

Writing Assignments in the Age of AI

1. What AI text-generation capabilities are currently available or will soon be available?
2. Safety, Security, and Ethical Risks
3. Some Basic (but limited) Ways to Counteract Cheating
4. Broader Strategies and Alternative Assignments

Prepared by Jordan Glass for College Champlain-Lennoxville, May 2023



In this workshop we will discuss:

1. Currently available AI text-generation technologies
2. Safety, security, and ethical considerations
3. Some basic (but limited) ways to prevent cheating
4. Broader strategies and alternative assignments

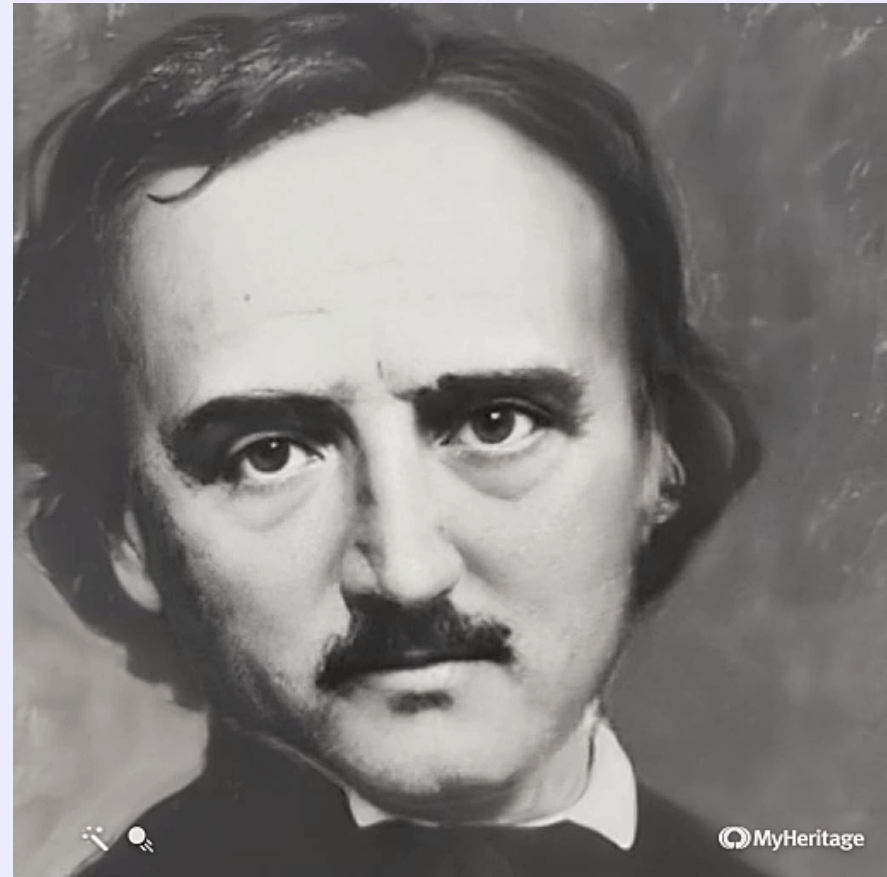


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1. What AI text-generation capabilities are currently available or will soon be available?

ChatGPT became popular in late 2022.

It has a significant capacity to compose texts in different languages and styles in response to user-generated prompts.



ChatGPT is not the only AI or text-generating software that exists, but it is probably the most widely used.

It can easily:

- respond to questions
- compose essays, letters, poems, or any other sort of writing (even in the first person, if requested)
- rewrite or summarize provided texts
- edit or elaborate on provided texts
- provide lines of code
- etc.

See more: [January 2023 Champlain ChatGPT Workshop Slides](#)

With **Co-Pilot** and similar software and plugins, many text-generating features will continue to be **integrated into word processing programs and other applications.**

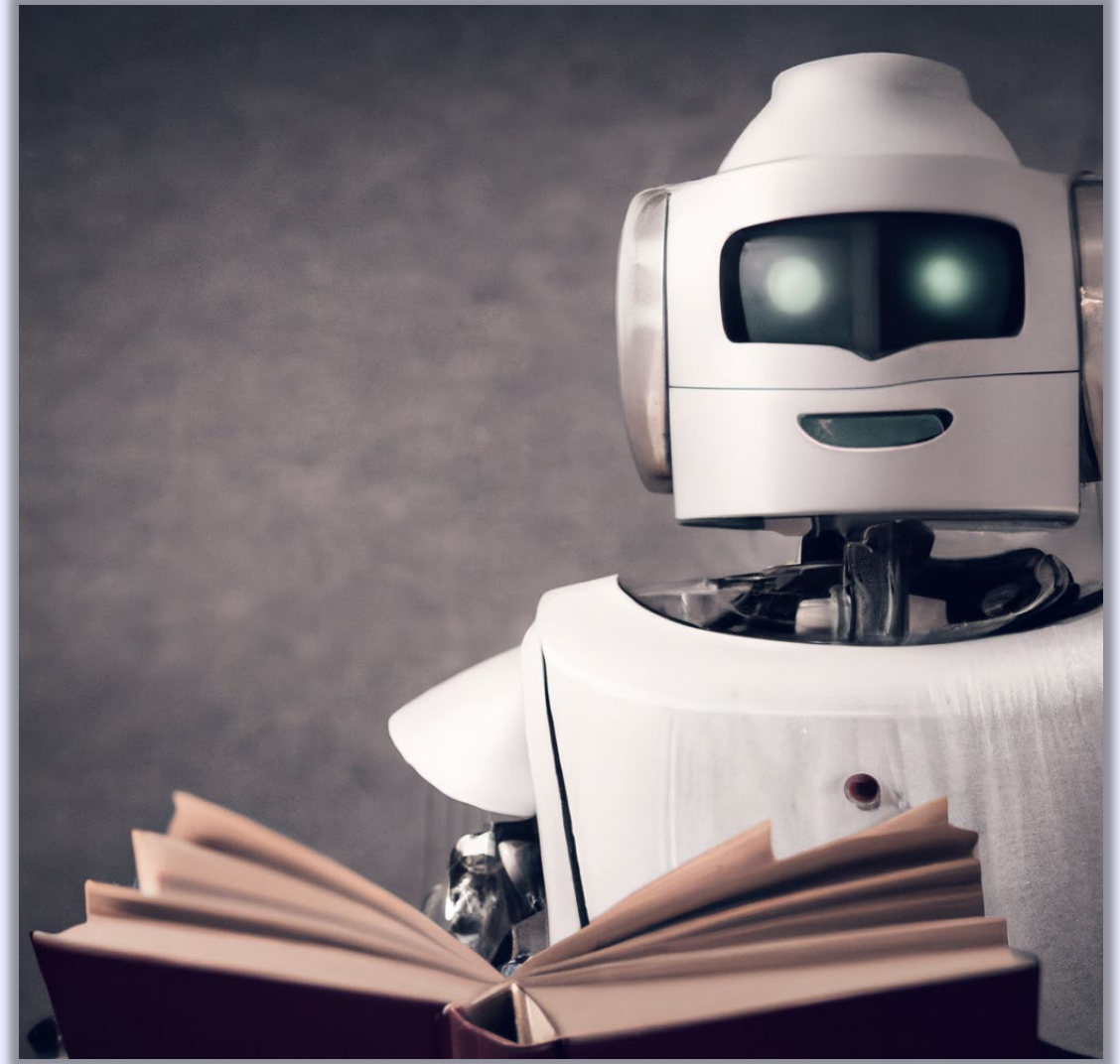
Read Microsoft's own description of Co-Pilot...

"With **Copilot in Word**, you can jump-start the creative process so you never start with a blank slate again. Copilot gives you a first draft to edit and iterate on — saving hours in writing, sourcing, and editing time. Sometimes Copilot will be right, other times usefully wrong — but it will always put you further ahead. You're always in control as the author [...].

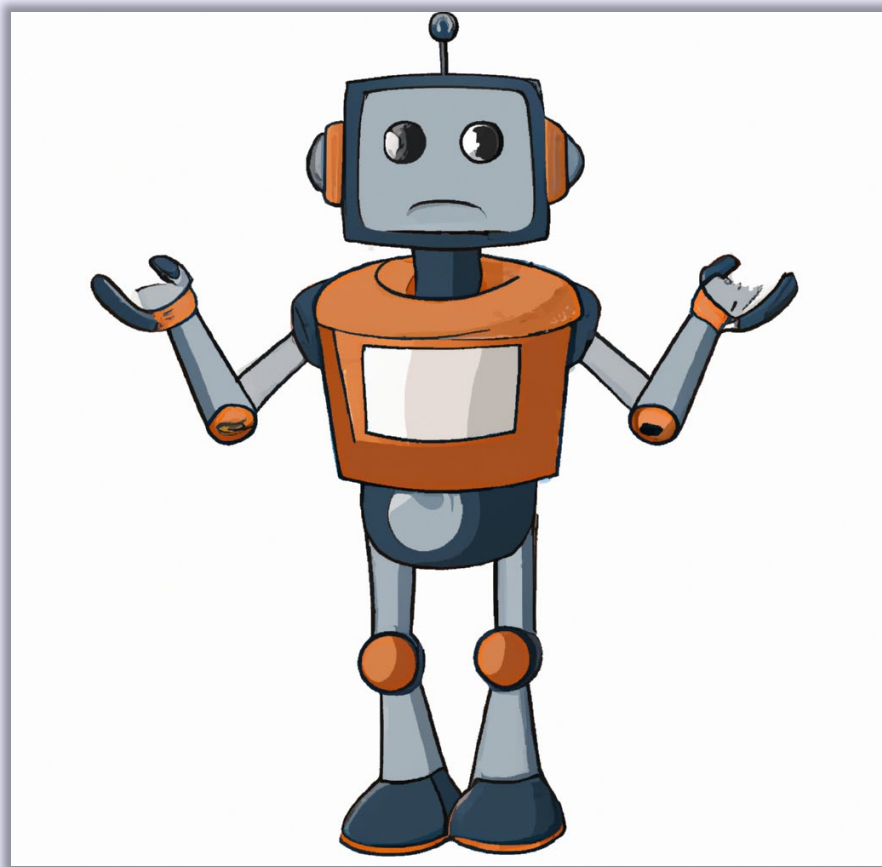
Unlock productivity. We all want to focus on the 20% of our work that really matters, but 80% of our time is consumed with busywork that bogs us down. Copilot lightens the load. From summarizing long email threads to quickly drafting suggested replies, **Copilot in Outlook** helps you clear your inbox in minutes, not hours. And every meeting is a productive meeting with **Copilot in Teams**. It can summarize key discussion points — including who said what and where people are aligned and where they disagree — and suggest action items, all in real time during a meeting. And with **Copilot in Power Platform**, anyone can automate repetitive tasks, create chatbots and go from idea to working app in minutes." [Microsoft Co-Pilot \(Blog\)](#)

One of the likely consequences of this integration is that the **distinction between a text authored by a person and a text authored by AI is likely to become blurry.**

Institutions/programs/instructors will have to decide what level of AI assistance is appropriate for students to use.



This image was created with the assistance of DALL·E 2, May 15, 2023.



This image was created with the assistance of DALL-E 2, May 16, 2023.

Biggest Limitation of ChatGPT?

It has no judgement or sensitivity to truthfulness/falsity.

All it can do is create coherent-sounding text based on large samples.

For example, if you ask it for sources to use for an essay, it will give you a list of what sound like good, reliable sources.

2. Safety, Security, and Ethical Risks

Information privacy

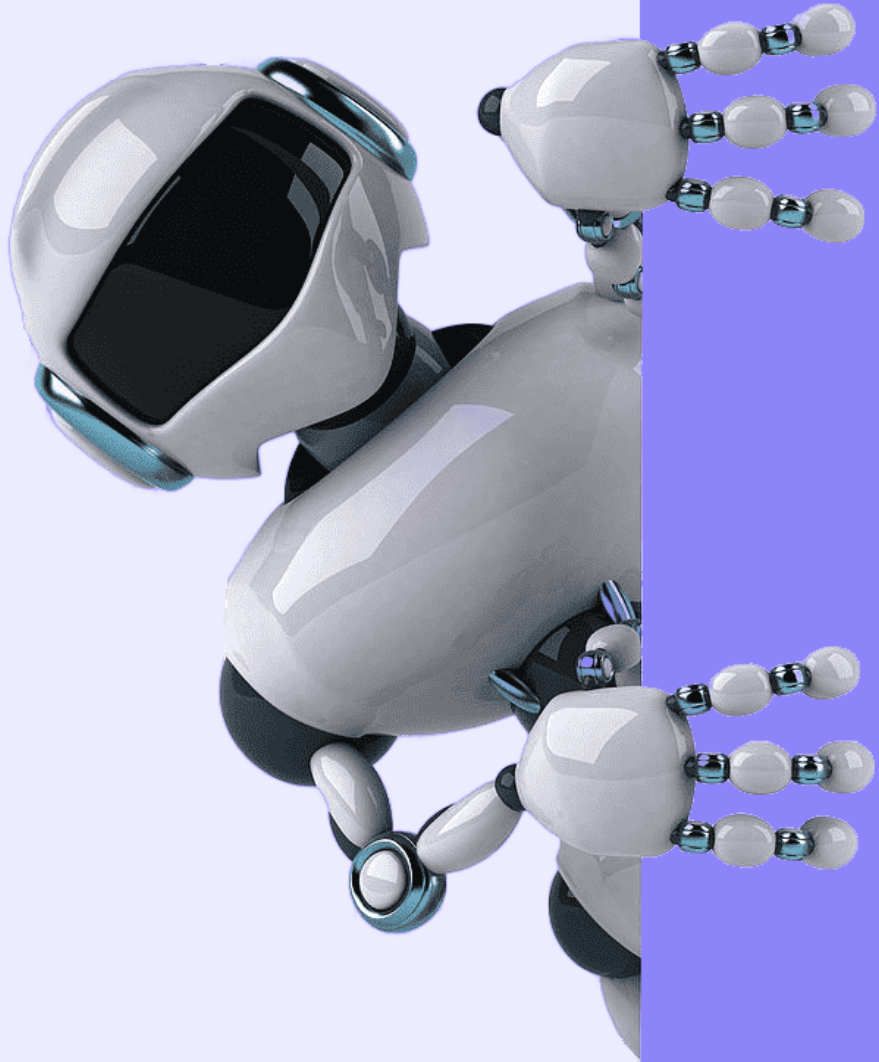
ChatGPT reserves a significant ability to collect data from its users. According to its [privacy policy](#)...

"[Open AI] collect[s] information that alone or in combination with other information in our possession could be used to identify you [...] as follows:

Personal Information You Provide: We may collect Personal Information if you create an account to use our Services or communicate with us [...] including your name, contact information, account credentials, payment card information, and transaction history [...].

User Content: When you use our Services, we may collect Personal Information that is included in the input, file uploads, or feedback that you provide to our Services [...]."





Legally, we should not be asking our students to use ChatGPT, as it does not meet the security and information privacy standards of the Ministry of Education and Higher Education.

If your students are nevertheless electing to use ChatGPT, you might consider cautioning them against putting personal or private information into the chat.

Other social and ethical concerns that you might discuss with your colleagues and students:

- **copyright and intellectual property ownership;**
- **prejudicial and biased information output;**
- **ethical nature of how the software was created;**
- **how AI could affect the job market.**

3. Some Basic (but limited) Ways to Counteract Cheating

- i. Do AI-generated text detectors work? (*Not really!*)
- ii. Safe Browsers and proctoring software
- iii. In-class, pen-and-paper assignments

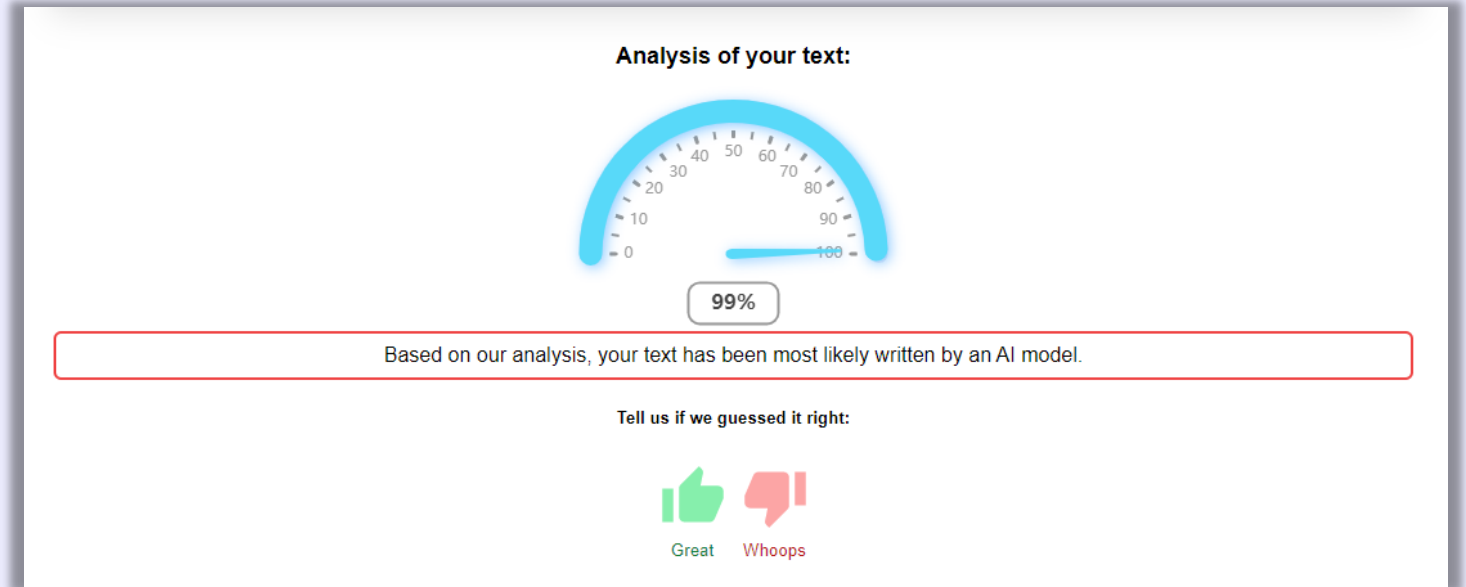


i. Do AI-generated text detectors work?

[Chat GPT-2 Detector](#), [Open AI's newer AI Text Classifier](#), [GPTZero](#), [Draft & Goal](#), [Turnitin \(forthcoming\)](#) and other applications claim to detect AI-generated texts within a degree of certainty.

They do so essentially by picking up on the same linguistic patterns that AI language generators use to construct language in the first place; and they check for the kinds of uniformity and regularity that are characteristic of AI-generated texts.

Draft & Goal evaluation of a text written entirely by ChatGPT. —



Your text is likely to be written entirely by a human

— GPTZero evaluation of a text written entirely by ChatGPT.

Students can easily introduce typos and small errors to decrease the likelihood of their essay being flagged.

There are supposed [guides to getting AI to disguise its own writing as human-created writing](#), so even the cheating can be automated!

The detection software will also sometimes falsely flag a human-written text as having likely been written by AI.

Conclusion: These detectors should not be used as a basis on which to accuse a student of plagiarism.

Although time-consuming, the old methods of catching plagiarism might still function better.

If a student:

- Is using **jargon and technical terms** that you didn't introduce
- Is **referring extensively to technical literature** that you did not assign
- Is **writing at a level uncharacteristic of Cegep students**
- Explicitly **contradicts or confuses basic material** that you have clearly covered in class...

Speak to your student in person and ask about the assignment.

ii. Safe Exam Browsers and proctoring software

The College supports the use of the **Safe Exam Browser (SEB)** within Moodle (for a which a [tutorial](#) is available).

- The SEB allows an instructor to set up a Moodle quiz, which can simply consist of one long essay question.
- Students' computers are 'locked' into Moodle while they write the quiz.
- With the SEB engaged, the student cannot search the web, use other applications, etc.



This can be effective for an exam setting.

However, there are some big **limitations**:

- Students **cannot be asked to use the SEB at home or on their personal devices**. (Having students use the SEB at home would likely be ineffective anyway.)
- SEB prevents students from productively using the computer in academically responsible ways.
- It relies on a bit of policing rather than more positive, active pedagogical engagement with the student.

What about surveillance-based invigilation software like **Proctorio**?

Proctorio has the ability to:

- Record screen and web search activity during an exam;
- Record students through a webcam while they write the exam.

However, this software raises important ethical concerns.

Students Are Rebelling Against Eye-Tracking Exam Surveillance Tools

Invasive test-taking software has become mandatory in many places, and some companies are retaliating against those who speak out.

“These coders are defining, mathematically, the ideal student body: how often it does, or doesn’t do, these certain attributes, and anything outside of that ideal is treated with suspicion [...]”

[Vice Magazine, September 24, 2020.](#)

iii. In-class, pen-and-paper assignments

As everyone knows...

Pros:

- Simple
- Requires little coordination with students and few tools
- Can be arranged spontaneously

Cons:

- It can only be used in class
- It deprives students of valuable research and writing tools
- Teachers may prefer digital corrections/records

4. Broader Strategies and Alternative Assignments

Begin with a reflection on the **competencies** aimed at through writing assignments.



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Help

Wooclap is an online platform through which presentations are made interactive. You can insert questions into your PowerPoint slideshow and have the audience participate through the web or via SMS. The results are then displayed in your PowerPoint presentation in real-time.

First, you need to sign into your Wooclap account. Then, you will be able to select the questions you would like to add to your PowerPoint presentation.

Start

If you don't have an account yet, you can sign up for free on www.wooclap.com

When writing aims at writing skills themselves, we can **try to focus on the process of writing and the skills that it requires** rather than on the finished product.

- i. Proposals, annotated bibliographies, etc.
- ii. Peer-reviewed assignments
- iii. Personal reflections on writing assignments
- iv. Annotations on an assignment or essay
- v. Practice writing in real time in class
- vi. (Almost) All is Permitted?

i. Proposals, annotated bibliographies, etc.

Annotated bibliography

If an essay requires research, you may be able to judge how seriously students are taking the project by looking at the suitability of the sources that they choose.

Have students **specify what they intend to use a source for in their essays** (e.g., to offer evidence for X, in order to provide a criticism of theory Y, in order to provide the background information needed to explain this or that essential element of the essay's argument, etc).

Proposal

Have students write essay proposals in advance. You can require these to be as basic or detailed as you like.

You can have them discuss essay content (what is the topic, what is the basic argument, how will the essay be structured, etc)...

but you can also **ask them to explain:**

- why the topic interested them;
- how the topic fits into the course;
- how the topic responds to the ideas that you have been discussing in class;
- how they think the topic will help them in their program, future studies, or future work, etc.

ii. Peer-Review Assignments

Theoretically, this can be done for any kind of assignment where students might verify one another's work against specific criteria.

Do not leave a peer-review assignment 'open'. Instead, give precise directions. **Have students fill out a worksheet that specifies the criteria** that they should look for in evaluating work.

Ask them to read another student's essay and:

- **Identify** the topic and thesis (based on the introductory paragraph);
- **Create** a simple, point-form outline of the essay to demonstrate that it is well organized and that the basic arguments or sections in the essay are clear;
- **Evaluate** whether the arguments clearly lead to the conclusion/thesis proposed in the essay;
- **Verify** that the essay makes appropriate use of sources (from class or according to whatever other criteria you have set out).

If the reviewer has difficulty, for example, identifying the topic and thesis, let this be a signal to the author that the intro. paragraph is perhaps unclear or disorganized.

Here is an example of an in-class peer-review assignment that I use.

Suggestion: Be very specific in the instructions to prevent students from taking shortcuts.

Essay Peer Review Worksheet

Instructions: Read your classmate's essay and fill out this peer review worksheet.

Part 1. Describe your classmates' (a) essay topic/problem/dilemma and (b) thesis in your own words. The point is to verify whether things have been properly communicated by the author; and this is only possible if you attempt to understand the essay well enough to explain it in your own words.

(a) The basic problem investigated in the essay:

(b) The author's thesis:

Part 2. Make a point-form outline of the essay you are reading. If you have difficulty doing this, it may be because the essay isn't organized in a clear way, and you can add a comment about this. Make an outline that describes what is discussed or explained in the introduction, in each of the body paragraphs, and in the conclusion. If the essay is well-organized, the outline should make it clear how the author will guide the reader to the conclusion of the essay. (Use the back of this sheet if you need to.)

Part 3. Respond to the following questions. Do not just say "everything looks good" to avoid the work and social discomfort of giving constructive feedback. Respect your classmate by giving a thoughtful, nuanced response. Indicate whether certain parts of the essay were unclear or whether certain arguments were insufficient.

a. Is the writing clear? Does the essay successfully guide the reader through the writer's reasoning? Are the arguments convincing? Explain.

b. What are the greatest strengths of the essay?

c. In what areas could the essay use additional work?

How would peer-reviewing essays make the use of ChatGPT less likely?

The hope is that:

- preparing students with the essay-writing knowledge required to do the peer-review assignment will **give them more confidence** in their own writing;
- students will feel more supported in their writing and **feel like the instructor cares about the process and monitors progress**;
- students will be **hesitant to have a peer spend time reviewing something they did not write**.

iii. Personal Reflections on a Written Assignment

In addition to (or instead of) a proposal/annotated bibliography, **have students submit essays with a written reflection about their process and their feelings about their work.**

In a page or two, have them explain:

- the biggest challenges they experienced
- any perceived limitations or obstacles while writing
- which aspects of their essay they are most proud of and which aspects need most work (have them refer to their knowledge of essay structure, argumentation, etc., in order to make this precise)
- what their biggest personal takeaway from the essay was...

This may also help with grading:

If the student has already noted that this or that aspect of the essay needs improvement, you do not later have to correct this aspect of the essay.

If the student recognizes that the essay structure/organization needs some work, perhaps you can give partial marks (and recognize a partial attainment of the competency) since the student has demonstrated his/her ability to identify such a problem in a piece of writing.

Use Video or Reflections or Interviews?

If you are feeling tech-adventurous, you could even **have students film a short oral reflection on their essay** (1-2 minutes) that you would watch before grading.

This would serve the above functions. It would also again reduce the likelihood that a student is going to invent something or misrepresent his/her work.

This can also be done with brief interviews before or after you have read the essays.

iv. Annotations on an Assignment or Essay

Alternatively, **have students annotate their own essays** to demonstrate that they have consciously employed essay-writing (or other writing) norms.

Thinking about how you would want students to annotate their essays can help you think in advance about the directions or information that you give them.

Example

This is an example that I show my students. It indicates the important elements of an intro. paragraph that I want them to incorporate in their writing.

Following your example, students could annotate their own essays to demonstrate the conscious choices they have made.

Example of an Introduction

“[Introduction of general topic:] In most parts of the world, almost everyone wears shoes, many or most of which are built to be tied with laces. For many adults and children over five years old, tying one’s shoelaces is a daily activity. One often ties up his or her shoes several times a day. [Generation of reader’s interest:] One may therefore tie up his or her shoes tens of thousands of times over a lifetime, hence the vital importance of learning how to tie one’s laces properly. [Precision of paper topic:] However, there is some debate as to the correct way to tie up one’s shoes. There are several different techniques that can be used, including the standard, the bunny ears, and the two circles methods. [Thesis:] I will argue that the bunny ears method is the most practical and should be used to the exclusion of the others. [Brief outline of essay structure:] I will demonstrate this by comparing all three methods in terms of ease of use, time efficiency, and reliability.”

v. Practice writing in real time in class

Not an assignment *per se*, but this is a way to help prepare students for writing, boost their confidence, and make cheating less tempting.

You can practice the basic elements of writing by working together on essay-style questions in class.

1. Following a lesson, open a Word document and share your screen on the projector.
2. Have a comprehension question about the lesson ready. Ask students, "If you had to respond to this question for homework, how would you get started?"
3. Have the students make suggestions. Ideally, students will suggest to look at their notes, look back at the text, review the lecture, etc.
4. Have them suggest what information they will need to respond to the question. Add all of this to the Word document.
5. Ask for suggestions about how to organize this information properly and offer your own guidance. You can show them how to write a very formal response by beginning with a repetition of the comprehension question to form an introductory sentence; and you can demonstrate how a good concluding sentence can tie all of the information together; decide which collected information is superfluous; etc.
6. Ask their opinion about how to word this or that claim, whether this or that concept needs to be clarified in order to fully respond to the question, etc.
7. At the end, help them review what makes the response a good one: E.g.: It clearly expresses what question it is responding to; it provides sufficient but not extraneous background information; it appropriately refers to sources (to whatever extent is needed for the context); it is well organized to facilitate the reader's comprehension; etc.

In this way, composing a 250-word text in class can serve as a good basis to prepare students for doing their own writing.

vi. (Almost) All is Permitted?

As mentioned, you should not ask or require your students to use ChatGPT.

Nevertheless, you do not have to forbid students from using ChatGPT on their own time. Some instructors have elected to leave students the choice to use ChatGPT to facilitate their work.

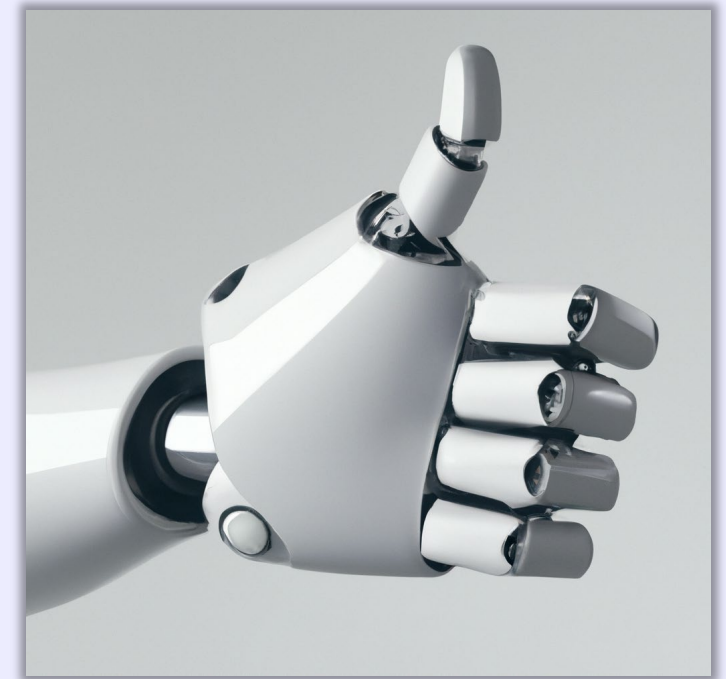
A [Marianopolis College instructor outlines how he used ChatGPT with his students](#) which included:

- surveys of student opinions about ChatGPT before the assignments
- a post-assignment survey to see what students found advantageous and disadvantageous about using it (not all students chose to use ChatGPT)
- detailed instructions about how the software should and should not be used and instructions about how to report how they have used it

According to this instructor...

Potential benefits:

- "ChatGPT cannot independently produce the assignment at a good to great level."
- "ChatGPT can meaningfully help students develop the assignment."
- "Using ChatGPT [...] requires knowledge and understanding and thus enhances learning (i.e. the achievement of learning objectives)."
- "Students care about the assignment (for example, they believe in its relevance)."



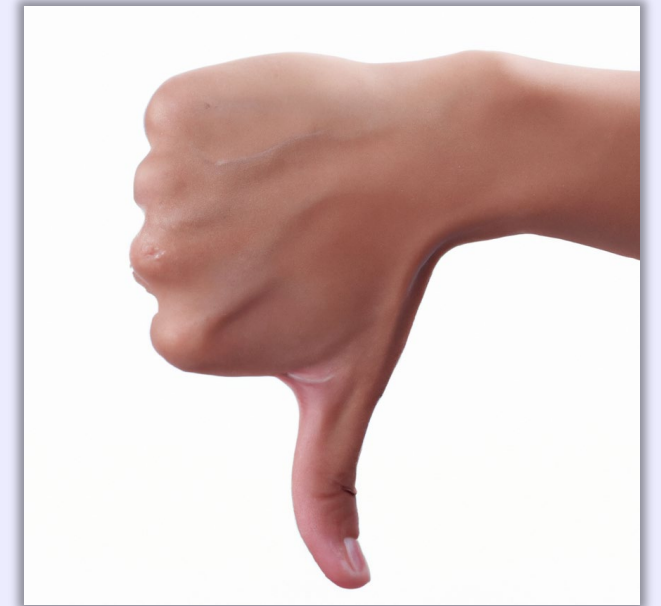
This image was created with the assistance of DALL-E 2, May 16, 2023.

According to this instructor...

Drawbacks:

When permitted to use ChatGPT to assist with writing a cover letter, *"the more liberal approach to academic integrity resulted in a modestly increased number of students uncritically copying example cover letters and so reducing their learning at the composition stage of the assignment."*

On the other hand, **when used for literary essays**, "it seems that students' use of ChatGPT was limited and not very substantial [...]. As long as the assignment involves any complex tasks, or demands in-depth analysis and critical thinking, as is the case for a literary essay, ChatGPT cannot do the work for the students at a good to great level."



This image was created with the assistance of DALL·E 2, May 16, 2023.

Some inspiration for this session came from a workshop offered by Dawson College (hosted by Jeffrey Gandell) called "Rethinking Assignment Design in the Age of AI" (May 19, 2023), and from *Engaging Ideas*, by John C. Bean and Dan Melzer (3rd edition, Jossey-Bass, 2021).

