use the following strategies to promote formative assessment practices and actionable feedback.



TEACHERS

Use assessment tools that provide real-time feedback or helpful tips to students based on their answers.

Provide targeted exercises and resources to address specific areas of weakness.

Use assessment tools that automatically identify correct and incorrect student responses and provide real-time insights into student performance based on skills or standards assessed.

Capture student reflections on how they used AI as a collaborative partner in the writing process.

Assist with creating rubrics to evaluate student work.

Analyze and provide constructive feedback on written assignments.

Analyze student data to identify patterns and trends to pinpoint areas for intervention or support.

Write reports and produce data visualizations based on data analysis.



ADMINISTRATORS

Analyze data to identify school-wide patterns and trends to pinpoint areas for intervention or areas for growth.

Provide trainings and resources for teachers on the use of AI to analyze student work and provide timely feedback, including:

Analyze data to determine the effectiveness of interventions as measured in terms of growth.

» Design personalized learning experiences for students based on student progress.

Develop reports from data analysis and produce supporting data visualizations.

» Analyze student data to identify patterns and trends to pinpoint areas for intervention or support.

Create checklists to recognize effective teaching practices based on the Professional Growth Rubric and examples of evidence that can be collected.

» Generate sample student goals for students based on data collected.

» Assist with creating rubrics to evaluate student work.

Supply feedback to support teachers after classroom observations or lesson plan reviews.

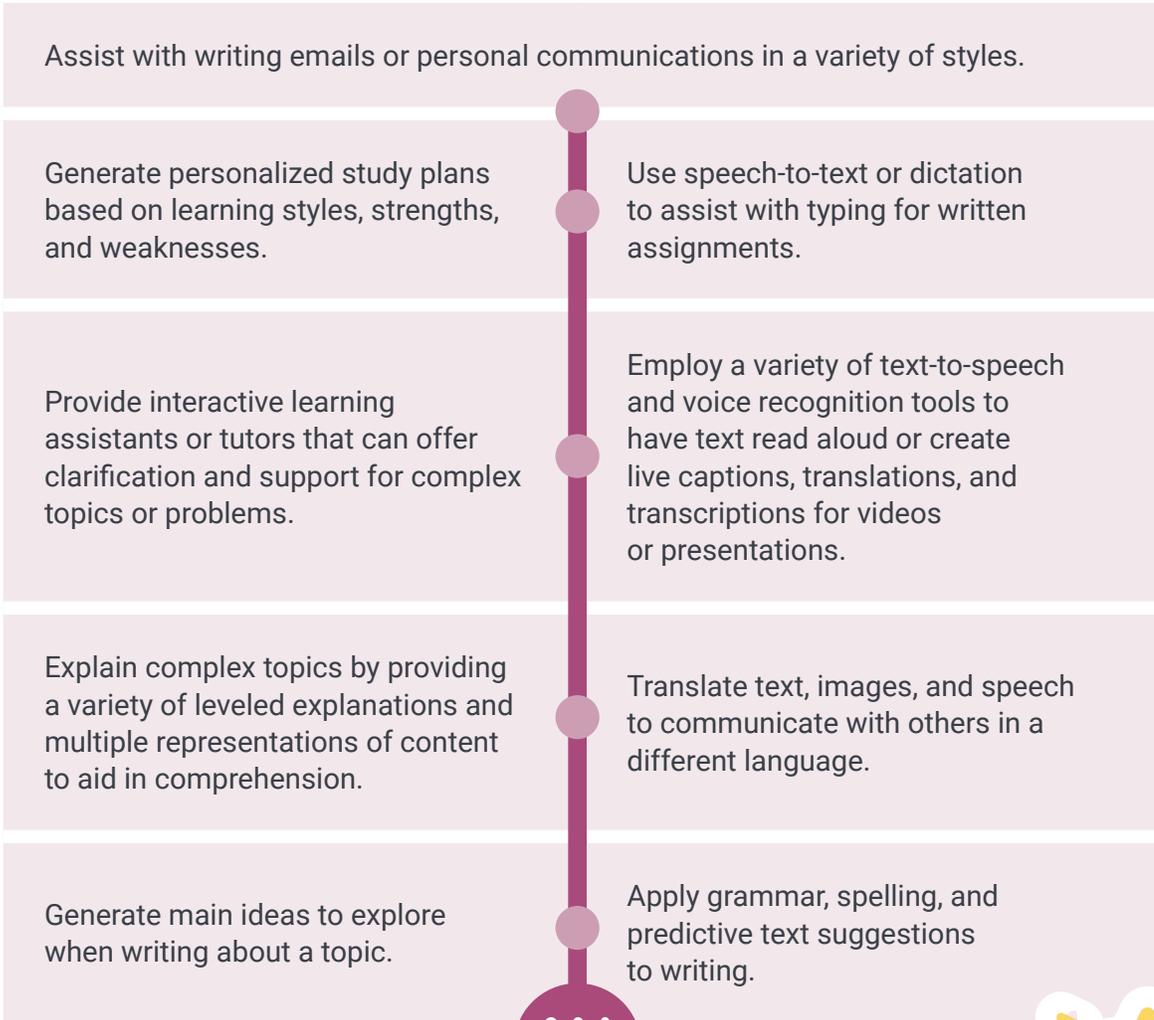
5

AI and Digital Learning: Accessibility

Perhaps the most powerful use of AI tools in place today is the ability to provide personalized, targeted support for students. By improving the **ACCESSIBILITY** of instructional materials and providing scaffolded support to help students complete learning activities, educators can help ensure that ALL students achieve success.

The following strategies empower students, teachers, and administrators to leverage AI tools to meet their individual needs or the needs of their learning community.

STUDENTS



ADAPTATIONS & SCAFFOLDING

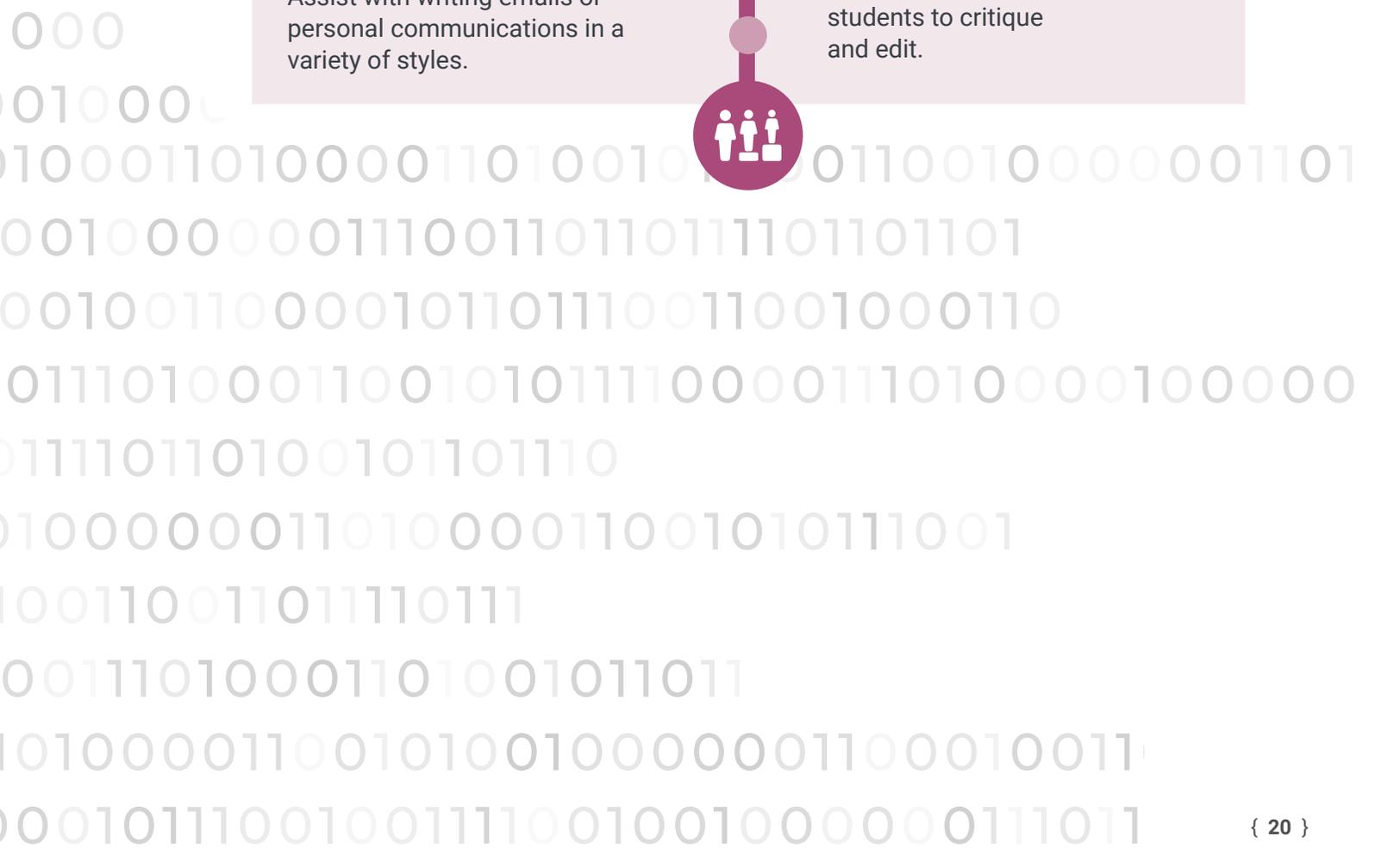
Students must know how and when to use technology to support and personalize their learning. Educators should guide students in the operation and use of these technologies and set clear expectations for their appropriate use. Additionally, educators should be mindful of properly scaffolding these supports, gradually reducing students' reliance on these tools. For more information on appropriate adaptations and scaffolding for ALL students, please review the [Access for All Guide 2.0](#).



TEACHERS

- Use speech-to-text or dictation to assist with typing.
- Employ a variety of text-to-speech and voice recognition tools to have text read aloud or create live captions and transcriptions for videos or presentations.
- Translate text, images, and speech to communicate with students and families who may speak a different language.
- Apply grammar, spelling, and predictive text suggestions to writing.
- Assist with writing emails or personal communications in a variety of styles.

- Create personalized learning materials, such as:
- » Explain complex topics by providing a variety of leveled explanations and multiple representations of content to aid in comprehension.
 - » Determine the reading level of a text and rewrite it at a lower or higher level.
 - » Summarize the text and make a bulleted list of key points.
 - » Identify potentially difficult words in the text and list them with definitions.
 - » Rewrite a text in a different style or from a different perspective (e.g., genre, person, etc.) to help understand the content.
 - » Generate model writing for students to critique and edit.



ADMINISTRATORS

Create an environment that supports the exploration and appropriate use of tools that can improve the accessibility of instructional materials, including:

- » Organize professional development focused on best practices (with real-world examples) of how AI can be used to support students with diverse learning needs, including students with individualized education plans (IEPs).
- » Allocate time for teachers to brainstorm and design lessons that incorporate AI-powered accessibility tools.
- » Create a collaborative space for teachers to share their experiences, resources, and strategies for using AI technologies to promote accessibility.

Act as a thought partner to brainstorm ways to implement accessibility tools or personalized learning strategies, such as:

- » Incorporating the use of translation tools, live captions, transcriptions, etc.
- » Ideas for scaffolding assignments based on students' deficit area (i.e., academic, physical, speech, social emotional, behavior, or organizational).
- » Reading supports, including leveling text, vocabulary lists, summaries, etc.
- » Generate social stories or brainstorm solutions for students who need additional behavior support.

Use speech-to-text or dictation to assist with typing.

Apply grammar, spelling, and predictive text suggestions to writing.

Translate text, images, and speech to communicate with students and families who may speak a different language.

Assist with writing emails or personal communications in a variety of styles.



WHAT SHOULD BE CONSIDERED WHEN CREATING POLICY FOR AI USE?

While AI can empower educators and students and improve productivity, concerns about privacy, security, plagiarism, and cheating have caused school districts nationwide to prohibit the use of some AI tools. However, AI works in the background of many technology tools and students can make use of these tools outside of the school setting. This unregulated access makes the banning of AI tools impractical and does not provide a solution to security and appropriate use concerns. In fact, districts can create a more significant risk by doing nothing to address AI use or train stakeholders in its proper application. Therefore, district leaders should consider the following when crafting policies around the integration of AI in K-12 classrooms.

THE
**BIGGEST
RISK**
is doing
NOTHING

HADI PARTOVI
Creator of Code.org



Evaluate tools

Carefully examine AI tools to determine if they are appropriate for education use, including the technical (privacy and security), functional, and instructional features. Remember that educators and students may use AI tools differently.



Adhere to security guidelines

Know how student data privacy policies impact the use of AI tools. Carefully examine the privacy policies of AI tools to ensure compliance with FERPA and COPPA.



Promote benefits and mitigate risks

Ensure educators and students understand the benefits and risks of using AI in the classroom. Write policies that support the positive uses of AI tools and reduce the risks of inappropriate use. Be sure to set clear consequences for the misuse of AI tools.



Monitor use

Assist educators in monitoring student use of AI tools through classroom observation or monitoring software. Provide training so educators understand the students' experience when using the tools.

Detect plagiarism

Weigh the pros and cons of providing educators access to AI detectors and plagiarism checkers. Many of these detectors are costly, and they are only somewhat effective at identifying AI-generated material or plagiarized content.



Expand digital citizenship instruction

Educators should provide continuous instruction on the responsible, ethical, and productive use of AI in an educational setting. Ensure digital citizenship curriculum includes lessons on appropriate use of AI tools.



Gather feedback

Create a continuous feedback loop between district leaders, administrators, educators, students, families, and other stakeholders to better understand the use, engagement, benefits, and risks of using AI tools in the classroom. Make adjustments to policies, procedures, and training as needed.



TRAINING ON THE USE OF AI

In addition to creating policies that govern the acceptable use of AI in the classroom, district leaders should ensure educators, students, and families understand what tools are being used in the classroom and how to use these tools appropriately. Consider providing **ongoing** training that covers the following topics:

Informed use. All stakeholders should understand the district’s acceptable use policy surrounding AI tools. Stakeholders should be informed of the benefits of using AI tools in the classroom, understand the safeguards against misuse, and acknowledge the consequences of inappropriate use. Additionally, training should be provided on how to report misuse and how to seek help if negatively affected by misuse of these tools.

Check the accuracy. AI tools can often return information that is not factual and can even be used to create harmful information. Training should be provided to improve skills in **lateral reading** and fact-checking for **misinformation, disinformation, and malinformation** within AI-generated responses.

Evaluate the quality of responses. In addition to inaccuracies, AI-generated responses may not provide quality responses. AI users should be informed on ways to evaluate responses, including checking for credibility, relevancy, standard alignment, and appropriate rigor.

Acknowledge potential bias. AI tools have the potential to reinforce biases rather than eliminate them. All stakeholders should be aware of the potential for bias and discuss how this can impact the information generated by AI tools.

Lateral reading is looking beyond the original source to determine its relevancy, accuracy, and purpose.

Misinformation is false information that is not created or shared with the intention of causing harm.

Disinformation is information deliberately created to mislead, harm, or manipulate.

Malinformation is information based on fact but used out of context to mislead, harm, or manipulate.



Detect plagiarism. Educators should be taught to recognize AI-written communication, such as repetitive sentences, overly complicated vocabulary, inconsistent tone, or divergent writing styles. (See the Strategies to Deter Cheating and/or Plagiarism on pages 10-11 for additional suggestions.) If the district has purchased or approved AI detectors or plagiarism checkers, educators should be trained in the use and effectiveness of these tools.

Revamp learning activities. The potential for cheating and plagiarism exists in any learning activity. However, learning activities can be designed to discourage cheating and plagiarism. Educators should be provided professional learning opportunities that help create these types of activities and assessments. Additionally, educators can purposefully design learning activities to give students opportunities to use AI in guided, productive, safe, and ethical ways.

Expand digital citizenship instruction. Digital citizenship curriculum supports the safe and appropriate use of digital tools. Digital citizenship topics should be expanded to support AI tools, including how AI affects cyberbullying, academic integrity, information literacy, security, copyright, licensing, and fair use. All stakeholders should receive digital citizenship instruction.

Classroom policies and procedures. Explicit classroom policies and procedures will outline the acceptable use of digital tools, including when and how to use them and the consequences for misuse. Educators should receive guidance on how to develop, explain, and implement age-appropriate policies and procedures.

Understand acceptable adaptations. AI tools can provide a variety of supports to assist students with understanding content and completing assignments. Stakeholders should know when and how to use AI tools to support acceptable adaptations in the classroom.

RESOURCES

Artificial Intelligence and the Future of Teaching and Learning | US Department of Educational Technology
{ <https://tech.ed.gov/ai-future-of-teaching-and-learning/> }

AI 101 for Teachers | Code.org, ETS, ISTE, Khan Academy
{ <https://code.org/ai/pl/101> }

AI Exploration for Educators: Putting Educators and Students in the Driver's Seat | ISTE
{ <https://www.iste.org/areas-of-focus/AI-in-education> }

AI for education: Resources and learning opportunities | Microsoft Education Center
{ <https://learn.microsoft.com/en-us/training/educator-center/topics/ai-for-education> }

AI Guidance Toolkit | Teach AI
{ <https://www.teachai.org/> }

AI: Learn, Teach, Empower | aiEDU
{ <https://www.aiedu.org/> }

AI: Trainer Toolkit Guide | Microsoft
{ <https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RW1f7Tg> }

Discover AI in Daily Life (Middle and High School Lesson) | Google: Applied Digital Skills
{ <https://applieddigitalskills.withgoogle.com/c/middle-and-high-school/en/discover-ai-in-daily-life/overview.html> }

Introduction to Generative AI Learning Path | Google Cloud Skills
{ <https://www.cloudskillsboost.google/paths/118> }

Mississippi CSTA AI Labs | CSTA
{ <https://mississippi.csteachers.org/> }

Mississippi Skill-AI-thon | Mississippi AI Collaborative
{ <https://www.mississippiai.org/skillaitthon> }

Open Learning Curriculum (High School Lessons) | AI4All
{ <https://ai-4-all.org/resources/> }

Teachable Machine (Middle and High School Lesson) | Google
{ <https://teachablemachine.withgoogle.com/> }

Unlock generative AI safely and responsibly—classroom toolkit | Microsoft
{ <https://learn.microsoft.com/en-us/training/educator-center/instructor-materials/classroom-toolkit-unlock-generative-ai-safely-responsibly> }



TECHNOLOGY INTEGRATION

The resources provided within this guidance document are made available to assist educators and school and district leaders with the integration of technology into classrooms, schools, and school districts. Local schools have discretion over which technology partners and products are used in their districts. For legal advice regarding technology services, please contact your local school board attorney.

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AI TOOLS FOR THE CLASSROOM



SPEECH

Dragon Natural Speaking
{ nuance.com/dragon/industry/education-solutions.html }

Dictation tools in Microsoft and Google applications



GRAMMAR + WRITING

Jenni { jenni.ai }

Grammarly { grammarly.com }



MUSIC

The Freddie Meter
{ freddiemeter.withyoutube.com }



IMAGES

Google Lens { lens.google }

Socratic { socratic.org }

AutoDraw { autodraw.com }

Scroobly { scroobly.com }

Canva { canva.com }



EDUCATORS

Magic School AI { magicschool.ai }

Curipod { curipod.com }