



Preventing AI Content Tools in Corporate Education

Instructional design tips & technology to prevent the use of ChatGPT & other AI during certification exams, corporate training, and pre-employment assessments

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

AI helps tailor learning and development programs, offers scheduling flexibility, and automates tasks that save organizations time and money.

But some forms of AI, like ChatGPT and other content tools, can also put the integrity of your programs at risk.

They can write anything. They're virtually undetectable. They're advancing every day.

This ebook will show you examples of how they work, real screenshots of their performance against plagiarism checkers, and how you can stop them from being used.

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



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.

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 based on the instructions and information given to them. ChatGPT was trained on one of the largest text datasets and received expert feedback from humans that helped it learn how to write just like a human, while most AI tools are repetitive and awkward.

How can ChatGPT put your organization's programs at risk?

Providing answers to test questions

e.g., employees or participants taking certification exams can ask ChatGPT to answer specific questions for them, even complex math problems.

Generating short and long-form written responses

e.g., employees can copy and paste ChatGPT's responses to any assessments.

Providing formulas to use in Excel

e.g., during skills training or pre-employment assessments, participants could ask ChatGPT for specific formulas needed to complete accounting tasks in Excel.

Writing & debugging code

e.g., during skills assessments, and developers can ask ChatGPT to write/debug code and then copy and paste it as their work.

Listing steps to complete tasks

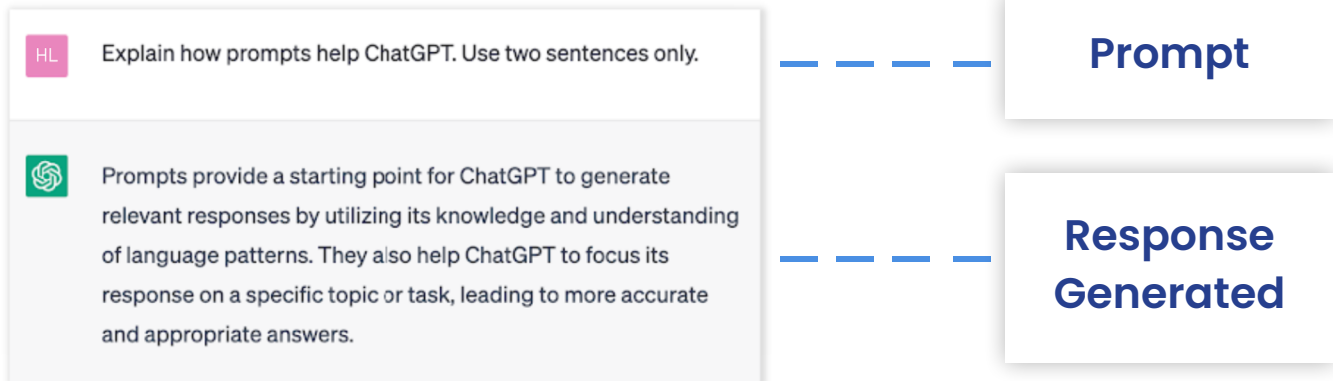
e.g., participants taking a pre-employment skills test can ask ChatGPT for a list of steps to create reports in Salesforce.

Did you know ChatGPT passed these exams?

- The Bar exam
- Google's level 3 engineer interview
- U.S. Medical Licensure Exam
- Fundamentals of Engineering Environmental Exam
- Wharton MBA exams

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...

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.

HL

Use an informal tone with a funny analogy to explain macroeconomics in two sentences.



Okay, listen up, peeps. Macroeconomics is like trying to keep a wild party under control. The economy is the party and the government is the designated driver. They gotta make sure everyone's having a good time without getting too wild and crashing the car.

HL

Use a very formal tone and sophisticated vocabulary to explain macroeconomics in two sentences.



Macroeconomics is a branch of economics that deals with the study of the performance, structure, and behavior of the entire economy, rather than individual markets or sectors. It seeks to analyze the aggregate economic variables, such as inflation, economic growth, and unemployment, in order to derive insights into the functioning of the economy as a whole, and to formulate policies to address any underlying issues or imbalances.

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.

Tell it who it's writing to

Tell ChatGPT who the audience is and any information about the perspective it's writing from. Similar to giving context about the tone to use, this information changes the response ChatGPT will generate.



Write two sentences pitching project management software to a client success manager at a prospective account.



Are you tired of juggling multiple spreadsheets and emails to manage your projects? With our project management software, you can streamline your workflow, keep track of deadlines and deliverables, and collaborate with your team all in one place.



Write two sentences pitching project management software to a CFO at a prospective account.



Our project management software will help you keep your projects on time and on budget, while also providing valuable insights into your team's productivity and resource allocation. With features such as financial tracking and forecasting, you can make informed decisions to optimize your company's financial performance.

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



Explain Six Sigma in 2 sentences like you're Jerry Seinfeld.



What's the deal with Six Sigma? It's like, let's make everything so perfect and error-free that we'll have nothing left to do but twiddle our thumbs and wait for the world to end.

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.

ChatGPT vs. 10 plagiarism checkers

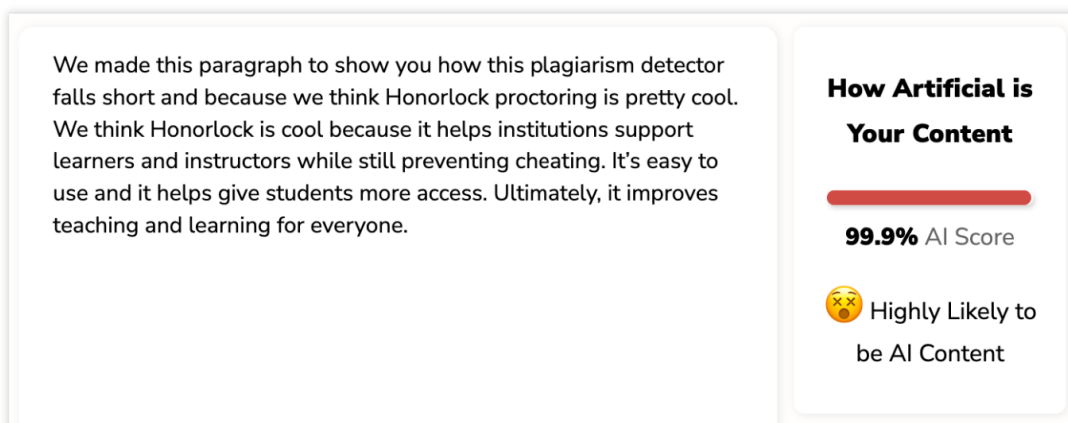
We tested ChatGPT against 10 plagiarism checkers.

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 (the first scored everything as 0% plagiarism while the second scored everything \geq 99% plagiarism).
 - The median plagiarism score is located at the bottom left of each ChatGPT screenshot in this section.

Here's an example of the second plagiarism tool we mentioned earlier indicating that a custom paragraph is 99.9% plagiarism - even though it starts with, "We made this paragraph to show you how this plagiarism detector falls short and because we think Honorlock proctoring is pretty cool."




The screenshot shows a plagiarism checker interface. On the left, there is a text box containing the paragraph: "We made this paragraph to show you how this plagiarism detector falls short and because we think Honorlock proctoring is pretty cool. We think Honorlock is cool because it helps institutions support learners and instructors while still preventing cheating. It's easy to use and it helps give students more access. Ultimately, it improves teaching and learning for everyone." On the right, there is a panel titled "How Artificial is Your Content". Below the title is a red progress bar that is almost full, indicating a high score. Below the bar, it says "99.9% AI Score". At the bottom of the panel, there is a yellow warning icon with a red 'X' and the text "Highly Likely to be AI Content".

Prompt 1: Basic instructions

Basic prompts = generic responses that are easily detected

ChatGPT generated an accurate, but mostly generic response to a basic prompt, "Explain what capital gains are." As expected, the plagiarism checkers found that the response was primarily generated by AI.

HL Explain what capital gains are

 Capital gains refer to the profit earned when an asset, such as a stock, bond, real estate, or artwork, is sold for a price that is higher than its original purchase price.

For example, suppose an individual purchases a stock for \$1,000 and later sells it for \$1,500. The capital gain in this case would be \$500 (\$1,500 selling price - \$1,000 purchase price).

Capital gains can be either short-term or long-term, depending on how long the asset was held before it was sold. If the asset was held for one year or less, any gain realized on the sale is considered a short-term capital gain. If the asset was held for more than one year, any gain realized on the sale is considered a long-term capital gain.

The tax treatment of capital gains also differs depending on whether they are short-term or long-term. In the United States, short-term capital gains are taxed at the individual's ordinary income tax rate, while long-term capital gains are subject to a lower tax rate. The tax rate for long-term capital gains varies depending on the individual's income, but it is generally lower than the tax rate for ordinary income.

Capital gains are an important consideration for investors, as they can significantly impact the overall return on an investment.




Prompt 2: Semi-detailed instructions

Small details make a big difference

This prompt provided extra response instructions, such as using a limited number of words, providing a particular analogy, and starting the response with specific words. All of this significantly reduced the plagiarism score.

HL Shorten your last response to 90 words. Use a different analogy that relates to buying and selling a house. Use short sentences. Start the response with this: Capital gains are

 Capital gains are profits made when selling an asset for more than its purchase price. Like selling a house, if the original purchase price was \$200,000 and the house was sold for \$300,000, the capital gain would be \$100,000. The gain is considered short-term if the house was owned for less than one year, and long-term if it was owned for more than a year. Short-term capital gains are taxed as ordinary income, while long-term capital gains are taxed at a lower rate. Understanding capital gains is important for investors as it affects their overall return on investment.

17%

PLAGIARISM

Prompt 3: Specific instructions

More details make responses virtually undetectable

The prompt instructions ask for a response that further reduces the word count, incorporates a specific sentence, and doesn't use certain words.

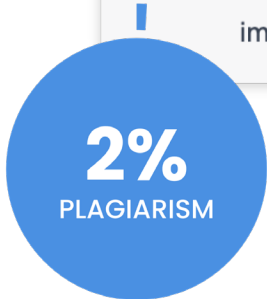
The result? The tools scored the response as almost entirely human-written.



Shorten your last response to 80 words. Include a sentence that says this: Capital gains basically let you know if you made money or lost money. Don't use these words: refer, asset, investors, return.



Capital gains are profits made when selling an item for more than what was paid for it. For example, selling a house for \$300,000 after purchasing it for \$200,000 results in a capital gain of \$100,000. Capital gains show if you made or lost money, and are either short-term (less than one year) or long-term (over one year). Short-term gains are taxed as regular income, while long-term gains are taxed at a lower rate. Understanding capital gains is important in evaluating the success of an investment.

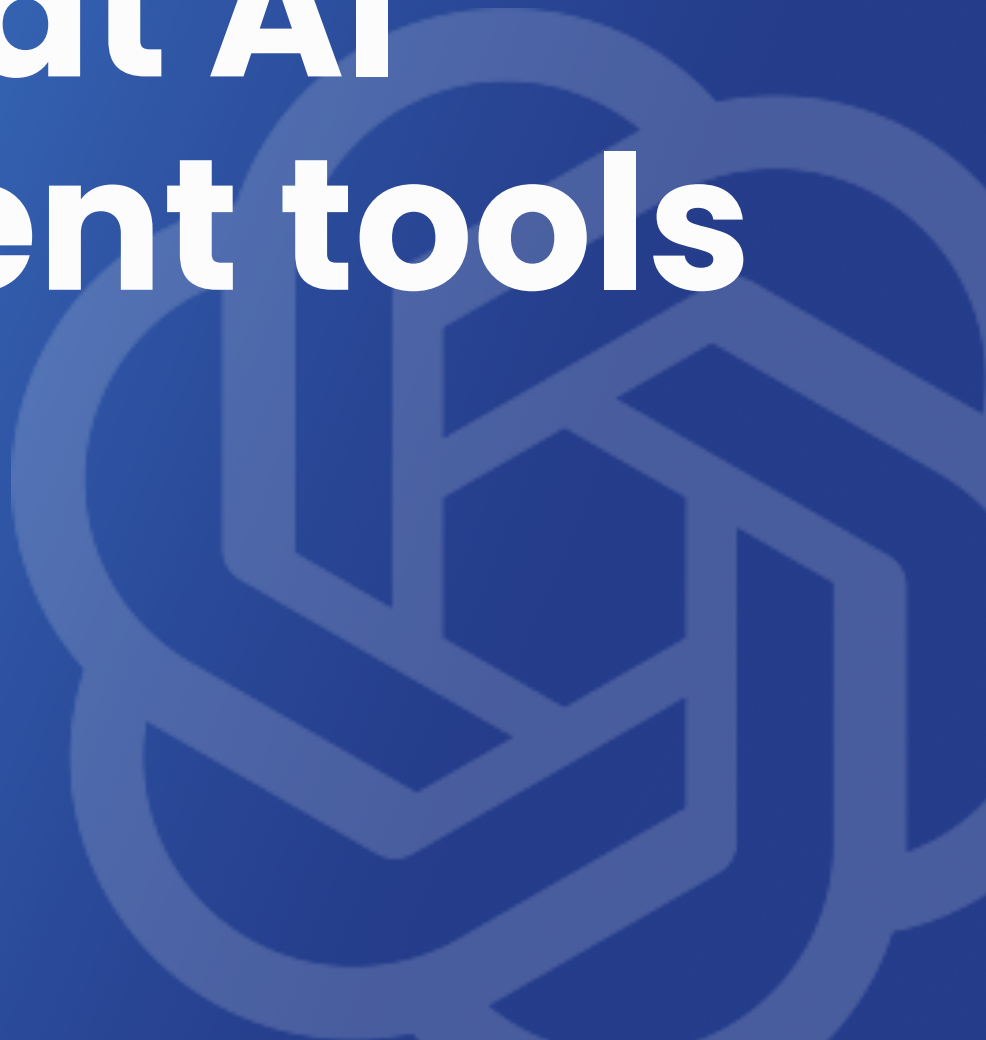


If it's this easy to work around plagiarism checkers, how can you stop ChatGPT?

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

Part 3:

Instructional design tips & technology to beat AI content tools



Ask questions based on case studies

Have participants respond to scenario-based questions from case studies that require them to apply what they know, 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.

Here are examples of general questions and alternative questions you could use based on a case study.

General questions	Specific case study questions
<p>Write a 500 word response about the following:</p> <ol style="list-style-type: none"> 1. Define Six Sigma's DMAIC methodology and how it improves processes. 2. Compare and contrast Six Sigma with Agile. 3. Provide three benefits of Six Sigma and one area of weakness. 	<p>Review ABC Org's case study and provide written responses to the following:</p> <ol style="list-style-type: none"> 1. Describe how ABC Org. uses each part of Six Sigma's DMAIC methodology to improve QA processes. 2. If you owned ABC Org., would you use Six Sigma or Agile? Provide three reasons to support your choice. 3. Provide one recommendation for ABC Org. to further improve the QA process using Six Sigma. Explain why it's needed and steps to implement & measure success.

Provide a set amount of time participants have to complete the assignment once they begin

Use LMS settings to specify a certain time frame participants have to complete the written assignment once they begin. The amount of time should vary depending on the assignment or exam questions.

Make sure they can't get help from Siri or Alexa

Voice assistants, like Siri and Alexa, can be used to navigate ChatGPT and other AI. You can prevent them from being used if you're using **Smart Voice Detection**, which 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 participants from accessing ChatGPT** and other AI writing tools, whether they're browser-based, applications, or browser extensions.

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

For example, you can allow participants to access your company's knowledge base, PowerPoint, Word Docs, case studies, and other training materials during the written assignment or exam while still preventing access to other applications, extensions, and sites like ChatGPT.

Detect cell phone use & other devices

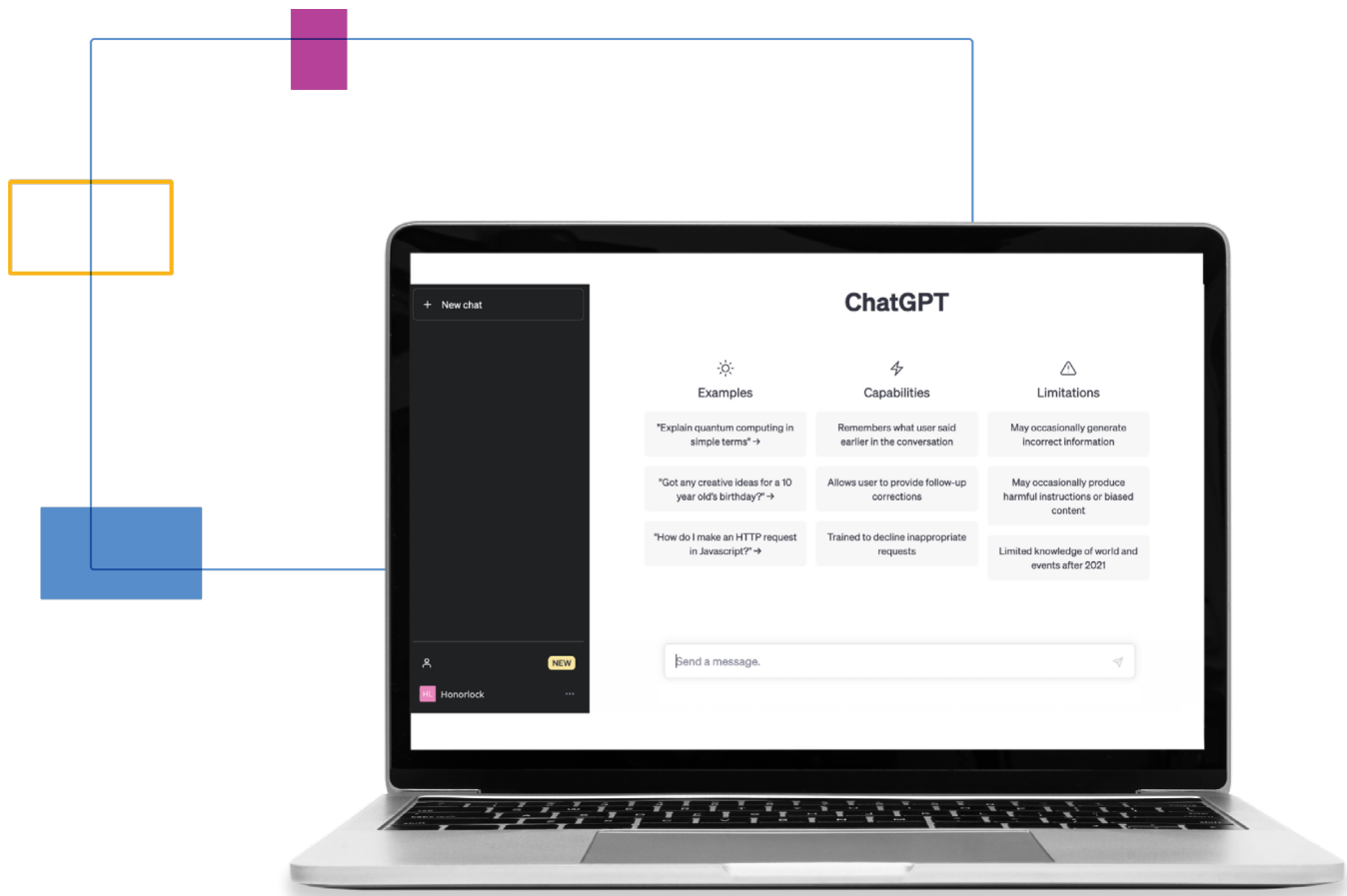
Honorlock's online proctoring software can also detect when a test taker attempts to access test bank content using a **cell phone or other devices** during the proctored assessment activity.

Disable cut, copy, & paste

If proctoring isn't used and a participant has a general idea of what they'll need to write about, they could use ChatGPT to write a response to the assignment/exam and then copy and paste the response as their own. Honorlock's proctoring platform includes a BrowserGuard that prevents participants from using keyboard shortcuts, like cutting, copying and pasting, and flags the behavior if a participant attempts to use them.

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 participants aren't accessing ChatGPT and other AI tools from other devices or asking other people in the room to do it for them.



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 prevent the use of AI content tools and other forms of cheating during written assignments and online exams.

Whether the written components are part employee trainings, pre-employment assessments, or professional certifications exams, organizations can use Honorlock to prevent the use of any AI tools during written activities and prevent other forms of academic dishonesty.

How can it prevent AI writing tools from being used?

Honorlock's proctoring platform can prevent the use of AI writing tools by:

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

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 test-takers & admin



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.



Blends AI with 1-on-1 live proctoring



Detects cell phone use & other devices



Monitors & records behavior



Locks the browser



Searches for leaked proprietary test content



Detects phrases that activate voice assistants



Integrates with the LMS & third-party exam tools

**AI content is here to stay.
Stay ahead with Honorlock.**



Honorlock.com