# Resources on AI, Writing and Critical Thinking

This is a modest working list of articles, tools, and resources related to artificial intelligence, writing, and critical thinking. It was compiled by Doug Ward of the **Center for Teaching Excellence**, with additions provided by participants in a February 2023 session on AI and teaching. It supplements [another resource list created in January](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fcteblog.ku.edu%2Fwp-content%2Fuploads%2F2023%2F01%2FAI-resources-related-to-teaching.docx&wdOrigin=BROWSELINK).

## Guides, tools and sites

[Sentient Syllabus Project](http://sentientsyllabus.org/), *a collaborative resource created by professors in Canada, the United States, and Japan to help instructors use artificial intelligence resources meaningfully. The site can be challenging to navigate, but it contains many thoughtful materials related to syllabus language, objectives, and activities.*

[AI Text Generators and Teaching Writing: Starting Points for Inquiry](https://wac.colostate.edu/repository/collections/ai-text-generators-and-teaching-writing-starting-points-for-inquiry/), curated by Anna Mills of the College of Marin and hosted by Colorado State University. *Also see:*

* [A Teacher’s Prompt Guide to ChatGPT](https://drive.google.com/file/d/15qAxnUzOwAPwHzoaKBJd8FAgiOZYcIxq/view), by Andrew Herft.
* [The practical guide to using AI to do stuff](https://oneusefulthing.substack.com/p/the-practical-guide-to-using-ai-to), by Ethan Mollick of the Wharton School of Business.
* [AI in Higher Education Metasite](https://sites.google.com/view/ai-highered?pli=1), by Ray Schroeder.
* [Update Your Course Syllabus for ChatGPT](https://medium.com/@rwatkins_7167/updating-your-course-syllabus-for-chatgpt-965f4b57b003), by Ryan Watkins, George Washington University.
* [Classroom Policies for AI Generative Tools](https://docs.google.com/document/d/1RMVwzjc1o0Mi8Blw_-JUTcXv02b2WRH86vw7mi16W3U/mobilebasic), compiled by Lance Eaton of College Unbound. *Material from classes at several universities*.

[Elicit](https://elicit.org/). *Uses GPT-3 to guide searches for research materials. The nonprofit organization behind it says Elicit is best used for conducting literature searches, answering initial questions, and defining directions for research. Elicit says it has access to 175 million papers.*

## AI Detectors

[AI Text Classifier](https://platform.openai.com/ai-text-classifier). *Created by OpenAI,* [*which is upfront about the tool’s weaknesses*](https://openai.com/blog/new-ai-classifier-for-indicating-ai-written-text/)*:* *It can misidentify material and can be fooled with some editing; it requires at least 150 to 250 words; and it doesn’t work well in languages other than English or with text written by children*. *Related tools:*

* [AI Content Detector](https://copyleaks.com/features/ai-content-detector), *a free beta tool created by Copyleaks, a company that sells plagiarism detection software*.
* [AI Content Detector](https://writer.com/ai-content-detector/), *a free tool from Writer, a company that sells AI-driven writing software*.
* [Hive Moderation](https://hivemoderation.com/dashboard). *Has a free option.*
* [GPTZero](https://gptzero.me/). *Free for now, and you can use it with paragraphs of up to 250 words. There’s a wait list for the full version.*

## AI, writing, and assignment design

[How to cheat on your final paper: Assigning AI for student writing](https://link.springer.com/epdf/10.1007/s00146-022-01397-z?sharing_token=YwKL6HmHeNSxEj6Go63ks_e4RwlQNchNByi7wbcMAY5jYiMNym3xBTAzN52Pp_FuF7Qv_P-Qnug5Ax7FJNWShl1DpAHIbV1fvh8gzqODl_v-dUgF0TEFyk8rlBIfksPNkX2csUNmE3KmnQCA9GDBy9sa4Q9nkg7MfuW4bbwdNNo=), by Paul Fyfe. AI & Society (accepted 4 September 2022).

*A professor writes about an AI experiment he undertook before ChatGPT roiled education.*

[Embrace the Bot: Designing Writing Assignments in the Face of AI](https://www.facultyfocus.com/articles/course-design-ideas/embrace-the-bot-designing-writing-assignments-in-the-face-of-ai/), by Eric Prochaska, Faculty Focus (23 January 2023).

* [Teaching Actual Student Writing in an AI World](https://www.insidehighered.com/advice/2023/01/19/ways-prevent-students-using-ai-tools-their-classes-opinion), by Kevin Jacob Kelley, Inside Higher Ed (19 January 2023). *Offers 10 strategies for engaging students in writing projects that avoid AI.*

[Worried About ChatGPT? Don’t Be](https://www.insidehighered.com/views/2023/01/23/chatgpt-and-what-we-value-writing-instruction-opinion), by Hetal Thaker, Inside Higher Ed (23 January 2023).

*Argues that AI is part of larger questions the humanities have been grappling with for years (relevance, creativity, assessment) and that it is just another reminder of why we need to keep pushing for solutions.*

[ChatGPT can’t be credited as an author, says world’s largest academic publisher](https://www.theverge.com/2023/1/26/23570967/chatgpt-author-scientific-papers-springer-nature-ban), by James Vincent, The Verge (26 January 2023).

*Springer Nature says authors are free to use AI tools as long as they disclose their use.* [*Medium announced*](https://blog.medium.com/how-were-approaching-ai-generated-writing-on-medium-16ee8cb3bc89) *a similar policy and cites policies from other organizations.*

[A Message to Students About ‘The Bot,’](https://www.insidehighered.com/views/2023/01/23/message-students-about-%E2%80%98-bot%E2%80%99-opinion) by Julia McKenzie Munemo, Inside Higher Ed (23 January 2023).

*The director of a writing center argues that AI will further demotivate students who see writing as a chore and classes as mere tasks. To educators, Munemo writes: “In a world where students are taught to write like robots, a robot can write for them.”*

[Why I’m Not Scared of ChatGPT](https://www.chronicle.com/article/why-im-not-scared-of-chatgpt), by Christopher Grobe, Chronicle Review (3 February 2023).

[ChatGPT’s Fluent BS Is Compelling Because Everything Is Fluent BS](https://www.wired.com/story/chatgpt-fluent-bs/), by Amit Katwala, Wired (9 December 2022).

*“ChatGPT was trained on real-world text, and the real world essentially runs on fluent bullshit,” from media to business to politics to education.*

## AI and teaching

[Will ChatGPT Change the Way You Teach?](https://www.chronicle.com/newsletter/teaching/2023-01-05), by Beth McMurtrie, Chronicle of Higher Education newsletter (5 January 2023).

* [Alarmed by A.I. Chatbots, Universities Start Revamping How They Teach](https://www.nytimes.com/2023/01/16/technology/chatgpt-artificial-intelligence-universities.html), by Kalley Huang, New York Times (16 January 2023).

[ChatGPT Advice Academics Can Use Now](https://www.insidehighered.com/news/2023/01/12/academic-experts-offer-advice-chatgpt), by Susan D’Agostino, Inside Higher Ed (12 January 2023). *Thoughts from a variety of educators.*

* [Is ChatGPT a threat to education?](https://news.ucr.edu/articles/2023/01/24/chatgpt-threat-education), by Iqbal Pittalwala, UC Riverside News (24 January 2023). *Instructors in computer science, biology, education policy, creative writing, physics and astronomy, economics, and public health offer their views.*

[Designing Assignments in the ChatGPT Era](https://www.insidehighered.com/news/2023/01/31/chatgpt-sparks-debate-how-design-student-assignments-now)*, by* Susan D’Agostino, Inside Higher Ed (31 January 2023).

[With ChatGPT, We’re All Editors Now](https://www.insidehighered.com/views/2023/01/31/chatgpt-we-must-teach-students-be-editors-opinion), by Rachel Elliott Rigolino, Inside Higher Ed (31 January 2023).

*Argues that AI has increased the need for critical editing.*

[Can ChatGPT fill in mentorship gaps for Gen Z workers](https://www.worklife.news/technology/chatgpt-gen-z/), by Cloey Callahan, Worklife (27 January 2023).

[The bots are here to stay. Do we deny or do we adapt?](https://cteblog.ku.edu/the-bots-are-here-to-stay-do-we-deny-or-do-we-adapt/), by Doug Ward, Bloom’s Sixth (20 January 2023).

## AI and critical thinking

[Conversation-Stopper: Will the development of AI tools make us less intelligent?](https://return.life/2022/07/26/conversation-stopper/), by John Symons, Return (26 July 2022).

[How ChatGPT robs students of motivation to write and think for themselves](https://theconversation.com/how-chatgpt-robs-students-of-motivation-to-write-and-think-for-themselves-197875), by Naomi S. Baron, The Conversation (19 January 2023).

*A linguist argues that writing is a human process and that AI tools diminish students’ ability to improve their thinking.*

[How to Teach Critical Thinking](http://www.danielwillingham.com/uploads/5/0/0/7/5007325/willingham_2019_nsw_critical_thinking2.pdf), by Daniel T. Willingham, Education: Future Frontiers (May 2019).

*A report commissioned by Australian educators provides a broad literature review of critical thinking research. That research suggests that critical thinking is discipline specific, even though we often consider it a general skill.* [*The Hechinger Report also wrote about Willingham’s work*](https://hechingerreport.org/scientific-research-on-how-to-teach-critical-thinking-contradicts-education-trends/)*.*

[An AI toolkit for libraries](https://insights.uksg.org/articles/10.1629/uksg.592/), by Michael Upshawk, UKSG Insights (1 November 2022).

*This article, published in a libraries journal, provides an excellent overview of how AI tools work and how we can evaluate them for potential use.*

## AI and ethics

[Teaching AI Ethics](https://leonfurze.com/2023/01/26/teaching-ai-ethics/), by Leon Furze. *An Australian educator’s excellent guide on the many facets of AI in education. Contains discussion questions and activities for various disciplines*.

[Ethical guidelines on the use of AI in education](https://op.europa.eu/en/publication-detail/-/publication/d81a0d54-5348-11ed-92ed-01aa75ed71a1/language-en), European Commission (25 October 2022).

[Australia’s AI Ethics Principles](https://www.industry.gov.au/publications/australias-artificial-intelligence-ethics-framework/australias-ai-ethics-principles), Department of Industry, Science and Resources. *This is focused more broadly than education, but educators may find many of the points useful for discussion.*

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