

Leading K12 Schools in the Intelligence Age: NC AI Guidelines





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Let's Connect!

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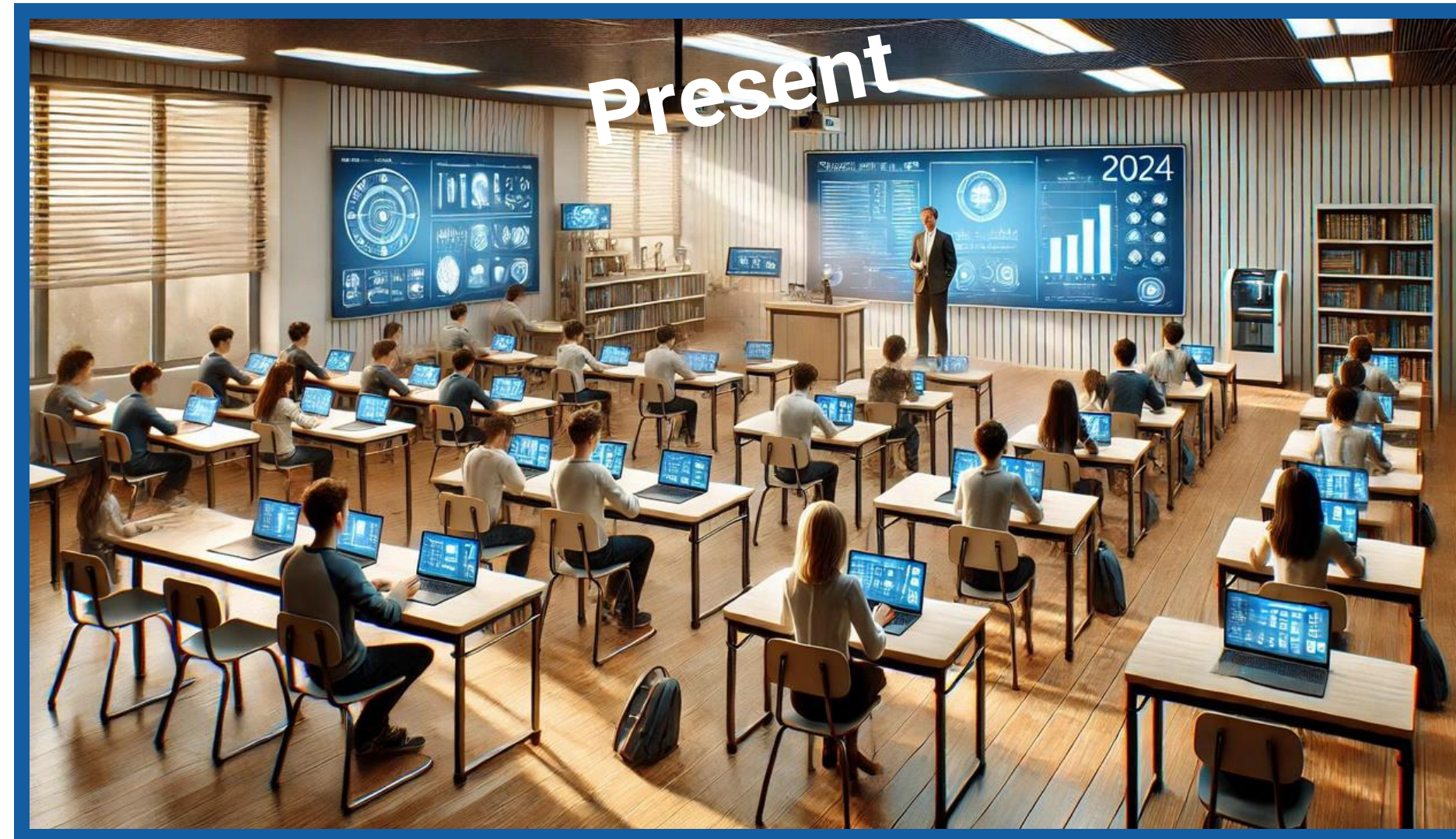
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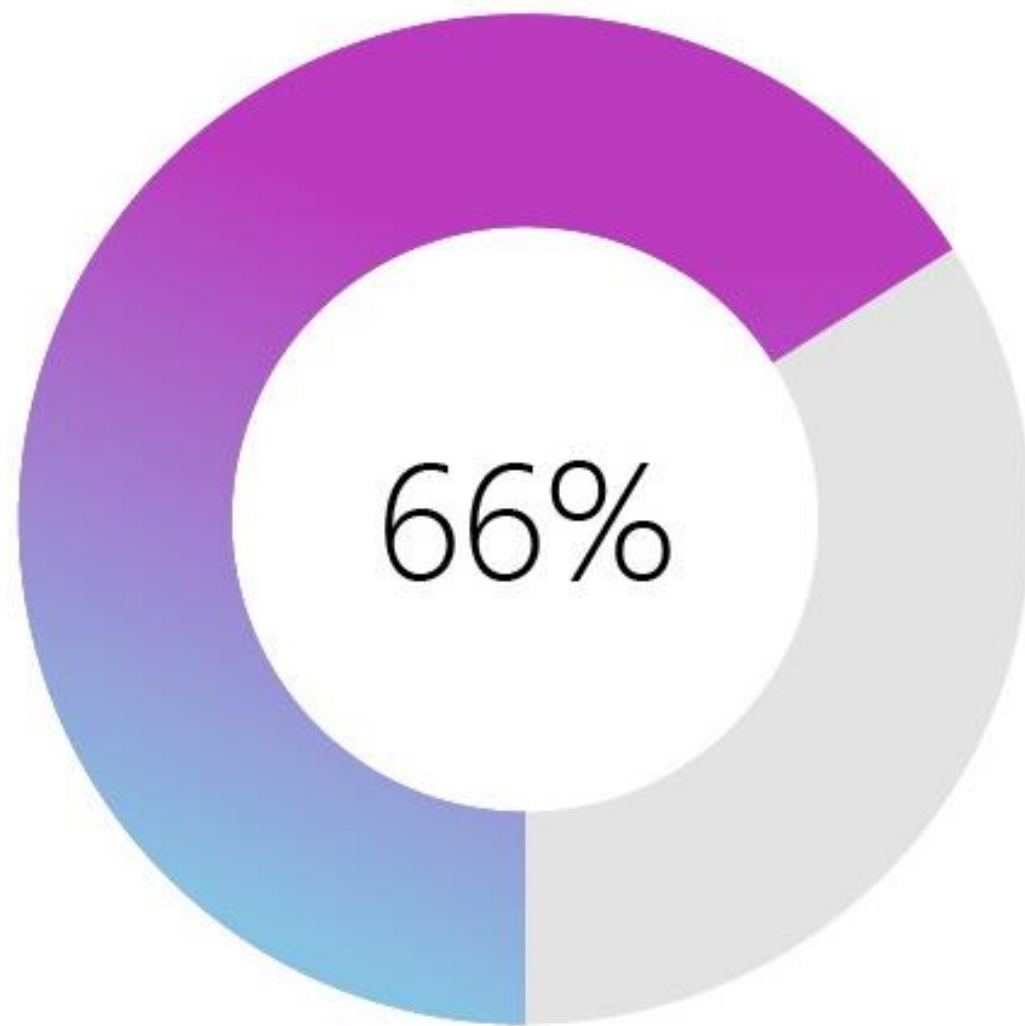
“If we teach today’s students as we taught yesterday’s, we rob them of tomorrow.”

Attributed to John Dewey, circa 1920's

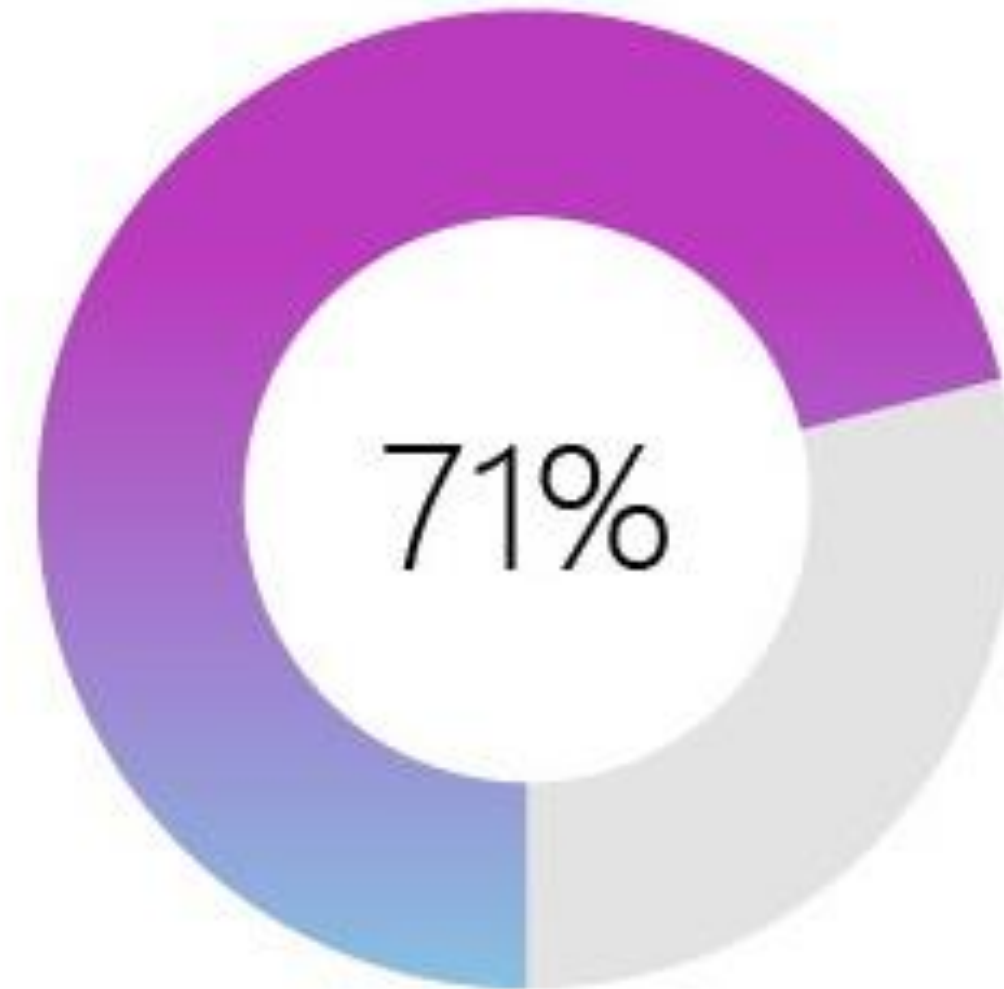


All Images created by Vera Cubero using Dall-E 3 in ChatGPT 4.0.

The New Hiring Imperative



66% of leaders would not hire someone without AI Skills



71% of leaders are more likely to hire a less experienced candidate with AI Skills than a more experienced candidate without them

Microsoft "[AI at Work Is Here. Now Comes the Hard Part](#)" May 2024



“We can expect to experience more progress in the next decade than the previous 100 years combined”

Entrepreneur & Futurist Peter Diamandis 2020
. via McKinsey & Company [“Tech Trends Reshaping the Future of IT and Business”](#)

Image Credit: created by Vera Cubero using ChatGPT+ Dall-E 3 generative image creator

The 3 Digital Divides

- The National Educational Technology Plan of 2024 identifies 3 digital divides, all which will be amplified by inequities in generative AI Adoption. (<https://tech.ed.gov/netp/>)



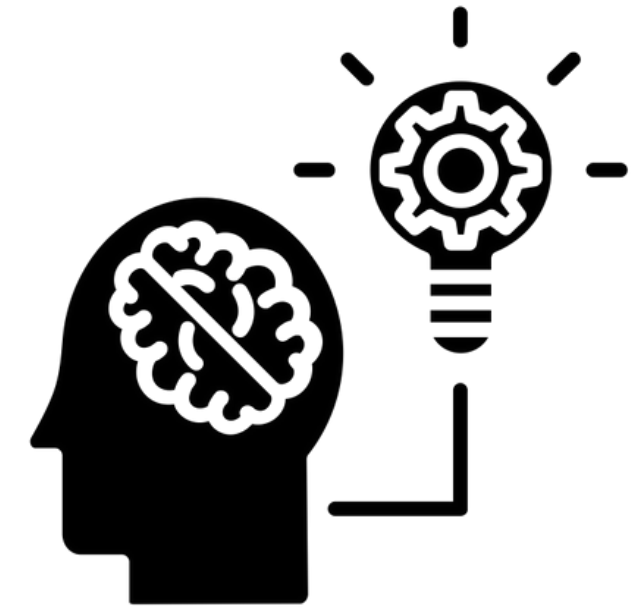
Access

Students & educators need equitable access to technology, connectivity, devices, and digital content



Design

Educators need high quality Professional Development to build the capacities necessary to design learning experiences enabled by technology



Use

ALL Students need opportunities to explore, create, and engage in critical analysis of academic content and knowledge

The Problem

4 Approaches to Generative AI Adoption in Education

AI for Education



BAN

Students & teachers get left behind while creating an atmosphere of suspicion



WAIT

Usage escalates without clear guidance and schools eventually scramble to try and catch up



SELF-GUIDED

Lack of guiding policies leaves individual teachers and students to adapt and fend for themselves



ORGANIZATION-WIDE

Maximizes potential, empowering teachers and improving student responsible adoption while preparing them for the future



most schools

The Journey



NOV. 2022

ChatGPT Release

- Unease and Fear
- Blocks and Bans
- Plagiarism concerns
- Inequitable access
- Little guidance provided for staff or students

SPRING 2023

Building our Capacity

- Learning & Developing Best Practices

SUMMER 2023

Building Teacher Capacity

- Leading Professional Development
- Concerns of inequity of access, lack of guidance for responsible use
- PSUs & schools had great need for guidance

FALL 2023

AI Steering Committee

- Expressed PSU's need for statewide guidance
- Created Steering Committee
- Began collaborating, researching, creating, revising Guidelines

JANUARY 2024

NC State Guidelines Published

- Jan 16, 2024 we published our guidelines
- Great response from PSUs
- Many PSUs began steering committees & planning since.

North Carolina AI Guidelines



Featuring an AI-generated podcast/voices discussing NC AI Guidelines(created with notebookLM)

[Listen to whole podcast](#)

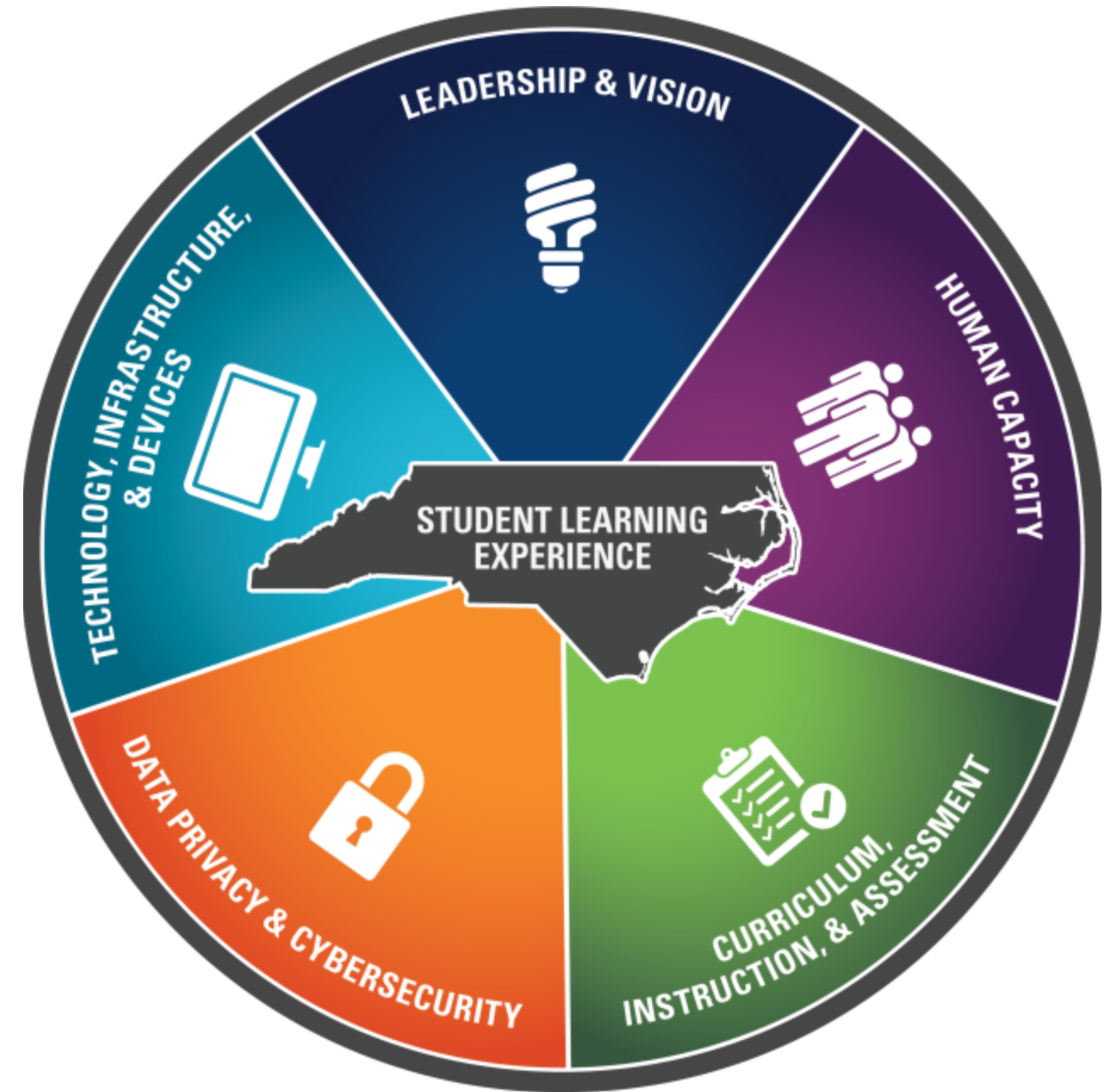
go.ncdpi.gov/AI_Guidelines



Image created by Vera Cubero, in partnership with DALL-E-3 Image Generator in ChatGPT Plus

NC AI Guidelines

- Organized around the NC Digital Learning Plan
- Balanced approach, addressing both benefits & concerns.
- Encourages safe & responsible implementation of AI technologies.





A Roadmap for Responsible Implementation

1

Establish a Foundation

- Upskill Leaders
- Create Guidelines

2

Develop Your Staff

- Upskill Educators
- Support integration & shifting mindsets

3

Educate Students & Community

- Build common understanding with students, parents, community
- Integrate AI in the classroom

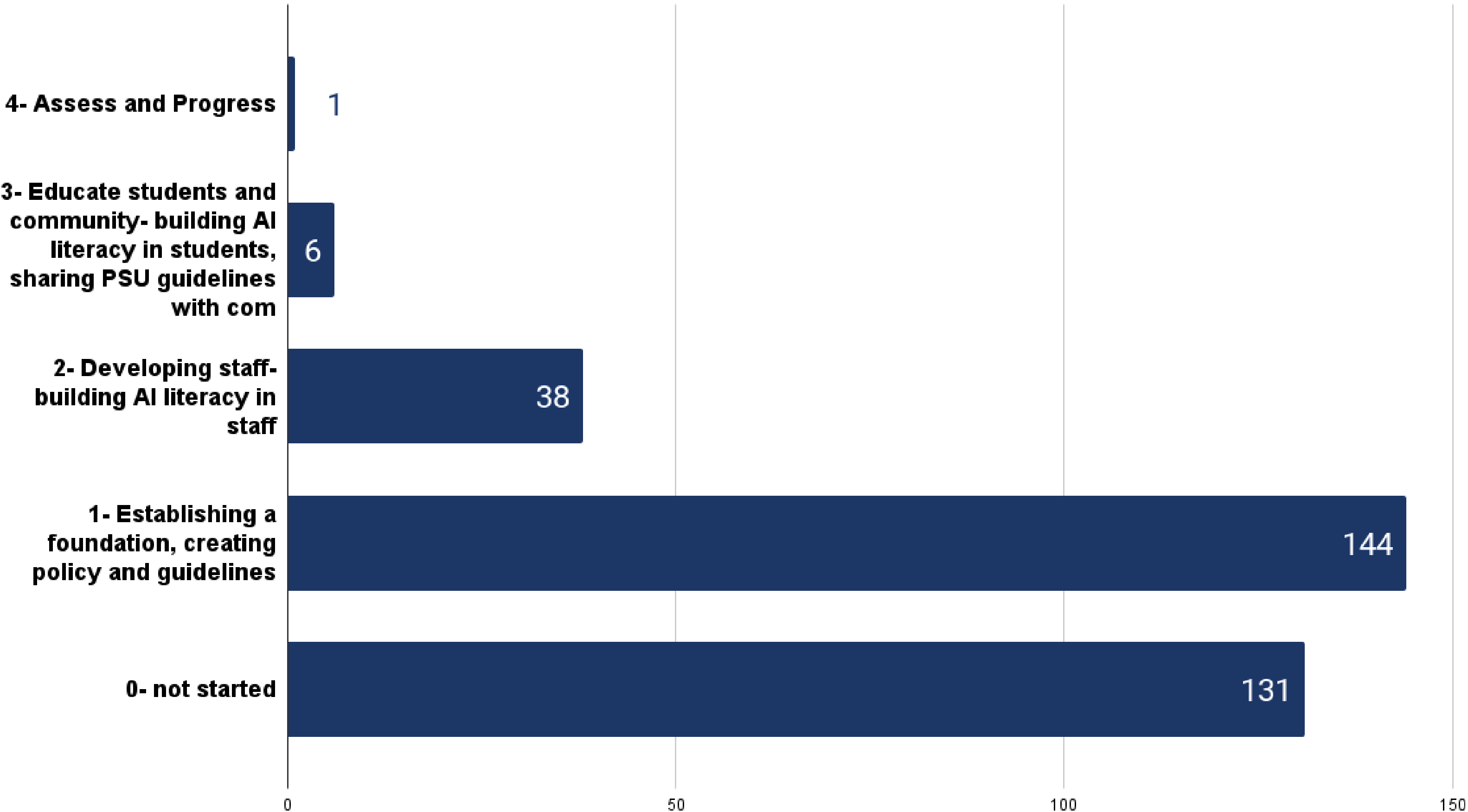
4

Assess & Progress

- Create plans to review guidelines often & adjust as needed in light of new advances

The AI Implementation Roadmap is adapted from the work of [aiforeducation.io](https://www.aiforeducation.io)
<https://www.aiforeducation.io/ai-resources/ai-adoption-roadmap-for-education-institutions>

Gen AI Roadmap Progress: NC Statewide June 30, 2024



Appropriate Use of GenAI in Education

Education without AI



Like riding a mountain bike, the human is in control, but also has no assistance. Sometimes the struggle inhibits learning.

Too Much Reliance on AI



Like riding a motorcycle, you can go really fast, but it is unpredictable and can even be dangerous.

Using AI as a Learning Partner



Like riding an E bike, the human is totally in control, but the E bike can reduce the struggle and result in more productive learning.

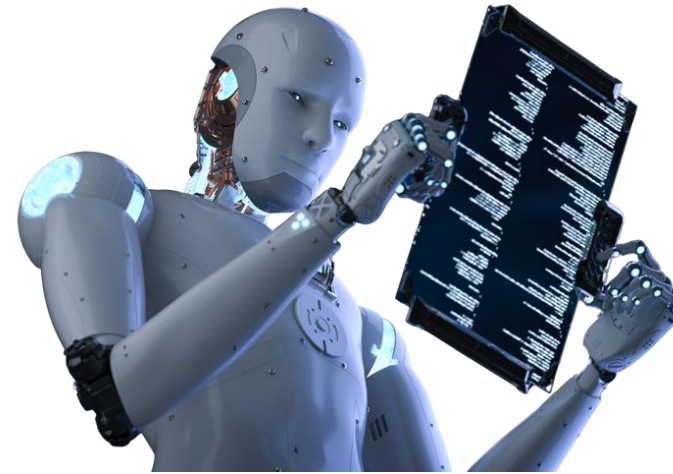
Analogy & Graphic- credit Vera Cubero (NCDPI)
Images created by Vera Cubero in partnership with Dall-E 3
GenAI image creator via ChatGPT 4





The Good

- Personalized Learning
- Accessibility
- Improved Efficiency
- Enhanced Creativity & Critical Thinking



The Bad

- Privacy
- Bias
- Inaccuracies / hallucinations
- Overdependence



The Ugly

- Synthetic Media/ 'Digital Plastic'
- Anthropomorphization
- Manipulation
- Frauds/Scams

**“EDUCATION is the best way to
mitigate the bad and ugly implications
of AI.”**

Vera Cubero NCDPI

Ready to Use Resources

CRAFT a Power Prompt



CONTEXT

CONTEXT

Add specific details to help the AI target your specific needs; these can be embedded throughout the prompt



ROLE

Role

Assign the AI a role for more targeted response
"You are an excellent 8th grade math teacher"



AUDIENCE

AUDIENCE

Provide specific details about the Audience
ESL students, 8th grade parent, CTE teachers



FORMAT

FORMAT

Output format, length, style, Rap, Song, HTML
Providing examples may help the model



TASK & TONE

TASK

What you want action you want the AI to do for you; evaluate, create, edit, revise, brainstorm, etc
TONE professional, friendly, caring, etc



The CRAFT framework was created by Vera Cubero

go.ncdpi.gov/CRAFT_Poster

Strategies To Ensure More Accurate Responses from LLMs

While there *is currently no way to completely eliminate the potential for inaccuracies/hallucinations in LLM models*, the end user can help ensure more accurate information with these prompting strategies.

1

Give Clear, Specific Instructions

- Use precise and concise language
- Avoid ambiguity or vague language
- Just as if you were directing an assistant, provide enough detail to get exactly what you want.

2

Ask AI to adopt a persona/ take on a role

- Think, 'who would have expertise on this task?'
- Tell model 'You are a(n) [expert marine biologist]'

3

Provide examples & Use delimiters

- Provide examples for the model to base response on
- Use delimiters such as triple quotes to indicate distinct parts of the input such as examples
- Ex: The text of the bill is in """" below; Format the responses like this """" Term: definition-analogy""""

4

Chunk Inputs and Outputs

- Split complex tasks into smaller tasks
- Specify the steps needed to complete the task
- Allow the model time to 'think'
- Tell it to answer step by step so you can monitor for accuracy.

5

Provide reference Material

- Help avoid inaccurate responses by specifying a reference text
- Depending on the model used, this can be text pasted in, referencing a URL, uploading a file, image, etc.
- Ex: Paste in the text of an NC SCOS standard, paste in a URL as reference, paste in text of passage to ask questions about, etc.

Vera Cubero (NCDPI)

go.ncdpi.gov/AI_Strategies

Why AI Detectors Are Problematic

(and what to do instead)

✓ Have conversations w/students about appropriate use of AI

✓ Collect writing samples throughout the year to use as growth indicators

✓ Capture student reflections on the AI collaboration process

✓ Think of collaboration with AI as similar to working with a tutor

✓ Have students share about how much AI was used for idea generation and feedback and how it impacted the final writing



✗ High frequency of false positives

✗ A lot of unnecessary work for teachers

✗ Lack of transparency about how they actually work

✗ Discrimination against non-native English speakers

✗ Promotes a false assumption that this is always bad

✗ Many institutions of higher learning are now turning these off




[Source Holly Clark on Facebook](#)

Ready to Use Resources

Student AI Integration: 0 to Infinity Student AI Usage Continuum for Empowered Learning

To prepare ALL students for the AI-rich future that awaits them, it is imperative that they ALL learn ABOUT AI, and have opportunities to learn WITH AI in increasingly interactive and complex ways.

0	<p style="text-align: center;">AI Free</p> <ul style="list-style-type: none"> • Work must be completed entirely without any AI assistance. • Students must rely entirely on their own knowledge, understanding, and skills. • Any AI use is a violation of student academic integrity policy. • An academic honesty pledge that AI was not used may be required.
1	<p style="text-align: center;">AI Assisted</p> <ul style="list-style-type: none"> • AI is used for tasks as specified such as brainstorming, planning, feedback etc. • No AI content is allowed in the final submission. • Usage beyond specified tasks is a violation of academic integrity. • Disclosure statement should be submitted with final product; be prepared to share links, screenshots, etc as evidence of all AI Chats
2	<p style="text-align: center;">AI Enhanced</p> <ul style="list-style-type: none"> • AI is used interactively throughout to enhance your knowledge, efficiency, & creativity. • Student must provide human oversight and evaluation of all AI generated content. • Interactivity with AI and critical engagement with AI-generated content is required. • Student is responsible for the accuracy and fairness of all AI-generated content. • Disclosure statement should be submitted with final product; be prepared to share links, screenshots, etc as evidence of all AI Chats
	<p style="text-align: center;">AI Empowered</p> <ul style="list-style-type: none"> • The full integration of AI allows for the creation of things that were previously impossible, empowering students as critical thinkers, creatives, and problem solvers. • Student must provide human oversight and evaluation of all AI-generated content. • Student is responsible for the accuracy, fairness, & originality of all AI-generated content. • All AI tools used and how they were used should be cited in a disclosure statement.

Adapted by Vera Cubero 4/28/24 for the North Carolina Department of Public Instruction (NCDPI) from the work of Dr. Leon Furze, Dr. Mike Perkins, Dr. Jasper Roe FHEA, & Dr. Jason McVaugh [Link to Original Work](#)



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go.ncdpi.gov/AI_Assessment_Scale

AI for Education

How to Use AI Responsibly EVERY Time

E **VALUATE** the initial output to see if it meets the intended purpose and your needs.

V **ERIFY** facts, figures, quotes, and data using reliable sources to ensure there are no hallucinations or bias.

E **NGAGE** in every conversation with the GenAI chatbot, providing critical feedback and oversight to improve the AI's output.

R **EVISE** the results to reflect your unique needs, style, and/or tone. AI output is a great starting point, but shouldn't be a final product.

Y **OU** are responsible for everything you create with AI. Always be transparent about how you've used these tools.

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<https://www.aiforeducation.io/ai-resources/how-to-use-ai-responsibly-every-time>

Call to Action



- **Create & share clear guidelines**



- **Equip Educators with ongoing, job-embedded professional development, including time, space, and freedom to explore, share, & learn from each other**



- **Infuse AI Literacy throughout all grades and curriculum areas in age-appropriate ways**

thank you

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Google Certified Trainer since 2014



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