
Evaluating AI Outputs - Ensuring Accuracy & Relevance

Disclosures

None

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The Team

The Team



John Lowry
Central Michigan University



Stacey Pylman
Michigan State University



Anthony Gaynier
Wayne State University



Tonya Anderson (Thomas)
Wayne State University



Emily Rush
Rush University



Larry Hurtubise
Ohio State University



Elissa Hall
Mayo Clinic



Heather Billings
Mayo Clinic



Boyung Suh
Southern Illinois University



Priya Parkh
Wright State University

Upcoming Sessions

- AI for Efficiency and Automation
- Using AI with Data and Scholarship
- Developing AI-Enhanced Curricula

Evaluating AI Outputs: Ensuring Accuracy & Relevance

Objectives

1. Analyze AI outputs to determine alignment with educational goals.
2. Check AI outputs for accuracy, and relevance against credible sources.
3. Triangulate results across multiple AI tools.
4. Recognize ethical risks such as AI-generated misinformation and biased content.



Cassidy Punt, PA-C
Rocky Vista University



Christopher Shaltry, PhD
Michigan State University



Keywords

Term	Meaning
Bias ¹	systematic and unfair skewing of outcomes produced by AI systems
Hallucination ²	AI system generates fictional, erroneous, or unsubstantiated information in response to a query
Information Literacy ³	the ability to find, evaluate, and use information effectively
AI Literacy ³	the ability to understand and interpret AI systems and their outputs



1. Marian University Library. *AI Bias – Artificial Intelligence in Education [LibGuide]*. Accessed July 14, 2025. <https://libguides.marian.edu/c.php?g=1321167&p=10767259>

2. Rawte V, Chakraborty S, Pathak A, Sarkar A. The troubling emergence of hallucination in large language models—an extensive definition, quantification, and prescriptive remediations. *arXiv*. 2023. doi:10.48550/arXiv.2310.04988

3. The Chicago School Library. *Information Literacy & AI – Artificial Intelligence (AI) Tools and Resources*. The Chicago School Library. Accessed July 14, 2025.

<https://library.thechicagoschool.edu/c.php?g=1318063&p=9893083>.

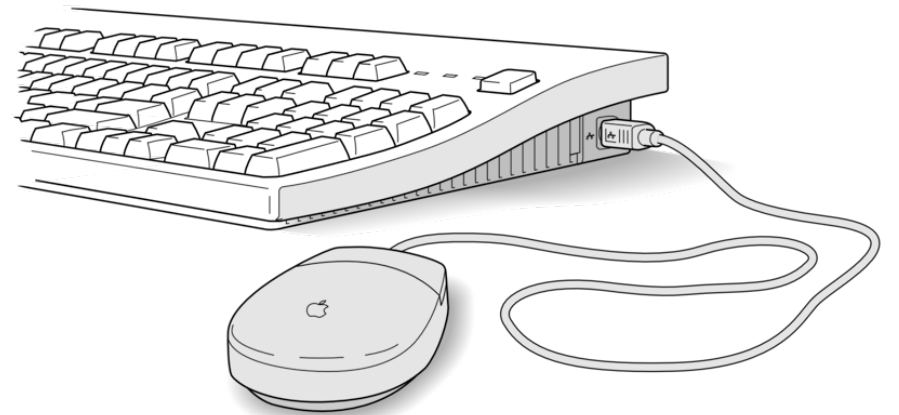
Skill #1:

Analyze AI outputs to determine alignment with educational goals.

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Activity!

- Pull up a new chat on your LLM of choice:
 - OpenEvidence, ChatGPT, Gemini, Claude, Copilot, etc.
- Give it the following task:
 - “Write me a multiple choice question on (topic of choice) .”



Evaluate the Output...

- Critical AI Evaluation [Checklist](#)* for Med Ed
 - Use as a starting point for your own use
 - Edit/adapt to your role and setting

Critical AI Output Evaluation Checklist for Medical Educators

Disclaimer: This checklist was compiled by Cassidy Punt, MSBS, MPAS PA-C, Assistant Professor, Rocky Vista University. The views and materials presented here are my own and do not represent the official position of the Rocky Vista University PA Program, Rocky Vista University, or the American Association of Medical Colleges (AAMC)..

AI Use Disclosure: This handout was created by synthesizing responses from three advanced large language models (Gemini 2.5 Flash, ChatGPT-4o, and Claude Sonnet 4) and curated collaboratively with ChatGPT-4o to support medical educators in the critical evaluation of generative AI outputs.

1. Relevance & Alignment

- Does the output directly respond to your prompt or task?
- Is the content aligned with your specific goal or use case (e.g., educational, clinical, administrative)?
- Does it stay on-topic or deviate unnecessarily?
- Is the tone, depth, and format appropriate for your audience or setting?
- Are all parts of the request adequately addressed?





*Produced on 7/14/2025 - generated 3 independent checklists and combined using 3 popular free-access LLMs

Skill #2:

Check AI outputs for accuracy, and relevance against credible sources.






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Applying Existing Online Source Evaluation Skills to AI Output

Information Literacy Skill	Applied to <i>Internet Sources</i>	Applied to <i>AI Sources</i>
 Relevance	Decide if the source addresses your needs.	Match answer to prompt intent.
 Authority	Verify the author's credentials/affiliation.	Request citations and verify credentials/affiliation.
 Accuracy	Cross-check claims with two trusted sources.	Cross-check claims with two trusted sources.
 Timeliness	Verify publication dates.	Verify publication dates.

Question: “When should adults get a shingles vaccine?”

Fictional AI Answer: Adults should get a shingles booster every five years.

Information Literacy Skill	Applied to AI Sources
 Relevance	Match answer to prompt intent. <div>Yes, this answers the question I asked about the shingles vaccine.</div>
 Authority	Request citations and verify credentials/affiliation. <div>In this case, no citation is available.</div>
 Accuracy	Cross-check claims with two trusted sources. <div><div>1. <u>CDC website</u> (search “site:cdc.gov shingles vaccine schedule.”)</div><div>2. <u>PubMed</u> or similar</div></div>
 Timeliness	Verify publication dates. <div><div>1. <u>CDC webpage</u> on shingles vaccine recommendations published Oct 2024.</div><div>2. PubMed Article published...</div></div>
 Conclusion	While the AI model answered the question I asked, I determined the information it gave me was incorrect and that the AI hallucinated the answer.

Skill #3:

Triangulate results across multiple AI tools to improve quality.

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Triangulating AI Outputs

1. Treat AI as a shifting toolset.
2. Run the same prompt in 2-3 models (see example below).
3. Re-test periodically; outputs evolve.

Practice: Share your thoughts on the outputs below in the chat.

Prompt: Explain CRISPR in a single sentence in non-technical terms.

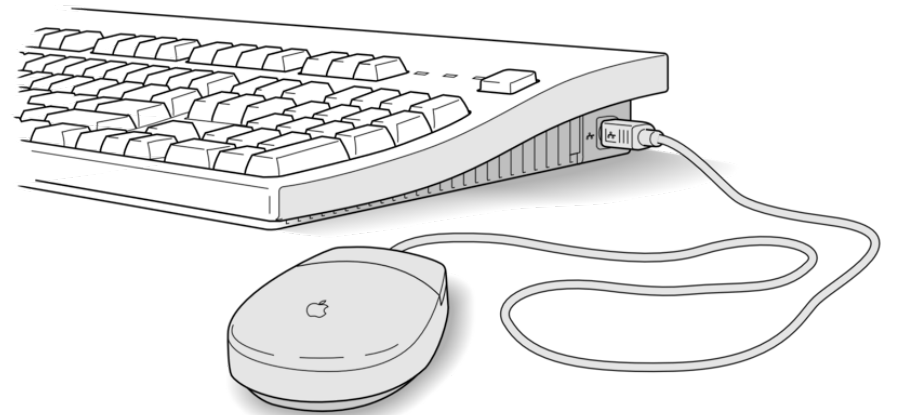
ChatGPT o3	Claude Opus 4	Gemini 2.5 Pro
CRISPR is like giving scientists a GPS-guided pair of microscopic scissors that lets them find and snip out specific bits of DNA so they can tweak how living things grow and function—all with amazing precision.	CRISPR is a tool that allows scientists to edit DNA like a word processor edits text - finding specific genetic "typos" and precisely correcting them to treat diseases or improve crops.	CRISPR is a gene-editing tool that allows scientists to find and change specific sections of DNA in a living organism, similar to using the "find and replace" function in a word processor.

Skill #4:

Recognize ethical risks such as
AI-generated misinformation and
biased content.

Activity!

1. Pull up a new chat on your LLM of choice:
 - OpenEvidence, ChatGPT, Gemini, Claude, Copilot, etc.
2. Give it the following task:
 - “Give me a brief overview of how to manage hypertension in African American patients.”



Meta Activity: Evaluate the ~~Output~~ Prompt

- Critical AI Evaluation [Checklist](#)* for Med Ed
 - Use as a **starting point** for your own use
 - Edit/adapt to your role and setting

Critical AI Output Evaluation Checklist for Medical Educators

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Questions?



Session Evaluation

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Self-Assessment Survey



CME ACTIVITY INFORMATION

Activity Name: Enduring: Evaluating AI Outputs: Ensuring Accuracy and Relevance

Date: July 18, 2025 – May 14, 2028

Activity Code: 95035

Speaker Name: Tonya Anderson, MS; John Lowery, PhD; Cassidy Punt, PA-C; Christopher Shaltry, PhD

Target Audience: Regional physicians, residents, students, faculty

Learning Objectives: *at the conclusion of this educational activity, learners will be able to:*

Objective 1: Analyze AI outputs to determine alignment with educational goals.

Objective 2: Check AI outputs for accuracy, correctness, and relevance against credible sources.

Objective 3: Triangulate results across multiple AI tools.

Objective 4: Recognize ethical risks such as AI-generated misinformation and biased content.

Accreditation Statement:

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Summary of Financial Disclosures:

All planners, reviewers, faculty presenters have nothing to disclose.

Commercial Support Disclosure:

No commercial support was provided for this CME activity

Review Date: JULY 18, 2025

Original Release Date: JULY 17, 2025

Termination Date: MAY 14, 2028

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 - Enter the activity code provided on this sheet.
 - Complete the evaluation and attest to your time in attendance, then follow the screen instructions to print your certificate. Make sure your computer is set to allow pop-ups from the site or the certificate will not show.

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