Honorlock

Preventing AI Content Tools in Higher Ed

Instructional design tips & technology to stay ahead of ChatGPT & other AI content tools



AI is more sophisticated, human, and integrated into our lives than ever before, including in higher education.

AI helps personalize learning, provide quicker feedback, offer flexibility, increase access, and automate tasks that give instructors more time to teach.

But some forms of AI, like ChatGPT and other tools, can also put academic integrity at risk. They can write anything, they're virtually undetectable, and they're rapidly advancing.

So, how can you stop them?

We'll show you.

Note: This eBook uses ChatGPT as the primary example because it's the most sophisticated AI content tool. Other tools, like Google's Bard chatbot and Microsoft's Bing AI chatbot, are trained on ChatGPT's response data and machine learning model. References to ChatGPT also include newer releases.

Table of Contents

HL

What's this ebook about?

Here's what you'll learn in this eBook:

Part 1: How ChatGPT & other AI writing tools work
A brief summary of how these tools work (specifically ChatGPT), what they can write, where they get their information, and real screenshots of how versatile responses are depending on the instructions given.

Part 2: 10 plagiarism tools vs. ChatGPT
We tested ChatGPT's responses to prompts with varying levels of detail against ten plagiarism detection tools. See who won.

Part 3: Instructional design tips & technology to beat AI writing
AI writing tools are extremely difficult to detect, but we'll show you best practices to apply and software that can prevent them from being used during written assignments and online exams.

© Honorlock 2023

Part 1:

How ChatGPT & other AI content tools work



What are AI content tools?

AI content tools, sometimes referred to as AI writing tools and AI chatbots, generate content for you based on the writing instructions and information you give them. The best tools were trained on billions of internet resources (websites, news, research, etc.) and use machine learning to continually improve responses.

How does ChatGPT stand out?

While some AI writing tools are repetitive and awkward, ChatGPT stands out because of its ability to write just like a human. Its ability to be "human" is because it was trained on one of the largest text datasets and received expert feedback from humans that helped it learn and refine its responses.

What can it write?

- Essays of any length
- Responses to test questions
- Jokes & poems
- Music & screenplays
- Resumes & cover letters
- Code and debugging code

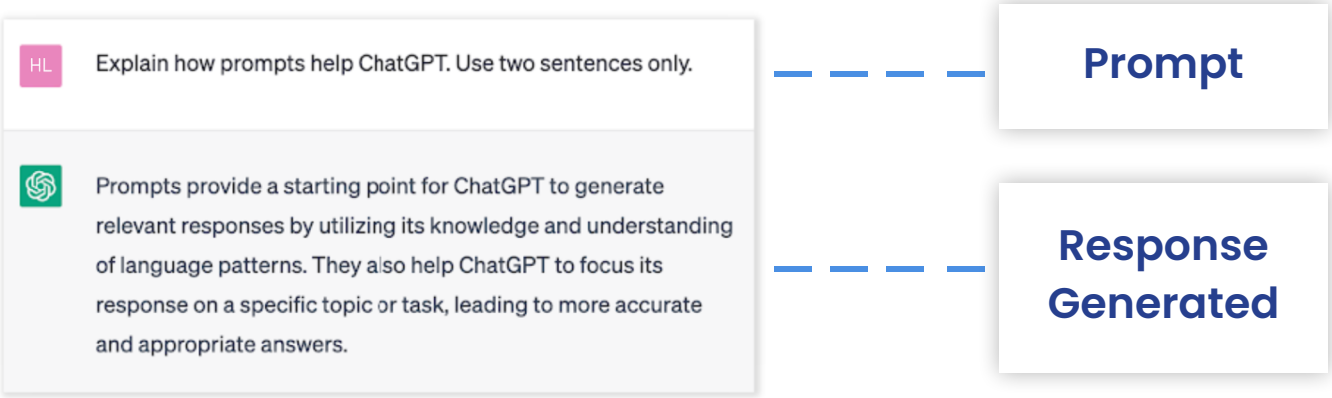
Did you know ChatGPT passed these exams?

- MBA & law school exams
- Bar Exam
- GRE & SAT
- Medical school finals
- 3-part U.S. Medical Licensing Exam

© Honorlock 2023

How do you use ChatGPT?

It's pretty simple: you enter a prompt, and it generates a response based on the information and instructions provided in the prompt.



Prompt examples

Prompts can be basic, complex, or anything in between. Detailed prompt instructions generate tailored responses, which is difficult for plagiarism tools to detect (we'll show you in Part 2)

Add some detail

Length

Specify the length of the response with instructions like:

- In [number] words, explain...
- In [number] paragraphs, describe...

Format

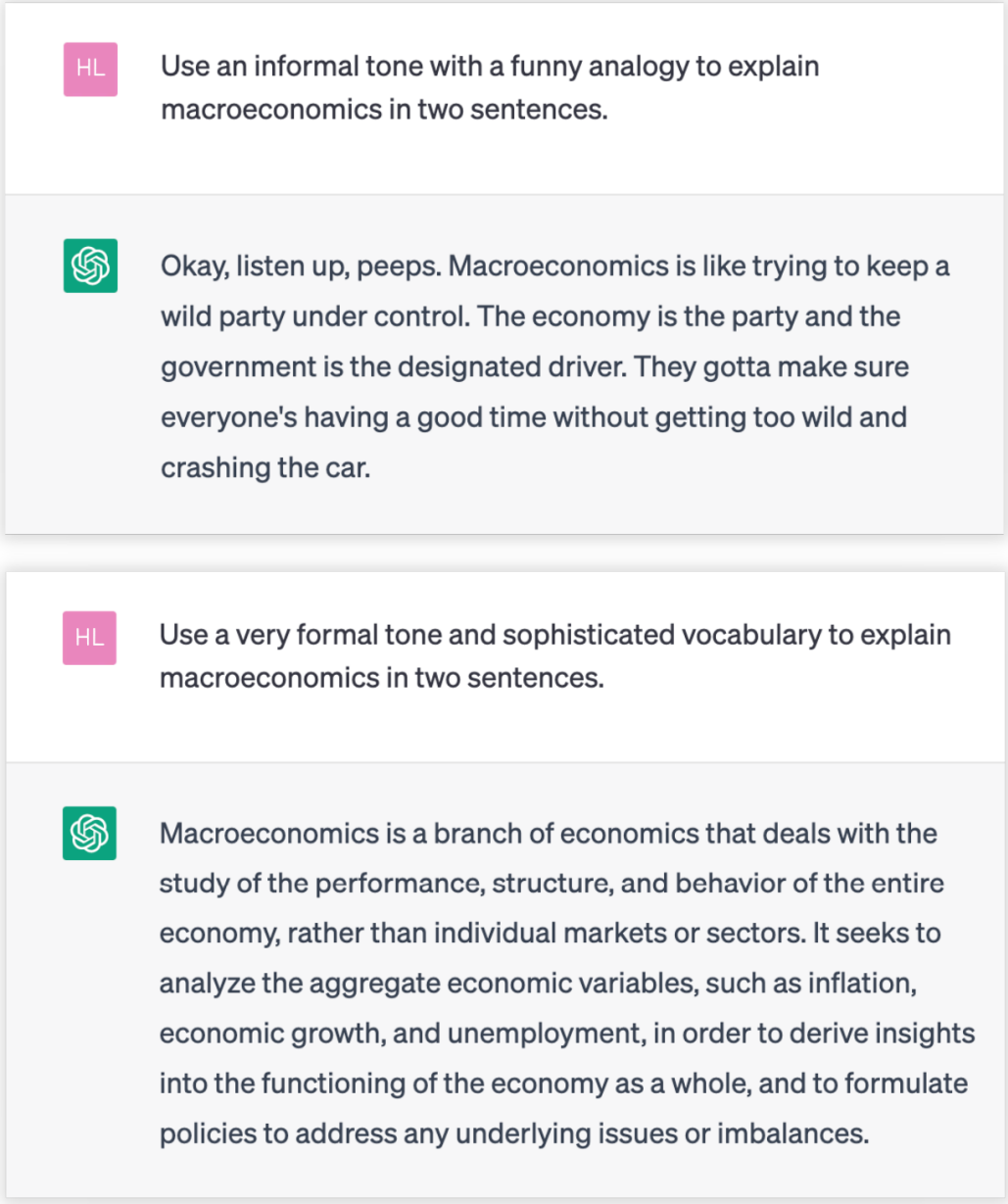
Describe the response format with with instructions like:

- Write a short paragraph that explains the steps to...
- Make a bulleted/numbered list of the steps to...
- Use short, choppy sentences to explain...

© Honorlock 2023

Set the tone

Give ChatGPT context about how formal or informal the response should be, if it should be funny or serious, etc. This information can significantly change the response you'll receive, as shown in the examples below.



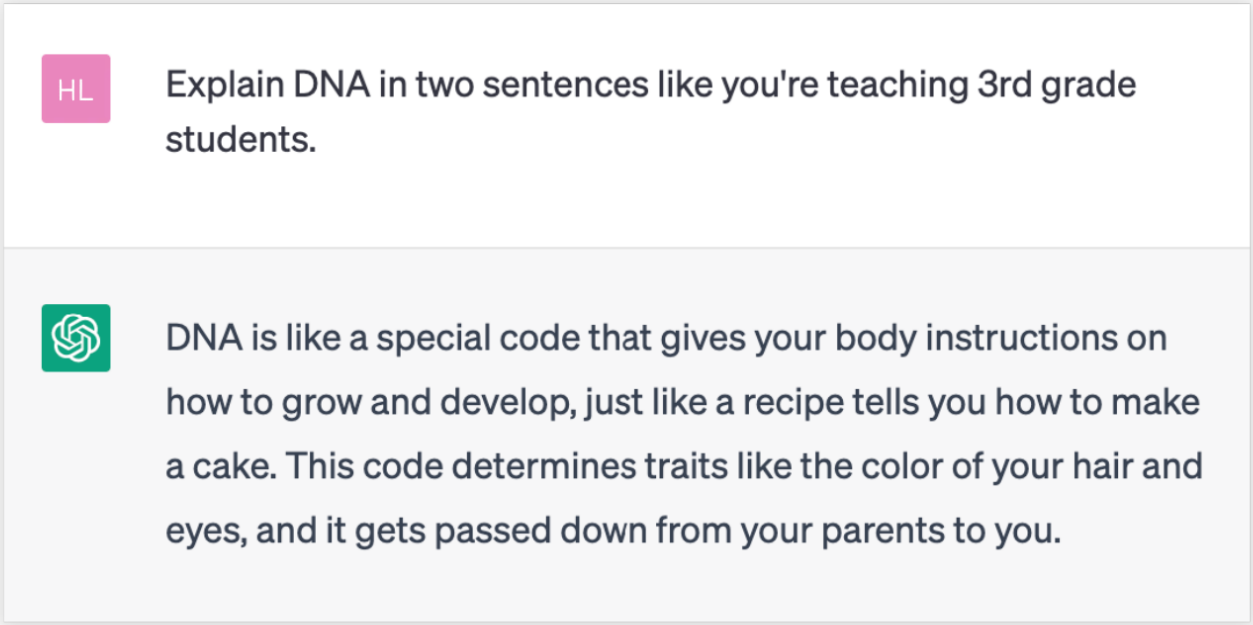
What to include, exclude, and limit

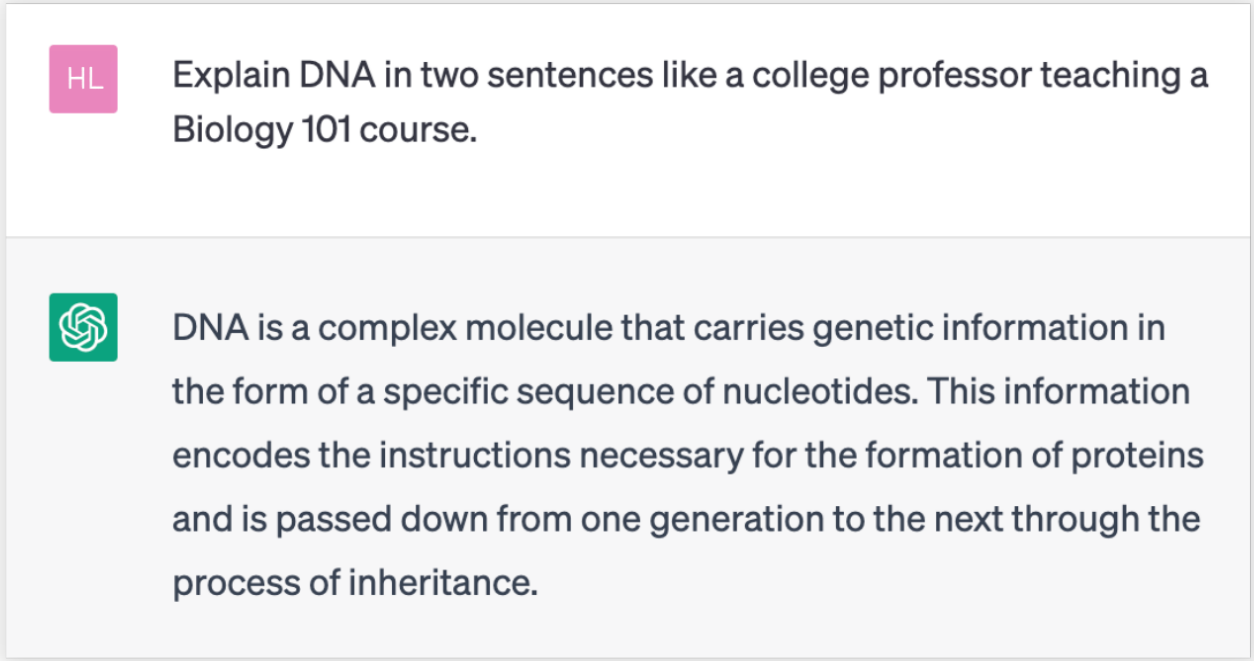
You can provide ChatGPT with specific words and phrases to use or avoid, limit the frequency of certain words, and include extra guidelines, like using abbreviations.

© Honorlock 2023

Tell it who it's writing to

Some prompts should tell ChatGPT who it's writing as and the audience it's writing to. Similar to giving context about the tone to use, this information changes the response ChatGPT will generate.





© Honorlock 2023

Do these AI content tools just plagiarize?

These tools do not plagiarize. For example, ChatGPT was trained **WITH** hundreds of billions of internet resources, but it doesn't plagiarize **FROM** those resources.

Sounds confusing, but here's an analogy:

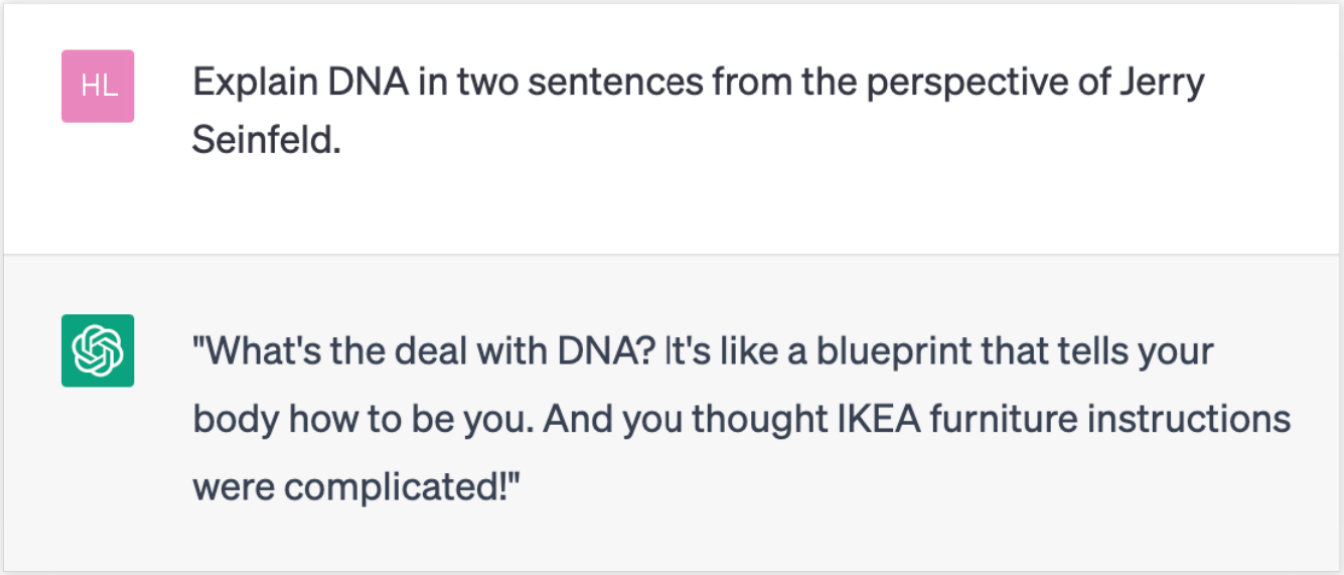
- You learn from articles, textbooks, research, instructors, lectures, etc.
- But you don't just repeat the information word-for word, right?
- You understand the information and you're able to make connections between all of it to apply in different ways.

ChatGPT basically works the same way. It makes connections between all of the information it learned, refines responses based on feedback from humans, and generates responses based on the information it's given. All of this makes ChatGPT more human and extremely difficult for plagiarism checkers to detect.

Part 2 shows you how 10 plagiarism detection tools performed against ChatGPT when we used basic, semi-detailed, and highly detailed prompts.

Try this!

Ask ChatGPT to write like a certain celebrity



© Honorlock 2023

Part 2:

10 plagiarism checkers vs ChatGPT



Some plagiarism checkers are pretty sophisticated. Can they catch ChatGPT?

This section shows you:

- A brief summary of how plagiarism detection works
- Real screenshots of ChatGPT responses to prompts with varying amounts of detail
- Response plagiarism scores from 10 different checkers

How do plagiarism checkers work?

They compare written text submissions to their databases of content. Some plagiarism checkers can only find text that exactly matches, others can identify paraphrasing, and a few were designed specifically to detect ChatGPT.

How accurate are they?

They're accurate in some cases, like when text is copied and pasted, slightly paraphrased, or when responses to basic prompts in an AI tool are used.

But we'll show you how more detailed prompts make things more difficult for plagiarism checkers.

© Honorlock 2023

ChatGPT vs. 10 plagiarism checkers

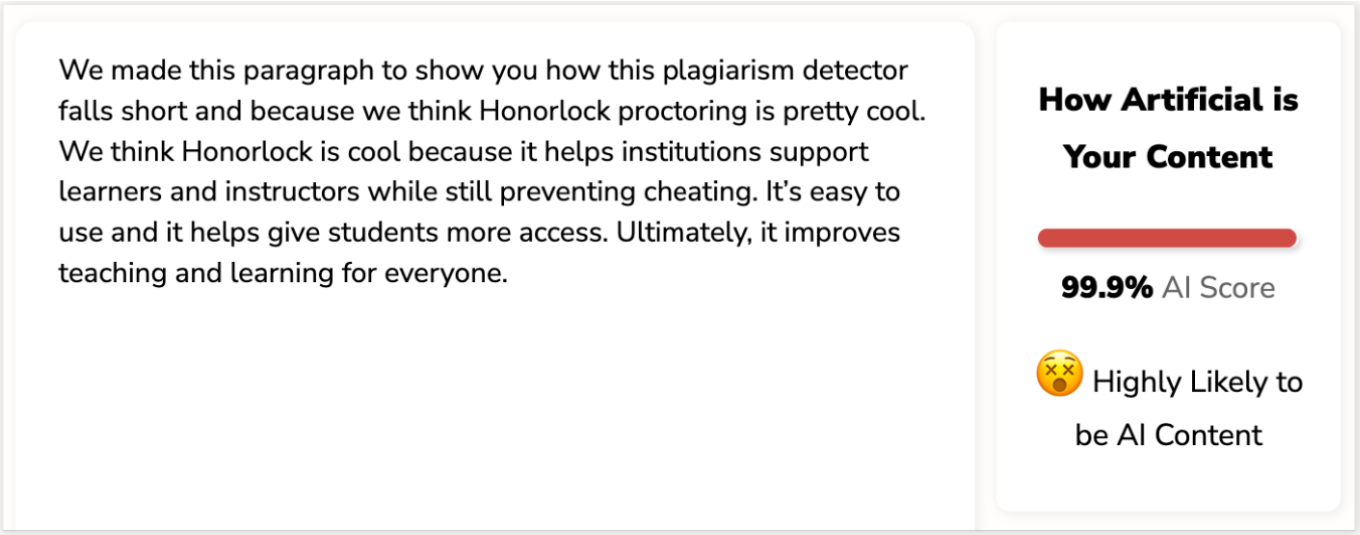
We tested ChatGPT against 10 plagiarism checkers.

Some of the checkers we tested were newer and specifically made for AI plagiarism detection; others were general plagiarism checkers that are browser-based and free to use; and one is a popular browser extension that has free and paid options.

How did we do this test?

- Gave ChatGPT three prompts with varying levels of instructions
- Copied and pasted responses to each prompt into all 10 plagiarism checkers
- Recorded and combined the plagiarism scores for each prompt, which indicate the probability that the content was written by AI
- We used the median number as the overall plagiarism score because there were many outlier scores, especially with two of the checkers (example below)
    - This median plagiarism score is located at the bottom left of each ChatGPT screenshot in this section.

The first scored everything as 0% plagiarism. The second scored everything as 99.9% plagiarism - even the custom paragraph below, starting with, “We made this paragraph to show you how this plagiarism detector falls short and because we think Honorlock proctoring is pretty cool.”

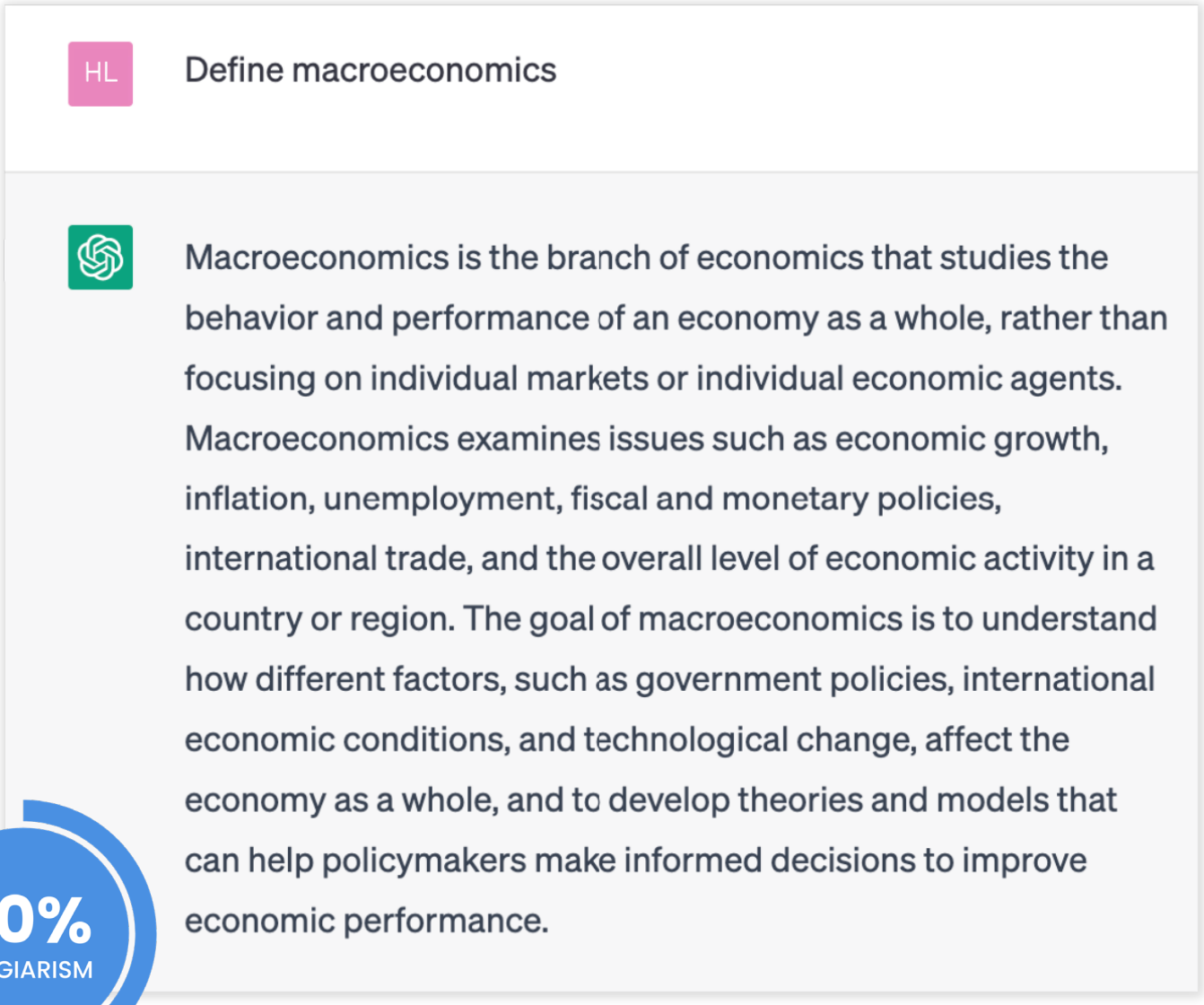


© Honorlock 2023

Prompt 1: Basic instructions

Basic prompts = generic responses that are easily detected

ChatGPT generated an accurate, but pretty generic response to a basic prompt, "Define macroeconomics." As expected, the plagiarism checkers found that the response was mostly generated by AI.



© Honorlock 2023

Prompt 2: Semi-detailed instructions

Small details make a big difference

This prompt asked for a response written in a specific tone and to use an analogy, which significantly reduces the plagiarism score.

HL

Define macroeconomics using a conversational tone and an analogy.

Think of a garden with many different types of plants, each with its own unique characteristics and needs. Now, imagine that you are trying to manage this garden to ensure that it thrives and grows to its fullest potential. This involves considering many different factors, such as the amount of sunlight and water each plant needs, the quality of the soil, and the presence of pests or disease.

Similarly, macroeconomics is like managing a garden, but instead of plants, we are dealing with the overall health and performance of an economy. Just like a gardener needs to consider a variety of factors to keep the garden healthy, policymakers and economists need to consider many different factors to ensure that an economy grows and thrives. These factors can include things like government policies, international trade, technological innovation, and the behavior of consumers and businesses.

31%
PLAGIARISM

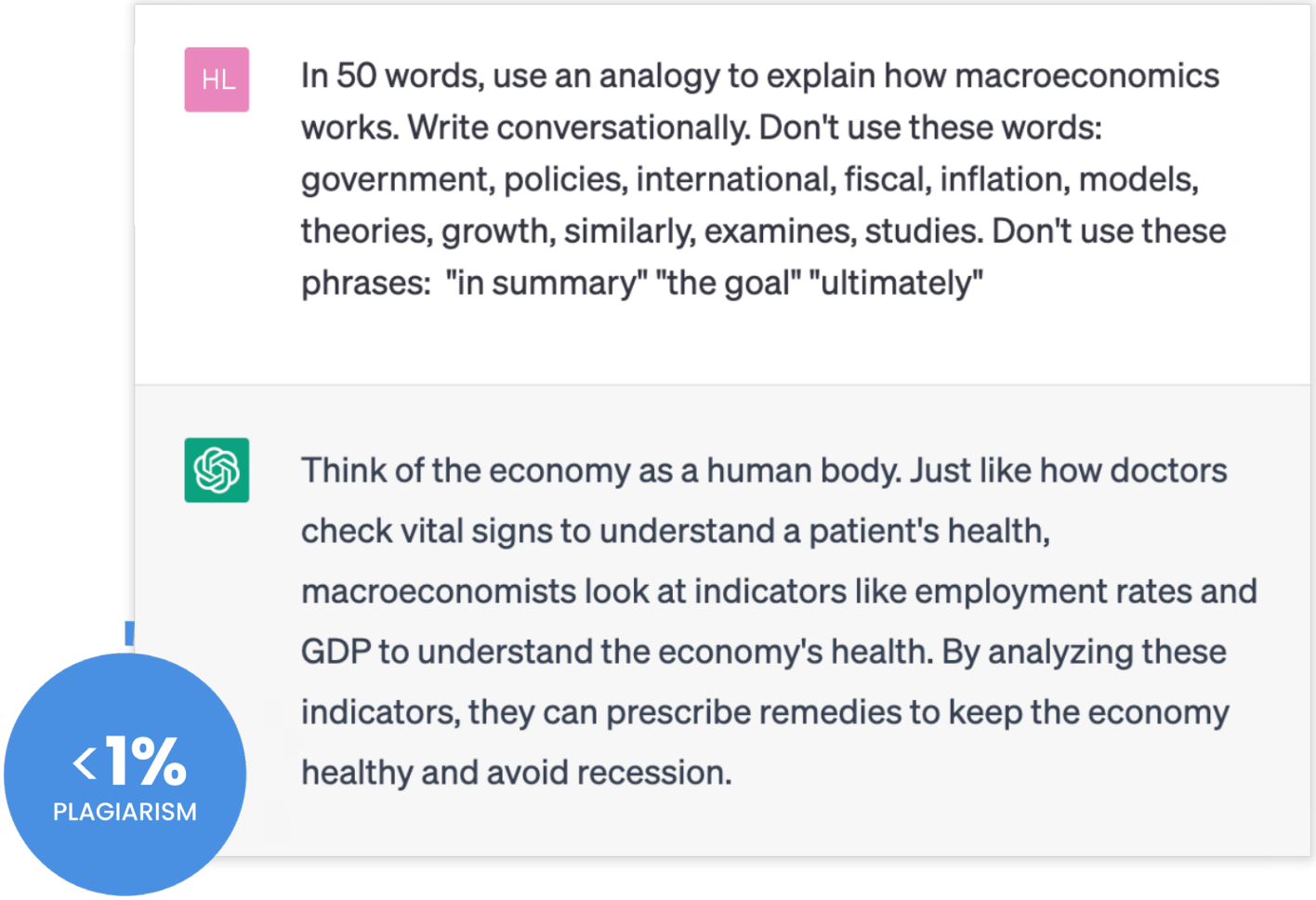
© Honorlock 2023

Prompt 3: Specific instructions

More details make responses virtually undetectable

This prompt gives detailed instructions to generate a response within a certain word count (50), to use an analogy, and not to use specific words and phrases.

The result? The tools scored the response as almost entirely human-written



If plagiarism checkers won't really work, how do you stop ChatGPT?

Part 3 shows you practical instructional design tips and with technology that can stop AI content writing tools from being used during assignments and exams.

© Honorlock 2023

Part 3:

Instructional design tips & technology to beat AI content tools

Ask for short-form responses tied to course materials instead of long-form essays

Instead of assigning lengthy essays, ask students to review two case studies and reply to specific questions requiring them to think critically and integrate their opinions and reasoning. Doing so makes it harder to use AI content tools because they won't have enough context to respond effectively.

Review both case studies and respond to the following questions:

Case Study 1 - ABC Organization's QA improvements with Six Sigma

1. Define each component of Six Sigma's DMAIC and how it was used by ABC Org. to improve its QA process.
2. Do you believe using Six Sigma instead of Agile was the best choice for ABC Org.? Explain why or why not, and provide three specific reasons to support it.
3. Provide one recommendation for ABC Org. to further improve the QA process. Explain why it's needed, the steps to implement it, and how to measure success.

Case Study 2 - How Agile increased product development speed for XYZ Company

1. Explain the six stages (steps) of Agile methodology by describing how XYZ Company used them to increase product development speed.
2. Although development speed increased by 17% using Agile, provide an argument with two reasons Six Sigma could also work for XYZ Company.
3. Provide one recommendation to help XYZ Company increase production speed from 17% to 20%. Explain how your recommendation can increase production speed and how to measure its success quantifiably.

© Honorlock 2023

Set a certain number of hours participants have to complete the assignment once the begin

Instructors can create rules that specify a certain number of hours participants have to complete the written assignment once they begin.

Make sure they aren't asking Siri or Alexa for help

Voice assistants, like Siri and Alexa, can be used to navigate ChatGPT during the assignment. Prevent these from being used with **Smart Voice Detection** that listens for specific keywords or phrases, like "Hey Siri," "Alexa," and "OK Google." It also records and transcribes what's said while the assignment/exam is in progress.

Prevent access to sites, applications, & browser extensions

Use a BrowserGuard to **prevent students from accessing ChatGPT** and other AI writing tools, whether they're browser-based, applications, or browser extensions.

BrowserGuard can also give students access to specific websites and applications while blocking all others.

This is important because you may want to give students access to certain case study PDFs, internet articles, or lectures in PowerPoint as a supplement while they're writing, but you want to make sure that they can't access ChatGPT or other AI writing tools.

Detect cell phone use & other devices

Honorlock's online proctoring software can also detect when a test taker attempts to access test bank content using a **cell phone or other devices** during the proctored assessment activity.

© Honorlock 2023

Disable keyboard shortcuts like copying & pasting

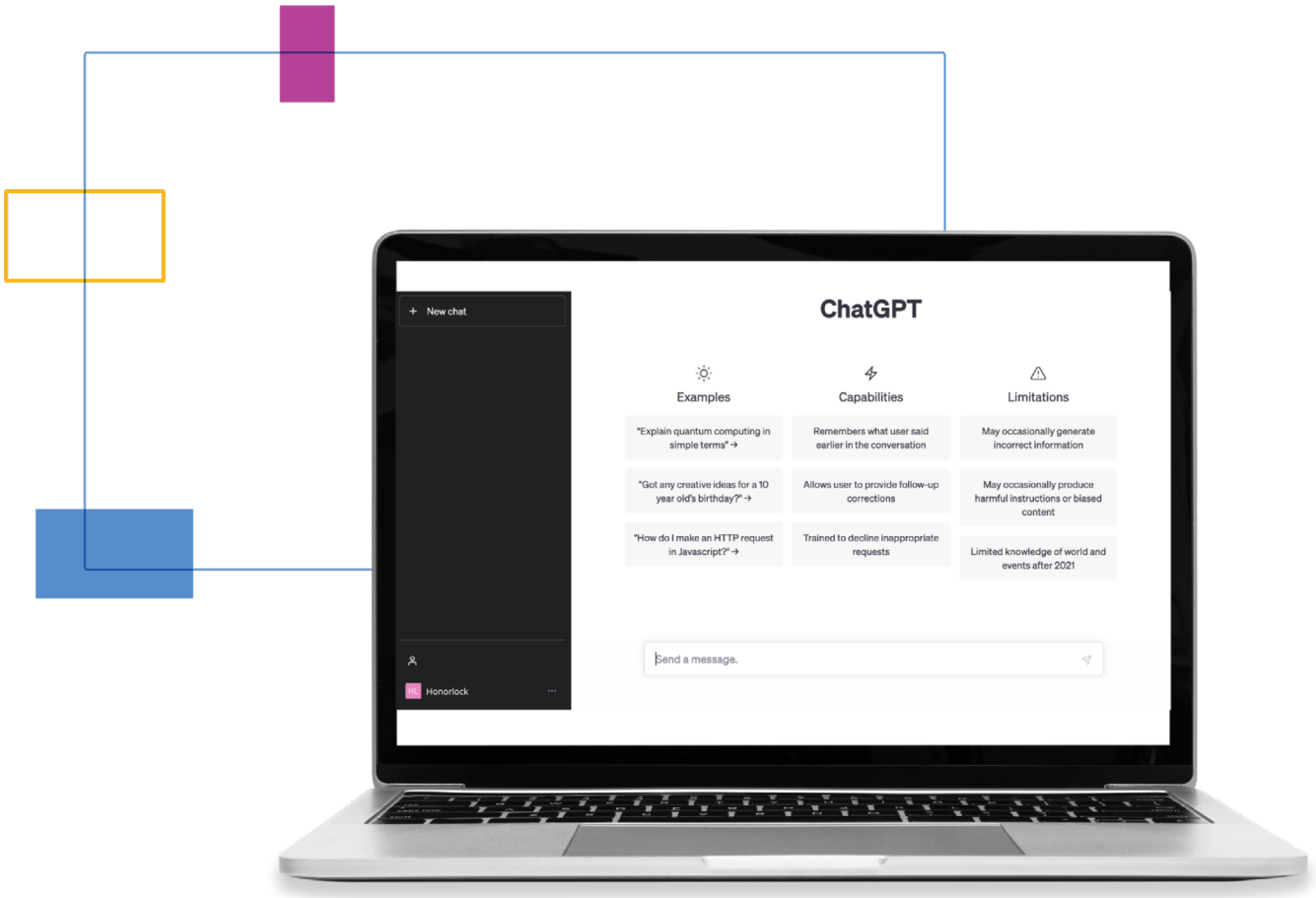
If a student has a general idea of what the written assignment will be about, they could have ChatGPT write a response prior to starting the assignment/exam and then copy and paste the response as their own.

But Honorlock's BrowserGuard prevents students from using keyboard shortcuts, like copying and pasting, and flags the behavior if a student attempts to use them. to complete the written assignment once they begin.

Use the webcam to check the room & monitor behavior

Check the room for unauthorized resources (cell phones, notes, other people, etc.), and monitor/record behavior throughout the assignment/exam.

This way, you'll know that test takers aren't accessing ChatGPT and other AI tools from other devices or asking friends in the room to do it for them while they're writing their essay.



© Honorlock 2023

Honorlock's online proctoring solution can prevent the use of ChatGPT & other AI content tools

What is Honorlock?

Honorlock's online proctoring solution combines AI with human proctors. Our blended proctoring solution can detect and prevent the use of AI content tools and other forms of academic dishonesty during written assignments and online exams.

How can it prevent AI writing tools from being used?

During written assignments and online exams, Honorlock's solution can prevent the use of AI writing tools by:

- Restricting access to AI content writing websites, applications, and extensions
- Checking the room for unauthorized resources like cell phones and other devices
- Detecting words/phrases that activate voice assistants
- Recording desktop screens
- Preventing keyboard shortcuts like copying and pasting

© Honorlock 2023

How does Honorlock work?

Honorlock blends AI with human proctors to prevent cheating while improving the testing experience.



AI monitors behavior during the assignment/exam



AI alerts a live proctor if it detects suspicious behavior



The proctor can review the behavior and intervene if necessary



Admins can access in-depth reports with time-stamped recordings of notable behavior



24/7/365 online proctoring with live support for students & faculty



Flat-rate cost per exam or per test taker

Honorlock's online proctoring features

From detecting cell phones and voices during exams to preventing the use of ChatGPT, Honorlock protects academic integrity from all angles.



Combines AI with live proctors



Detects cell phone use & other devices



Monitors & records behavior



Locks the browser



Searches for leaked test content



Detects phrases that activate voice assistants



Integrates with the LMS & third-party exam tools

© Honorlock 2023

AI content is here to stay.

Stay ahead with Honorlock.

Honorlock

Honorlock.com