

# Instructional GenAI Playbook

Version 1.0



# Table of Contents

<b>Introduction</b>	<b>3</b>
<b>Vision Statement</b>	<b>3</b>
AI in Instructional Practice Vision	3
<b>Learning about AI (AI Literacy)</b>	<b>4</b>
Foundational Knowledge: Leading with Literacy	5
Practical Applications: Training vs Learning	5
Ethical Awareness	6
Critical Thinking	7
Future-Oriented Perspective	8
<b>Instructional Practice with AI</b>	<b>9</b>
Critical Thinking: Human-in-the-Loop	9
Utilizing AI Meaningfully	10
Administrative Process Use Cases	10
Student-Facing Materials Use Cases	13
Avoiding AI Meaningfully	17
Administrative Processes	17
Student-Facing Materials	18
<b>Student Access to Generative AI</b>	<b>19</b>
Starting with Literacy	20
Teacher-Led Activities	20
Unplugged Activities	21
Transparency	21
<b>Active Generative AI Pilots</b>	<b>22</b>
<b>Alignments</b>	<b>24</b>
<b>Recommended Readings</b>	<b>24</b>
<b>Contributors and Authorship</b>	<b>25</b>
Lead Author	25
Instructional Practice	25

# Introduction

*This playbook is a resource of the [CPS AI Guidebook](#) in service of the [CPS Success 2029 Strategic Plan](#), which outlines how the District can make bold and transformational changes to instructional practice to make high-quality, culturally responsive learning more equitable. This playbook supports the District's strategic priorities of accelerating proven practices in high-quality instructional material for every student, and targeting the modernization of technology and systems in every school. Toward high-quality instructional materials practices, this playbook is aligned with the District's definition of high-quality curriculum. Toward technology and system modernization, this playbook is aligned with the District's five pillars of AI Literacy. With these goals to further the CPS Strategic Plan by accelerating high-quality instructional materials for students and prioritizing the modernization of technology and systems in schools in mind, this playbook is designed to provide guidance on using generative Artificial Intelligence in instructional practice.*

# Vision Statement

## **AI in Instructional Practice Vision**

CPS students will be responsible, innovative, and successful citizens because of their intentional use of Artificial Intelligence (AI). The primary cognitive load will remain with each student, with AI freeing them for higher-order thinking and creativity. Students will use AI as an extension of human problem-solving and not a replacement for critical thinking. Learners will communicate effectively with AI tools, interpret and evaluate outputs, and recognize AI's limitations, ultimately developing skills in human-AI interaction. Learners will use AI as a tool to personalize their experiences, solicit and evaluate feedback, and assist with their research, while maintaining learner agency. Importantly, students will also employ an understanding of the ethics of using AI, including bias, privacy, data security, and impact on the environment and energy.

# Learning about AI (AI Literacy)

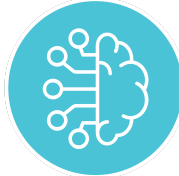
AI literacy represents developing a comprehensive understanding of AI's capabilities, limitations, ethical implications, and societal impact. Our vision of AI literacy is based on 5 pillars:



**Foundational  
Knowledge**



**Practical  
Application**



**Ethical  
Awareness**



**Critical  
Thinking**



**Future-Oriented  
Perspective**

Both students and teachers need to share a unified understanding of Foundational Knowledge and Future-Oriented perspective, but the means by which Practical Applications, Ethical Awareness, and Critical Thinking manifest change based on the audience.



## Foundational Knowledge: Leading with Literacy

Media and AI literacy serve as the foundation for making the instructional practice vision reality. Our students cannot begin to transform their learning with emerging technologies without being literate in those technologies. Our students cannot develop an informed opinion for *or against* AI without being AI literate. Both are equally true for adult stakeholders. To make progress, we have to begin with building shared understandings and expanding our foundational knowledge of emerging technologies like generative Artificial Intelligence and their impact on our lives.

## Practical Applications: Training vs Learning

Literacy is the stepping stone to responsible and effective use. When you are presented with a task, integrating AI shouldn't require exhaustive trial and error. Before you can successfully use generative AI tools, you should be able to intuit spaces in which AI could be valuable by having a clear **understanding of different tools' possible uses**. What can you do with a given tool? What are you expected to be able to do with it? A central theme of this section is to differentiate training and learning. **Training**, typically in the form of professional development, strives to provide stakeholders with the AI literacy described in the previous section. **Learning** is the process of acquiring the intended knowledge, skills, attitude, confidence through hands-on use and experimentation. Training in 'how to use a tool' is temporary while building knowledge and skills is iterative and transferable. The location of the button changes, the need for critical thinking doesn't go away.

Often, the best way to gauge how well one has internalized core knowledge or practical skills is to attempt to externalize it. In your own words, can you **describe** the core knowledge of what a foundational model is or the difference between generative and predictive AI? Can you **walk someone through** the process of creating a Gemini Gem? Once you feel comfortable and confident explaining, the next step is to build an action plan for taking advantage of your literacy. How can you **use** Gemini, for example, in your classroom or workflow? What's one **strategy or tool** you could use to improve your communications with students, teachers, or colleagues? What's one **next step** you will take to move forward in streamlining your more time consuming practices? If you have clear answers to these questions, get experimenting! If you don't, you have the blueprint to seek further advice or training and you're one step closer to putting what you've learned into practice.

*For an in-depth discussion on practical applications of AI for educator-facing and student-facing instructional practices, see the next section: [Instructional Practice with AI](#).*

## Ethical Awareness

A core competency of AI literacy is not just knowing when or why an AI tool may be used, but to also understand the societal and ethical implications of utilizing it. From personal impact to data privacy responsibilities to broader societal implications, students and teachers alike need to be cognizant of the ethical conversations surrounding AI. When using AI within their instructional practices, teachers need to be particularly ethically aware of data privacy risks. To ensure a product meets data privacy standards, CPS vets potential tools in part using questions included in the [1EdTech](#) and [EDSAFE](#) rubrics. Teachers can review these public rubrics themselves, and consider how they apply to their AI use with their students. Student data should never be input into Gemini or other approved AI tools while not logged in to your CPS account, nor should it ever be entered into any blocked or unapproved AI tools, as they may train on this data.

Not only are instructors responsible for their own engagement with generative AI tools, they are also uniquely capable of supporting students by modeling ethical considerations in real time. This may look like engaging an individual student or colleague in a conversation about their AI usage. Are they fairly using the tool, or are there concerns of plagiarism and creative infringement? Educators can also hold larger group discussions to offer students and peers better awareness of their immediate communities.



## Critical Thinking

The pillars of critical thinking and ethical awareness go hand in hand, often in the form of media and AI literacy. Alongside understanding the societal and ethical impacts AI usage may have within their communities, students and teachers alike need to cultivate the skills necessary to think critically about their own usage of AI and when they see it used by others. Teachers share a higher burden when it comes to employing critical thinking in the context of AI literacy. Not only do educators need to be aware of their ability to protect themselves and find reputable sources of information for their students, but they are also responsible for protecting the data privacy of their students when using products and tools and modeling the behaviors of critical thinking and AI literacy for their students so as to be an exemplar within their own classrooms.

One example of AI-related critical thinking in everyday life today is at the top of most Google searches is an AI-generated summary that directly answers the Google search. While it can be tempting to take these summaries at face value, it is important to know that these summaries are sourced from other articles and materials that, themselves, may have biases, outdated, incorrect, or malicious information within them. When you encounter any material that is clearly AI-generated or edited, ask:

- Does the information presented seem to be complete?
- Does the information presented seem to be correct?
- Does the information presented seem to be relevant and contextual?
- Does the information presented contain any clear or unspoken biases?
- Can I tell what the sources that it pulled from are? Are they reliable and does the content accurately reflect them?



## Future-Oriented Perspective

As emerging technologies like generative AI continue to rapidly change and advance, it is important to recognize that instructional, social, and ethical practices concerning the technology will change as well. Having a future-oriented perspective concerning instructional practices with Artificial Intelligence is necessary to not only provide students with the ability to engage with the AI tools they already know and understand, but to also critically think about the ways they engage with new technologies, understand the ethical implications of their usage, know how to apply these tools in practical ways, and to update key foundational knowledge as technological capabilities grow. Currently, K-12 Media and AI Literacy curriculum [is available in Skyline](#).

*For more information on AI literacy in the District and key literacy points, visit the [AI Literacy](#) and section of the [CPS AI Guidebook](#).*



## Instructional Practice with AI

The following section serves as guidelines for moving from a **theoretical understanding** of generative AI to **active and critical use** of it in meaningful ways. This builds on Foundational Knowledge, and embodies the Practical Use pillar of the CPS AI vision. Safe, responsible, and meaningful generative AI use by CPS educators and staff can serve our overall goal to elevate educational delivery and streamline administrative tasks. Generative AI tools can be used to create, augment, and accompany instructional materials. These tools may be external products approved by the District, or tools developed in house.

### Critical Thinking: Human-in-the-Loop

In this context, critical thinking in action means always treating GenAI outputs as "rough drafts" that require your professional expertise to refine, culturally responsive vetting to protect against historical bias, and instructional alignment to ensure student success. Integrating generative AI into your teaching requires a shift from being a "content consumer" to a "critical editor." This **human-in-the-loop** approach ensures that technology serves as a co-pilot rather than an autopilot. Human-centered AI use involves **highly interactive, iterative work** with an AI tool to produce valuable outputs that have been fully vetted by a subject matter expert: **you**. In practice, this means you must always **double-check** and **verify** every AI-generated output for accuracy and pedagogical soundness. The market is currently flooded with generated worksheets and lesson plans, and the vast majority **do not meet** the rigorous standards CPS holds for High-Quality Curriculum (HQC). When pulling from these external sources, it is your responsibility to carefully review their alignment against CPS HQC standards.



## Utilizing AI Meaningfully

In this section, we provide you with some specific examples of how generative AI could be used in your instructional practice. Always keep the human-in-the-loop standard in mind: you should never copy and paste straight from a chatbot into teacher or student-facing documents. Adhering to that, there are several places in your administrative and student-facing processes where generative AI could be a valuable tool.

## Administrative Process Use Cases

In your administrative or teacher-facing tasks, generative AI can help you spend less time on busy work so you can spend more time on high-level planning around your students' needs. When deciding whether generative AI might be of use to you, ask yourself the following questions:

- ★ Is there a task that is repetitive?
- ★ Is there a task that can be made easier by quickly creating a very rough draft?
- ★ Is there a task where a lengthy document or resource needs to be reviewed against a complex set of criteria?

The following are initial use cases to think about:

---

### Communicating with Students and Families

Writing emails and letters to students and families is key to maintaining an engaged and transparent classroom environment. Generative AI is particularly effective at taking a body of text and tailoring it to a certain audience or to having a certain tone, as well as translating text. It is also effective at taking a list of bullet points and a desired format (email, Google Classroom announcement, etc.), and synthesizing them into a well-structured message.

#### Human-in-the-Loop Warnings:

- *Do not send AI-generated or enhanced communications to families without proof-reading the material.*
- *If using AI to translate communications for multilingual families, be aware that AI often misses cultural idioms or local dialect nuances, which can lead to unintended formalities or misunderstandings.*

#### Examples:

- ★ Creating a NotebookLM notebook that takes your lesson documents from the week, upcoming dates of note or deadlines, and your notes and converts them into a consistently formatted newsletter to share with students and families

- ★ Using Gemini to translate a permission slip into Spanish and Polish, then sharing the draft with a bilingual staff member to ensure the tone remains welcoming and culturally appropriate.
  - ★ Using NotebookLM to create an infographic or visual aid for a message you're sending out to students and/or families
- 

## Building and Refining Rubrics

Generative AI can help you create a rubric for an assignment with benchmarks of your choice based on the learning goals and/or standards your class is working on. Rubrics can be key to ensuring that students have a clear understanding of your expectations, and that your grading is conducted as objectively as possible.

### Human-in-the-Loop Warnings:

- *Make sure rubric grading criteria is aligned with assessment expectations from lesson TFGs and Unit Scope and Sequence Plans*
- *Because AI is trained on historical data, it can inadvertently mirror systemic biases or outdated "deficit-based" language that has historically underserved different student populations. Be vigilant in ensuring AI doesn't apply stereotypical descriptors or unfair assumptions based on student demographics.*

### Examples:

- ★ Using NotebookLM to generate a rubric for a multimedia class project, adapting grading criteria based on the form of media submitted.
  - ★ Asking an AI to "crosswalk" your draft rubric against Universal Design for Learning guidelines to ensure there are multiple pathways for students to demonstrate proficiency and mastery.
- 

## Writing Administrative Reports

Drafting progress reports, incident logs, or meeting minutes can be a time-intensive burden on an educator's schedule. Generative AI can act as a drafting tool to help structure your observations into professional, concise, and objective reports. By providing the AI with raw data or bulleted notes, you can ensure that the final document follows a logical flow and meets institutional formatting standards.

### Human-in-the-Loop Warnings:

- *Personally Identifying Information (PII) can only be entered in approved products with data*

*share agreements*

- *Because AI is trained on historical data, it can inadvertently mirror systemic biases or outdated "deficit-based" language that has historically underserved different student populations. Be vigilant in ensuring AI doesn't apply stereotypical descriptors or unfair assumptions based on student demographics.*

## Examples:

- ★ Inputting raw observation notes from a classroom walkthrough into Gemini to draft a structured professional development feedback report for a peer.
- ★ Using NotebookLM to help synthesize three weeks of attendance and participation data into a brief, narrative summary for a departmental progress review.

---

## Automating Workflows

Are you interested in dabbling in a bit of AI-assisted coding? Is there a repetitive task in your Google Suite that takes up too much of your time? Consider using generative AI to help you make automatic scripts in your Google Docs, Drive, Sheets, and Slides.

## Human-in-the-Loop Warnings:

- *Do not test AI-generated code on large datasets or on outside stakeholders.*
- *Ensure you maintain human-in-the-loop standards. There should be a clear audit trail of anything a script does automatically for you, and scripts that directly modify anything facing students or other stakeholders should be thoroughly tested and require manual approval to run.*

## Examples:

- ★ Using Gemini to create an automation script that auto replies to emails when a specific folder reaches a certain capacity.
- ★ Using an AI-generated Apps Script to automatically generate a "Certificate of Achievement" PDF whenever a student hits a specific milestone in a Google Sheet tracker.



## Student-Facing Materials Use Cases

When using AI as a "thought partner"—especially in a co-teaching or collaborative planning environment—Generative AI can support the implementation of high-quality curriculum with **integrity** by offering options for adapting and accelerating materials in ways that resonate with their students’ diverse needs and backgrounds, maintaining the balance between consistency and responsiveness. Curricular implementation with integrity means staying true to the critical elements that make a curriculum high quality while encouraging the necessary adaptations in instructional approach, supplemental scaffolding, and enrichment that tailor the curriculum to students’ needs. [Integrity & Learning Acceleration: Shared Definitions & Research](#) offers you a deeper dive into implementing curriculum with integrity versus fidelity.

### Our Definition of High-Quality Curriculum

Chicago Public Schools built Skyline, the District’s custom PK-12 digital curriculum, in English Language Arts, Artes del Lenguaje Español, Mathematics, Science, Social Science, World Languages (Spanish, French), college and career readiness, and AI and digital literacy to provide teachers with high-quality curriculum that meets the District’s six-part definition:



Standards-aligned



Horizontally-aligned across instructional and assessment materials



Vertically-aligned across grade bands (PK-2, 3-5, 6-8, HS)



Accessible for all learners as aligned to Universal Design for Learning, and supportive of differentiation for students, including English learners and diverse learners



Supportive of students’ social-emotional learning



Culturally responsive



When using generative AI in this context, ask yourself the following questions:

- ★ Am I preserving the three critical elements within each lesson?
  - a. Backwards-planning from and administering **end-of-unit assessments** without modification, except per IEPs and/or language proficiency levels
  - b. Teaching towards standards-aligned **daily lesson learning targets** (both content and language targets) as written, maintaining the intended level of rigor
  - c. Using the culturally and linguistically responsive complex texts and tasks central to the lesson at the intended level of rigor
- ★ Am I creating temporary scaffolds that maintain rigor? *Instead of modifying complex texts and tasks, scaffolds provide entry points for all students to access learning at the intended level of rigor. When planning scaffolds, we first leverage embedded supports inside of the HQ curriculum (linguistic scaffolds, Universal Design for Learning Strategies, mini-lessons, etc.) before introducing external supports like generative AI tools.*
- ★ Am I generating scaffolds with my students in mind? *Consider students' strengths, needs, identities, cultures, backgrounds, and languages as you adapt their instructional approach and consider supplemental scaffolding or enrichment.*

The following are initial use cases to think about:

---

## Differentiation

One of the most exciting use cases for generative AI in instructional practice is the ability to differentiate a lesson plan or assignment for various learners. Differentiation is an intricate process, where teachers have to present different content, learning processes, learning products, and learning environments based on individual student goals, levels, and interests (Tomlinson & Moon, 2013). The primary focus of differentiation—especially in a Tier 1, whole class environment—is increasing access and creating entry points to on-grade level instruction, which all students have a right to. Skyline or other learning objects can be scaffolded to target different reading levels, students struggling with specific standards, students ready for an additional challenge, and more.

### Human-in-the-Loop Warnings:

- *PII can only be entered in approved products with data share agreements.*
- *Maintain rigor. Ensure that "scaling down" a text for readability does not strip away the complex concepts or critical thinking required by the grade-level standard.*

### Examples:

- ★ Use AI to create group roles to help ensure that ML (EL) students at all ACCESS levels can fully engage in a meaningful discussion with their peers
- ★ Use NotebookLM to create a graphic organizer (not necessarily a scaled down/lower

reading level text) that will help an ML (EL) student better understand the complex text.

- ★ Use AI to generate "Hint Cards" for a set of math word problems. The AI can create three versions of the same problem: one with a visual starter, one with a step-by-step checklist, and one "challenge" version that requires applying the concept to a new context.
- ★ Use AI to create a supplemental assignment for a student who is struggling with a specific standard within the unit.

---

## Augmenting Materials

Generative AI tools are getting better and better at creating infographics, diagrams, images, stories, and even audio. One exciting use case for gen AI is to augment your own materials with captivating visuals, clarifying diagrams, or audio engagement options.

### Human-in-the-Loop Warnings:

- *Check the content of generated images and diagrams to ensure instructional integrity.*
- *AI image generators often struggle with representation bias, frequently defaulting to stereotypical depictions of gender, race, or ability. Always vet generated visuals to ensure they reflect the true diversity of your classroom.*

### Examples:

- ★ Using NotebookLM, create an interactive podcast version of the textbook chapter students are reading for homework.
- ★ Have Google's nanobanana create images that support the text your class is reading
- ★ Use NotebookLM to create an interactive study guide that students can prompt for answers to their questions based on textbook material.

---

## Refining Feedback

Similar to communications for students and families, generative AI can help you workshop the tone with which you provide feedback to students.

### Human-in-the-Loop Warnings:

- *PII can only be entered in approved products with data share agreements.*
- *If feedback was generated with the assistance of AI, be transparent with your students.*
- *Use AI to structure your thoughts, but ensure the final feedback contains specific references to classroom moments that only you and the student share.*

### Examples:

- ★ Have Gemini create an overall summary based on the comments you've left on a student's essay.
- ★ Feeding your "shorthand" grading notes into an AI to expand them into full, encouraging sentences.

---

## Generating Learning Objects

AI can be used to generate basic and intricate activities and worksheets based on a lesson plan and a set of learning objectives.

### Human-in-the-Loop Warnings:

- *Always ensure that the output aligns with High Quality Instructional Material (HQIM) standards.*
- *AI may suggest activities that are engaging but "off-map" for your specific curriculum. Always check that the generated activity fits into the Unit Plan.*

### Examples:

- ★ Use AI to brainstorm and draft a fill-in-the-blank vocabulary worksheet.
- ★ Prompting an AI to generate five hook ideas for a new activity on Ecosystems that specifically utilize local landmarks or nearby parks to make the lesson place-based.



## Avoiding AI Meaningfully

This section details some specific examples of how generative AI should not be used in your instructional practice. Avoiding AI **meaningfully** entails critically thinking about where AI is and isn't appropriate in your practice as opposed to adopting or rejecting it in its entirety.

### Administrative Processes

#### Plagiarism Detection

GenAI detection software is a category of tools marketed as capable of identifying potential AI plagiarism or AI-generated work, but staff and administrators are **strongly encouraged to avoid using these tools**. These tools frequently produce false positives—incorrectly flagging student work—as well as false negatives—missing AI-generated work. For example, current AI detection software has been found to disproportionately flag work completed by English Learners (ELs) due to linguistic differences or patterns that the software misinterprets as AI-generated content. Overreliance on these tools could lead to unfounded accusations of academic dishonesty, erode trust between teachers and students, and unfairly penalize certain groups of students. When ensuring that students are maintaining academic integrity, prioritize a holistic assessment of student work—considering multiple factors like the writing process, individual student progress, and direct conversations—rather than relying on GenAI detection software. Sources on these findings and proposed alternatives can be found in the [Recommended Readings](#) section below.

#### Non-Approved Tools

The rapid evolution of AI technology has introduced significant data security and legal complexities. Our priority remains enabling productive work within a secure and compliant environment, while recognizing and valuing the exploration and innovation happening District-wide. Unapproved, third-party AI products are blocked on the CPS network to maintain our robust AI Governance, protect our District, mitigate risk, and ensure responsible adoption. Approved tools have entered into an enterprise data share agreement, meaning they have a contract with CPS agreeing not to train their models on or store any data from interactions with their product—ensuring student privacy. Do not use non-approved tools in your instructional practice. Read more in the [CPS AI Access Overview](#).

# Student-Facing Materials

## Grading and Feedback

Generative AI should never be used to determine final grades or any other consequential decisions for student records. Feedback generated by AI should always be checked and supplemented with educator input to maintain the importance of a human-centered educational experience that is built on the relationship between teacher and student.

## Out-of-Domain Materials

When utilizing Generative AI for creating new content—text, images, audio, code, etc.—your ability to ensure quality and accuracy is limited by your expertise or resources available to verify the generated material. Therefore, a foundational principle for the ethical and practical use of GenAI is to strictly avoid the creation of materials that fall outside the scope of your existing knowledge base or that of your immediate support team. Specifically, you should not use GenAI to produce materials that you cannot competently or effectively evaluate and verify for accuracy, completeness, and adherence to necessary standards.



# Student Access to Generative AI

Student Generative AI use is perhaps the most critical and least standardized aspect of instructional generative AI currently. The **cognitive and socioemotional risks** associated with generative AI use by students are rightfully concerning, and the popular generative AI companies (Google - Gemini, Anthropic - Claude, OpenAI - ChatGPT) have yet to establish guardrails in their products that sufficiently meet the rigorous expectations held by CPS for student safety and equitable use. As such, students **do not currently have direct access to generative AI at school**. Additionally, parents and caregivers will be able to **opt-out** of their students having access to Generative AI in the classroom. This does not mean that students should not be exposed to AI in classrooms, especially with awareness that many students may be accessing these tools at home. In your instructional practice, consider some ways in which your students might be interacting with and learning about AI, and strategies for how you can guide them. The following sections delineate several strategies for teaching students about AI broadly, and generative AI specifically, when students don't have individual access.



## Starting with Literacy

As discussed in [Leading with Literacy](#) – student learning, like adult learning, begins with AI literacy rather than with 'how to use a tool'. This is true across all age bands. There are AI literacy and broader digital and media literacy curricular resources available in Skyline, the District's universal PreK-12 high-quality curriculum.

## Teacher-Led Activities

Effective integration of AI into your instructional practice includes explicit modeling for students of how to use the tools in ways that push their thinking and learning rather than doing the thinking for them. One strategy for familiarizing students with generative AI tools is to engage with them yourself while students watch, provide suggestions for, and direct your interaction. The following are examples of how to use generative AI tools with students in a teacher-directed manner, including several of the [Student-Facing Use Cases](#):

- ★ Using NotebookLM, create an interactive podcast version of the textbook chapter students are reading for homework. Play the podcast for the class and have students chime in or suggest ways for you to chime in.
- ★ Have students direct you in using Google's nanobanana to create images or visuals that support a text or textbook your class is reading.
- ★ Use NotebookLM to create an interactive study guide grounded in your course materials. At the end of a unit, before the assessment, have students ask or submit questions and confusions they still have. Share the Notebook on a screen and interact with it using students' questions. Discuss the Notebook's answers and outputs as a class.
- ★ Create a Gem that is designed to have the persona of a character in a book the class is reading or a historical figure. Share the Gem on a screen and have students ask interview questions that you input into the Gem chat. Discuss the Gem's answers as a class.



## Unplugged Activities

Unplugged activities are activities that don't require a computer and can be a powerful tool for teaching about technology with limited resources or age restrictions. Especially for younger grade bands, but relevant for all ages, there is an increasing collection of resources for teaching students about AI in an "unplugged" manner. The following are recommended unplugged resources by specific grade bands:

### Grades 3-5

aiEDU, a non-profit that works with education systems to advance AI literacy, has built hands-on classroom games and activities designed to spark debate and ignite curiosity about AI and AI concepts for students in upper elementary school. These free activities can be found and requested at <https://www.aiedu.org/ai-explorations>

### Grades 6-8

Led by Professor Duri Long, the Creative Interfaces Research and Design Studio at Northwestern University has developed a collection of unplugged AI literacy activities that can be used by educators and families interested in incorporating AI literacy into their middle schoolers' curriculum, home learning, or enrichment programs. These activities require only simple craft materials, like pens, paper, glue, or string. Each activity description is accompanied by a detailed lesson plan and links to relevant resources, and they have been consolidated into a free textbook. The textbook and activities can be found at <https://sites.northwestern.edu/aiunplugged/>

### Grades 4-12

The Bowers Institute at The Tech, a science and technology center in California, offers a 45 minute unplugged lesson plan designed for all grade bands that teaches machine learning, the key concept behind how Artificial Intelligence functions. The free plan and relevant resources can be found at <https://www.thetech.org/education/education-resources/lessons/machine-learning-unplugged>

## Transparency

Effective integration of AI into your instructional practice includes explicit modeling for students of how to use the tools in ways that are responsible and accountable. Be transparent with your students when you use generative AI to create student-facing content. Walk your students through your process, the considerations you take into account when creating materials, and how you prompted the generative tool. In doing so, you will help build teacher-student trust around AI use, create opportunities for conversations around generative AI and AI literacy, model responsible and meaningful practices, and encourage your students to engage in the same transparency with their use. You can do this by:

- ★ telling your students in class that you used generative AI, how, and why;
- ★ adding “watermarks” to images or visuals you provide students that identify them as AI-generated;
- ★ including the prompt you used to generate a student-facing material as a footnote on the material (be it image, text, audio file, or other);
- ★ adding notes on materials you generated that cite your AI use, including why you chose to use AI.



## Active Generative AI Pilots

The following table lists AI tools actively being piloted by the District. This means select schools, educators, and staff are exploring whether these tools would make meaningful additions to their classroom tools, allowing the District to do a competitive analysis of the AI tool market and understand what stakeholders value. For more information on how products and tools get piloted in the District, see the Approved Generative AI Tools section of the [CPS AI Guidebook](#).

Current Pilots	Lead	Partners	Description
Gemini	<i>Enterprise Generative AI</i>	Google	Google has begun integrating a powerful new suite of AI tools using its Gemini models directly into Google Classroom and other Workspace applications. In line with the District's commitment to responsible and thoughtful innovation, CPS launched a comprehensive pilot program to evaluate these tools before considering a District-wide implementation. The leadership and vision of our stakeholders have been essential to understanding the real impact of these technologies on school culture and instructional practice.
Parlay Ideas	<i>Curriculum, Instruction, and Digital Learning</i>	Select schools and educators within CPS	Parlay is an AI-powered instructional platform that helps teachers facilitate meaningful, measurable, and inclusive class discussions. Automatically generate discussion topics, summaries, feedback, assessment, and follow-up questions in the click of a button.
PASTA AI	<i>Department of STEM</i>	WestEd, Michigan State University, University of Georgia,	The PASTA project is building upon the Next Generation Science Assessments (NGSA) that are aligned to NGSS and can be used in conjunction with any NGSS-aligned curriculum, like Skyline. Like the Skyline checkpoint assessments, the NGSA tasks are open-ended, which requires teachers to

		University of Illinois at Chicago	score them and decide the student groupings for reteaching. The PASTA project uses AI to score the assessments and place students into recommended groupings for reteaching. AI scoring has the potential to enhance equity by ensuring that all teachers can implement formative assessment techniques and has the potential to remove teacher biases by providing consistent scoring.
Scratch Encore/ Conjuror	<i>Department of STEM</i>	University of Chicago	AI will allow teachers to modify the "wrapper" on the Scratch Encore Computer Science modules to integrate into content-specific themes or create community-based/culturally relevant themes. Outcome for students is Computer Science learning is available in more classes, more schools, more communities. Increased engagement and relevance for CS/STEM identity.
Brisk	<i>Curriculum, Instruction, and Digital Learning</i>	Select educators and the curriculum designers within CPS	Teachers and curriculum designers are offering Brisk feedback that will directly shape how Brisk supports CPS educators moving forward. Among others, key features being explored include alignment to Illinois Standards, alignment to the CPS AI Guidebook, and the Batch Feedback tool: generating timely, specific, and actionable feedback for the entire class.

There is a wide variety of EdTech based materials available and marketed to educators, but most do not meet the District’s High Quality Curriculum standards on their own. Not being aligned to HQIM implies that a product has no or insufficient transparency—no accountability as to what prompts or data are being used—meaning we can't guarantee that the outputs it produces will meet CPS standards, nor can we verify it. Our goal as a District is to take external tools with high potential and shape them into powerful resources that are meaningful to CPS specifically.

## Alignments

CPS Strategic Plan: [Success 2029 - CPS Strategic Plan Summary](#)

CPS AI Guidebook: [AI Guidance for CPS](#)

CPS AI Glossary: [AI Glossary](#)

AI Exploration Rubric: [Education First AI Exploration Rubric](#)

Educational Technology Library: [EdTech Catalog](#)

Generative AI Literacy 101: [GenAI 101 - AI Literacy](#)

Integrity vs Fidelity: [Integrity & Learning Acceleration: Shared Definitions and Research](#)

## Recommended Readings

- Employing prosocial design principles to create AI initiatives that shift power
  - [Responsible AI | Kapur Foundation](#)
  - [The case for prosocial tech design governance | Internet Policy Review](#)
  - [Toward Prosocial Tech Design Governance | TechPolicy.Press](#)
  - [Prosocial Design Network](#)
- Exploring existing AI research with guidance
  - [AI Research Repository | Stanford SCALE Initiative](#)
    - Filterable by use case, user, age band, objective, and/or study design
  - [Generative AI 101 - Washington Post Article](#)
  - [Great Lakes Report](#)
- Hallucinations and incorrect outputs
  - [AI-LIEDAR: Examine the Trade-off Between Utility and Truthfulness in LLM Agents](#)
  - [Do Large Language Models Know What They Are Capable Of?](#)
- AI Plagiarism Detection Software
  - [AI Detectors: Neither Accurate Nor Reliable](#)
  - [AI Detectors Don't Work. Here's What to Do Instead.](#)

## Contributors

### Lead Author

**Anya Bardach** | *AI Program Specialist, ITS*

## Instructional Practice AI Operating Committee

Chairs: Alexander Fishman, Kara Thorstenson

Name	Title	Office/Department
Alexander Fishman	DL Dgn & Instr GenAI Integ Mgr	Curriculum, Instruction, and Digital Learning
Ayana Davies	Generative AI Specialist	Curriculum, Instruction, and Digital Learning
Brianna Brown	EL Instructional Dev Spec	Ofc Multicultural/Lingual CW
Catherine Plocher	Instructional Support Leader	Network 6
Cesar Torruella	ED, Arts Education	Arts
Charlotte Cager	Apple Device Mgmt Team Lead	Information and Technology Services
Colum Dillon	Math Content Specialist	STEM Programs
Corey Morrison	ED, STEM	STEM Programs
Giovanni Benincasa	User Experience Specialist	Pre K-12 Curriculum
Helena Swanson-Ny...	ED, CIDL	Pre K-12 Curriculum
Jane Fleming	Director, Literacy	Literacy
Janet Kamiri-Ong	Health Education Content Spec	Health and Physical Education
Jennifer Brooks	Professional Learning Spec	Chief Equity Office
Jennifer Chin	Instruct Core Prof Lrning Spec	Professional Learning
Jennifer Keating	IT Training Specialist	ITS Training
Joseph Olsen	Data Quality Mgmt Team Lead	Early College and Career
Juman Kekhia	Manager, IB Program Support	Students with Disabilities
Kara Thorstenson	Dir, Digital Learning & Libraries	Curriculum, Instruction, and Digital Learning
Kristan Beck	Director, Computer Science	STEM Programs
Laura Zaniolo	Instructional Support Leader	Network 6
Lissette Rua	Instructional Support Leader	Network 6
M Ari Frede	School CIWP Specialist	Network Support
Maram Sweis	Director, Advanced Learning	Advanced Learning
Mark Sidarous	Regular Teacher	Lindblom Math and Science Academy
Michelle Rabkin	Director, Science	STEM Programs

<b>Priscilla Herrada</b>	Manager, Literacy	Literacy
<b>Sabrina Chen</b>	Inclusive Responsive Educ Mgr	Student Voice and Engagement
<b>Scott Topel</b>	Instructional Support Leader	Network 6
<b>Sunil Williams</b>	Frontend Engineer	Curriculum, Instruction, and Digital Learning
<b>Timothy Jackson</b>	Social & Emotional Lrng Spec	CW Social and Emotional Learning
<b>Vivian Redwood</b>	Instructional Support Leader	Network 9
<b>Whitney Carson</b>	EL Instructional Dev Spec	Multicultural/Lingual Education
<b>Yvette Vazquez</b>	Instructional Support Leader	Network 15