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Artifice and Intelligence: Designing Writing Assignments in the Age of Al

Erin Harte

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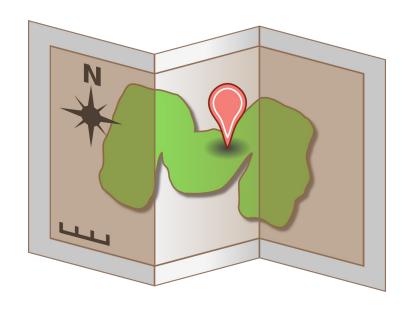


Artifice & Intelligence: Designing Writing Assignments In The Age Of AI

Presentation by Erin Harte May 24, 2023

Assignment Design Workshop Agenda

- Situate AI-Writing Concerns in the larger context of plagiarism concerns
- Brief Overview of Al Language Models
- Al Landscape for Writing Instruction
- Responsibilities & opportunities for Teaching
- Writing Assignment Design Tips
- Discussion



Feel free to ask questions as we go.

(my hopes for) Future Writing Instruction at Salve

Newly Adopted CLO #7: "Communicate Effectively"

Students connect, inform, persuade, and inspire by planning, crafting, and cultivating effective written and oral communications for a variety of functions, contexts and audiences.

Written and oral communication are:

- tools for learning and thinking
- shared responsibilities that should be integrated into all academic disciplines
- continually developed and improved. Students should encounter scaffolded writing and communication instruction at multiples points throughout their academic career, in a variety of disciplines and courses.
- flexibly defined (i.e digital competencies, information literacy skills, research techniques, oral communication, visual literacy, critical reading, critical thinking skills, and other key characteristics)

Writing and communication instruction requires interrogation, reflection and support

What is plagiarism?

Latin—plagiarius = kidnapper Greek—plagium = a kidnapping



http://cdn.toonvectors.com/images/8o/81479/toonvectors-81479-14o.jpg

plagiarism (n.)

"the purloining or wrongful appropriation of another's ideas, writing, artistic designs, etc., and giving them forth as one's own," 1620s, from <code>-ism</code> + <code>plagiary</code> (n.) "plagiarist, literary thief" (c. 1600), from Latin <code>plagiarius</code> "kidnapper, seducer, plunderer, one who kidnaps the child or slave of another," used by Martial in the sense of "literary thief," from <code>plagiare</code> "to kidnap," <code>plagium</code> "kidnapping," from <code>plaga</code> "snare, hunting net" (also "open expanse, territory"), which is perhaps from PIE *<code>plag-</code> (on notion of "something extended"), variant form of root *<code>plak-</code> (1) "to be flat." De Vaan tentatively compares Greek <code>plagia</code> "sides, flanks," Old High German <code>flah</code> "flat," Old Saxon <code>flaka</code> "sole of the foot."



Why do students plagiarize?

The Plagiarism Spectrum 2.0



The Plagiarism Spectrum 2.0 identifies twelve types of unoriginal work. Familiarity with traditional forms of plagiarism and emerging trends helps students develop original thinking skills and do their best original work.



Original Thinking

When someone submits assignments that are their own work, composed of original ideas built on attributed sources.



Student Collusion

Working with other students on an assignment meant for individual assessment.



Word-for-Word Plagiarism

Copying and pasting content without proper attribution.



Self Plagiarism

Reusing one's previously published or submitted work without proper attribution.



Mosaic Plagiarism

Weaving phrases and text from several sources into one's own work. Adjusting sentences without quotation marks or attribution.



Software-based Text Modification

Taking content written by another and running it through a software tool (text spinner, translation engine) to evade plagiarism detection.



Contract Cheating

Engaging a third party (for free, for pay, or in-kind) to complete an assignment and representing that as one's own work.



Inadvertent Plagiarism

Forgetting to properly cite or quote a source or unintentional paraphrasing.



Paraphrase Plagiarism

Rephrasing a source's ideas without proper attribution.



Computer Code Plagiarism

Copying or adapting source code without permission from and attribution to the original creator.



Source-based Plagiarism

Providing inaccurate or incomplete information about sources such that they cannot be found.



Manual Text Modification

Manipulating text with the intention of misleading plagiarism detection software.



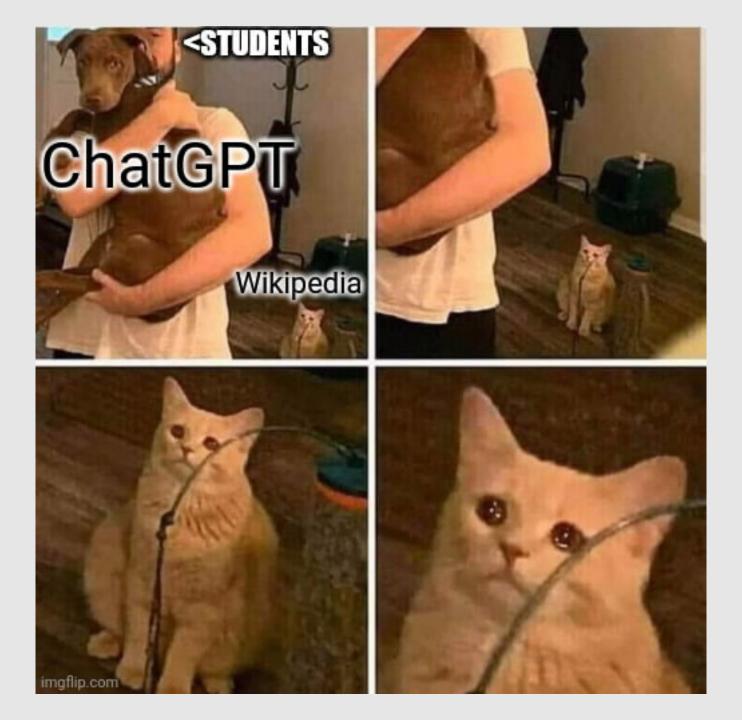
Data Plagiarism

Falsifying or fabricating data or improperly appropriating someone else's work, putting a researcher, institution, or publisher's reputation in jeopardy. The most common type of plagiarism has typically been accidental plagiarism.



"I understand what I am taking when I take the picnic table you put in your backyard. I am taking a thing, the picnic table, and after I take it, you don't have it. But what am I taking when I take the good idea you had to put a picnic table in the backyard -- by, for example, going to Sears, buying a table, and putting it in my backyard? What is the thing that I am taking then?"

- Lawrence Lessig



Why don't we want students to use Al tools in the classroom?

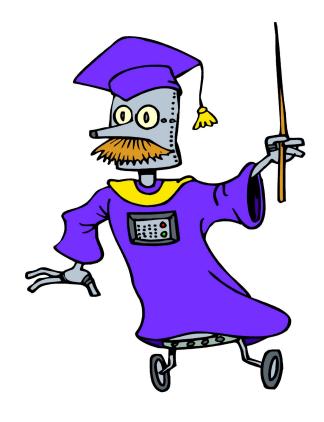
What worries do you have for your students?

New(ish) Plagiarism Concern: Al-Assisted Writing

Contract Plagiarism – engaging a 3rd party to prepare work on your behalf.

Now, might include unauthorized use of:

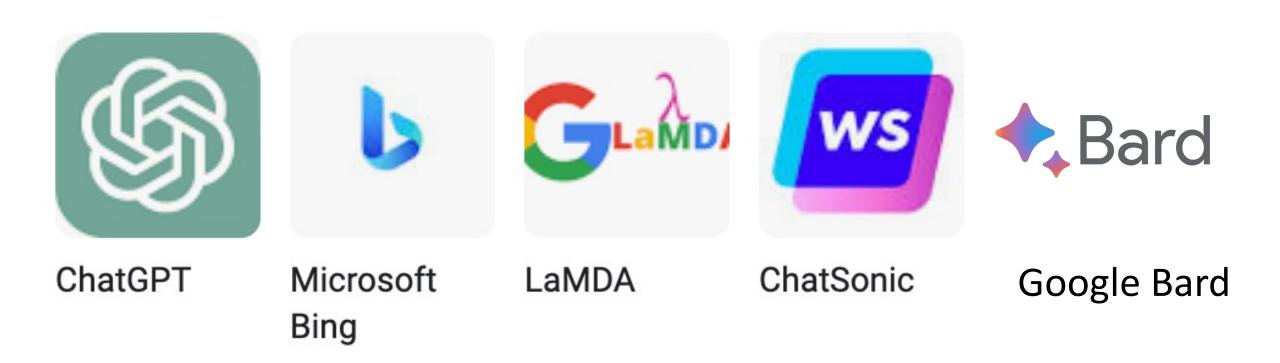
- Al-assisted writing tools
- Al-generated text
- Al-assisted paraphrasing



https://www.needpix.com/photo/1442869/robot-professor-robot-free-pictures-free-photos-free-images-royalty-free-free-illustrations

Large Language Models:

Artificial intelligence trained on large quantities of text allowing it the capacity to produce human-like text. Use predictive text generation to approximate what the most likely thing a human would write based on their training-data.



ChatGPT



Examples

4

Capabilities

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Limitations

"Explain quantum computing in simple terms" →

Remembers what user said earlier in the conversation

May occasionally generate incorrect information

"Got any creative ideas for a 10 year old's birthday?" →

Allows user to provide follow-up corrections

May occasionally produce harmful instructions or biased content

"How do I make an HTTP request in Javascript?" →

Trained to decline inappropriate requests

Limited knowledge of world and events after 2021

Please outline a presentation on teaching designing writing assignments in the age of Al.



As the AI landscape changes, remember social norms and boundaries haven't been firmly established.



Students don't necessarily understand using generative AI or AI-assisted writing tools as plagiarism



Risks of utilization and shortcomings aren't obvious to students



Different faculty/institutions will have individual approaches

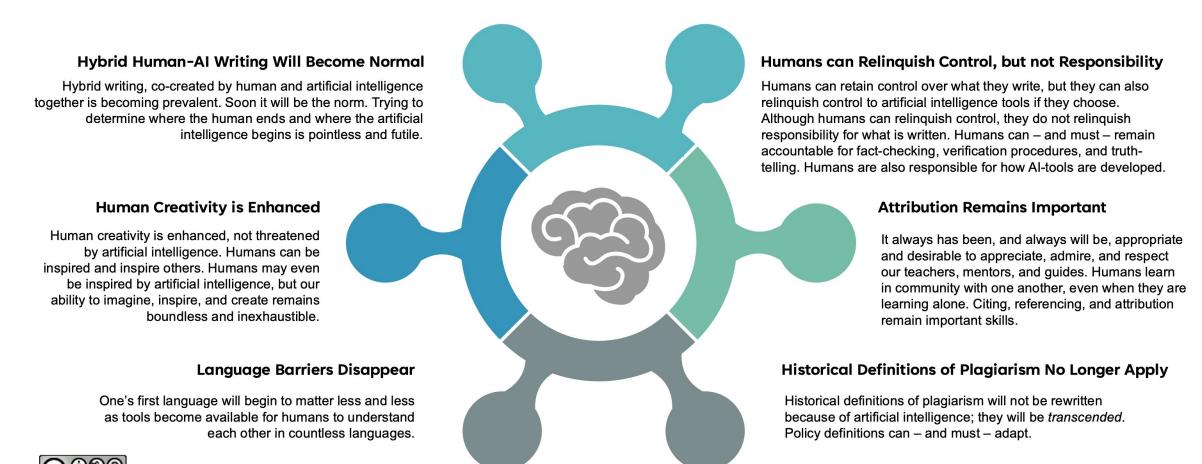


Public messaging may focus on the importance of these tools to the future of work.

6 Tenets of Postplagiarism: Writing in the Age of Artificial Intelligence

Sarah Elaine Eaton

In Plagiarism in Higher Education: Tackling Tough Topics in Academic Integrity (2021) I introduced the idea of life in a postplagiarism world. Here, I expand on those ideas.



24 February, 2023

Eaton, Sarah Elaine. "6 Tenets of Postplagiarism: Writing in the Age of Artificial Intelligence." *Learning, Teaching and Leadership*, 25 Feb. 2023, https://drsaraheaton.wordpress.com/2023/02/25/6-tenets-of-postplagiarism-writing-in-the-age-of-artificial-intelligence/.

What our are responsibilities as instructors?

- Discuss plagiarism with your students boundaries, implications, but help them understand the why
- Clarify your stance on using AI tools for coursework in your class
- Writing instruction is everyone's responsibility. Scaffold and support the writing process.
- Show them that you care about their writing.
- Provide safe classroom environments to make mistakes

Important takeaways from: "ChatGPT Just Got Better. What Does That Mean for Our Writing Assignments?" by Anna Mills

Anna Mills, an educator who has complied resources for the Writing Across the Curriculum Clearinghouse on AI & teaching writing had early access to Chat GPT-4, which she outlines in this article. She suggests:

- Unlikely we can "out-prompt it"
- It can produce writing that responds to metacognitive and personal prompts
- It can work across genres and incorporate multi-media
- Writing that AI can do is still worth assigning

A Word on AI detectors & Other Concerns

- Privacy Concerns
- (Student) Data Usage Concerns
- Energy Consumption
- Copyright issues around training data sets
- Transparency
- Built-in Bias & Learned Bias

So, what can we do?

- Emphasize purpose & meaning of assignments
- Utilize social annotation tools: Perusall, Hypothesis
- Incorporate brainstorming, process, or reflection into your assignments
- Incorporate some in-class writing (low-stakes; minute reflections on Canvas)
- Encourage synthesis of ideas
- Experiment with multi-modalities (ex. podcast production)
- Make the students responsible to each other (no, not "Big Brother")
- Teach Information literacy (our Librarians are EXCELLENT resources & presenting later today!)

Should I incorporate AI into my assignments or teaching practices?

Sure, why not?

Should I incorporate AI into my assignments?

- Teach / ask students to research how generative AI models work
- Have ChatGPT generate an assignment based on your prompt and ask students to dissect it (writing, content, etc.)
- Revise Al generated work
- Use AI to showcase how revision works compare different iterations of generated ideas
- Brainstorming
- Showcase shortcomings (ex: made-up sources)

Teach Students to Cite ChatGPT



When prompted with "Is the left brain right brain divide real or a metaphor?" the ChatGPT-generated text indicated that although the two brain hemispheres are somewhat specialized, "the notation that people can be characterized as 'left-brained' or 'right-brained' is considered to be an oversimplification and a popular myth" (OpenAl, 2023).

Reference

OpenAI. (2023). ChatGPT (Mar 14 version) [Large language model].

https://chat.openai.com/chat



Paraphrased in Your Prose

While the green light in *The Great Gatsby* might be said to chiefly symbolize four main things: optimism, the unattainability of the American dream, greed, and covetousness ("Describe the symbolism"), arguably the most important—the one that ties all four themes together—is greed.

Works-Cited-List Entry

"Describe the symbolism of the green light in the book *The Great Gatsby* by F. Scott Fitzgerald" prompt. *ChatGPT*, 13 Feb. version, OpenAl, 8 Mar. 2023, chat.openai.com/chat.

https://apastyle.apa.org/blog/how-to-cite-chatgpt

https://style.mla.org/citing-generative-ai/

Transparency in Learning and Teaching (TILT)

Purpose

Skills practiced Knowledge gained Relevance to students lives & careers
Connection to learning outcomes

Task

What to do

How to do it (steps, advice, resources)

Criteria

Checklist, rubric or other expectations Examples of what excellence looks like (multiple)



Assignment Design Brainstorming

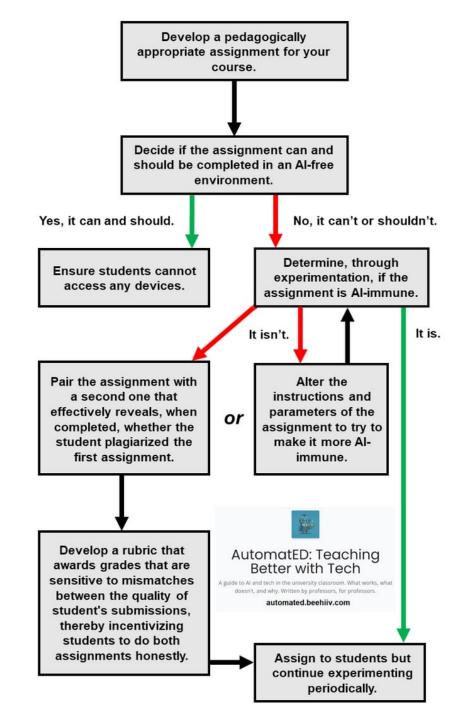
- What is the purpose of the assignment?
- What course objectives will the assignment help students meet?
- How will the assignment engage the students and further their understanding of course content?
- What transferable skills does the assignment offer students (academic or career)?
- What are the needs of the students who will complete this assignment?
- What knowledge & skills should the student demonstrate in the assignment product?
- Are there multiple ways to showcase mastery?
- Could this be designed as an "authentic writing assignment"?
- Why don't you want students to use AI writing-tools on this assignment?

Prompt Design

- Are the instructions clear, concise, and written at a level the student would understand?
- Do the instructions include:
 - The purpose of the assignment?
 - The outcomes being measured?
 - A rubric or scoring guide?
 - Details about length, sources, style, formatting etc?
 - Include Al statement
- What frequently asked questions do your students have? How can you address them?
- Peer review your assignments and get student feedback!
- ACE is happy to help you in a variety of ways.

Prompt Design

"Believe Your Assignment Is Al-Immune? Let's Put It to the Test." *AutomatED: Teaching Better with Tech,* https://automated.beehiiv.com/p/believe-assignment-aiimmune-lets-put-test. Accessed 24 May 2023.



Questions / Discussion

