

IA et enseignement supérieur



Le phénomène : 30 novembre 2022

- Chat(GPT – Generative Pretrained Transformer).
- Agent conversationnel (simulateur de conversation)
- “A new accessible interface to engage in complex interactions with information” (Siemens, 2023)
- Test de Turing passé
- Principe de base : prédictions sur ce qui vient après => simulation d’intelligence (les IA ne «comprennent» pas la réponse et ne formule pas de réponse sur base d’une réflexion. Il s’agit exclusivement d’un processus basé sur la reconnaissance de mots et d’association de mots qui conduisent à une réponse la plus probable sur base des infos disponibles).

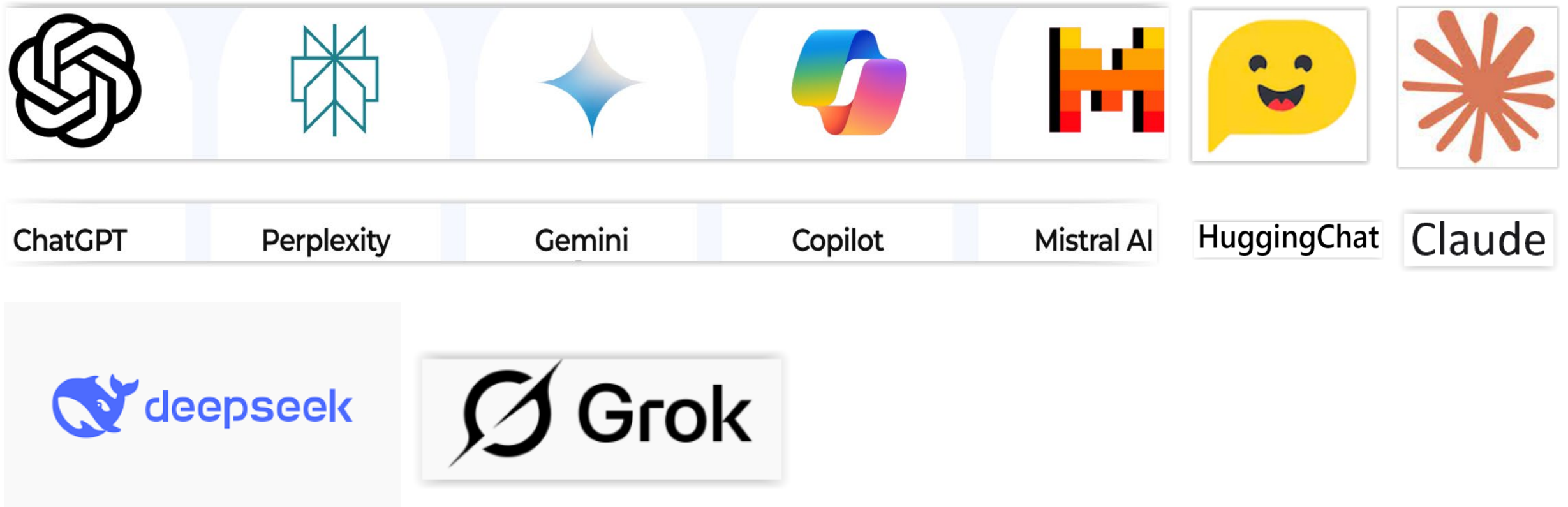
Définition de l'IA

- Présente depuis bien plus longtemps que le Chat, y compris dans notre quotidien (réseaux sociaux, médecine, fraude fiscale...)
- Le Chat représente un type d'IA : les LLM, cad un type d'intelligence artificielle, spécifiquement conçu pour comprendre et générer du langage naturel

What is Generative AI?

Generative artificial intelligence (generative AI, GenAI, or GAI) is artificial intelligence capable of generating text, images or other data using generative models, often in response to prompts. Generative AI models learn the patterns and structure of their input training data and then generate new data that has similar characteristics.

Les protagonistes actuels : les chatbots



Des LLM plus larges

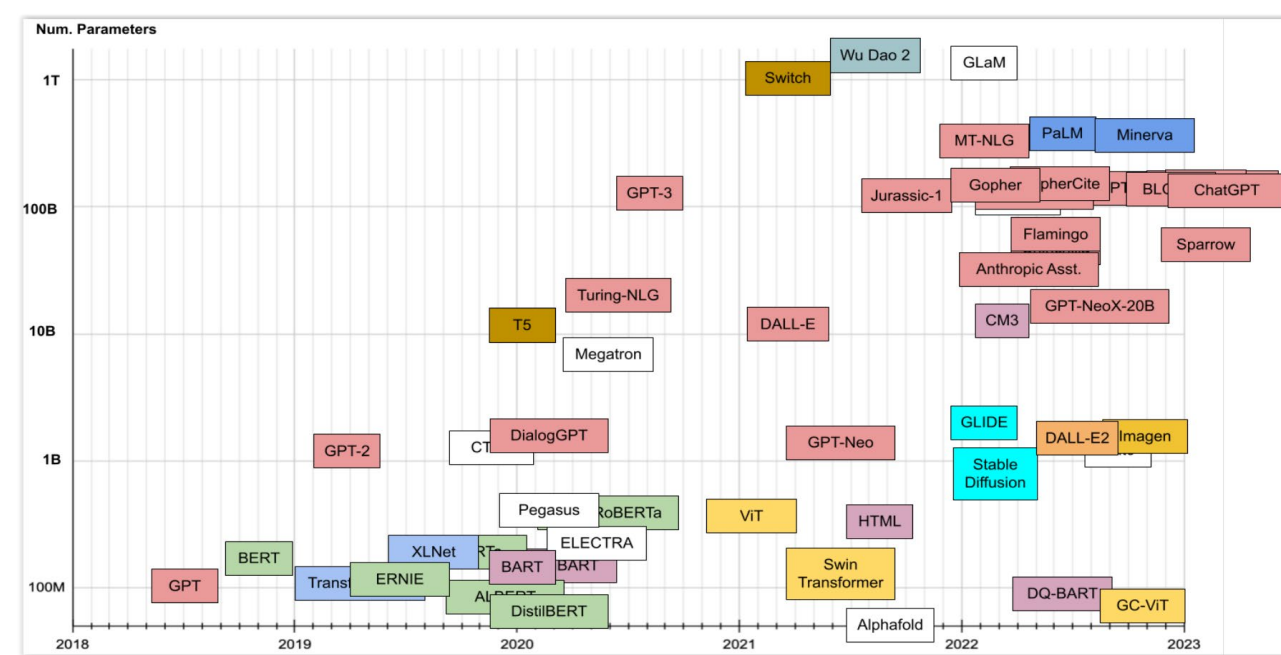
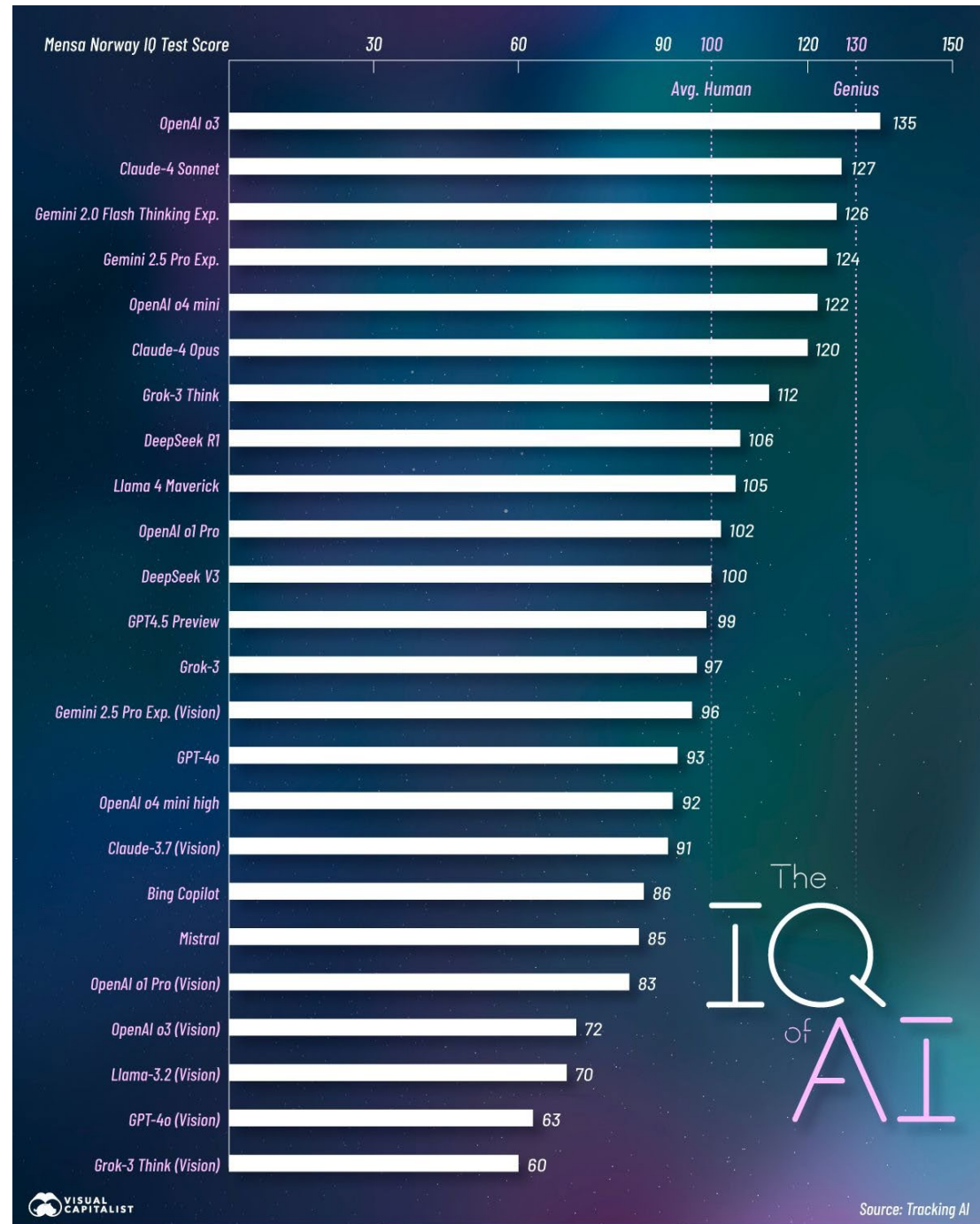


Table 2. OpenAI GPTs

Model	Launched	Amount of training data	Number of parameters	Characteristics
GPT-1	2018	40 GB	117 million	Capable of natural-language-processing tasks such as completing texts and answering questions.
GPT-2	2019	40 GB	1,500 million	Capable of more complex natural-language-processing tasks such as machine translation and summarizing.
GPT-3	2020	17,000 GB	175,000 million	Capable of advanced natural-language-processing tasks such as writing coherent paragraphs and generating entire articles. Also capable of adapting to new tasks with just a few examples.
GPT-4 ⁶	2023	1,000,000 GB (reported but not confirmed)	170,000,000 million (reported but not confirmed)	Enhanced reliability and is capable of processing more complex instructions.

LLM = type d'intelligence artificielle, spécifiquement conçu pour comprendre et générer du langage naturel.

Des LLM plus « intelligents »



Des LLM plus nombreux

[Arena \(battle\)](#)
[Arena \(side-by-side\)](#)
[Direct Chat](#)
[Leaderboard](#)
[Arena Explorer](#)
[About Us](#)

Chatbot Arena LLM Leaderboard: Community-driven Evaluation for Best LLM and AI chatbots

[小红书](#)
[Twitter](#)
[Discord](#)
[Blog](#)
[GitHub](#)
[Paper](#)
[Dataset](#)
[Kaggle Competition](#)

Chatbot Arena is an open platform for crowdsourced AI benchmarking, developed by researchers at UC Berkeley [SkyLab](#) and [LMArena](#). With over 1,000,000 user votes, the platform ranks best LLM and AI chatbots using the Bradley-Terry model to generate live leaderboards. For technical details, check out our [paper](#).

Chatbot Arena thrives on community engagement — cast your vote to help improve AI evaluation!

New Launch! WebDev Arena: [web.lmarena.ai](#) - AI Battle to build the best website!

[Language](#)
[Overview](#)
[Vision](#)
[Text-to-Image](#)
[Copilot Arena](#)
[WebDev Arena](#)
[Arena-Hard-Auto](#)

Total #models: 192. Total #votes: 2,541,965. Last updated: 2025-01-15.

Code to recreate leaderboard tables and plots in this [notebook](#). You can contribute your vote at [lmarena.ai](#)!

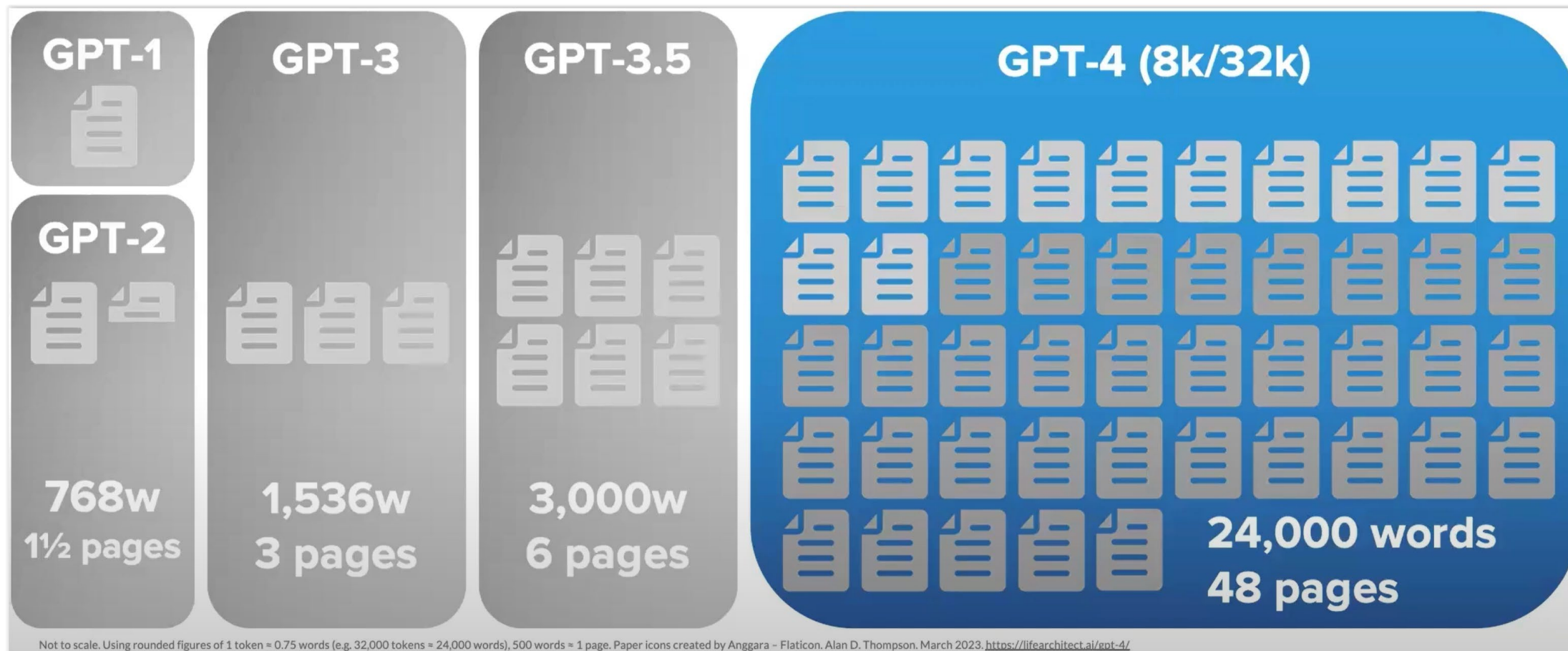
Category: Overall
 Apply filter: Style Control Show Deprecated

Overall Questions: #models: 192 (100%) #votes: 2,541,965 (100%)

Rank* (UB)	Rank (StyleCtrl)	Model	Arena Score	95% CI	Votes	Organization	License
1	1	Gemini::Exp::1206	1374	+4/-5	26227	Google	Proprietary
1	1	ChatGPT::4o::latest...(2024::11::20)	1365	+4/-3	33383	OpenAI	Proprietary
1	4	Gemini::2.0::Flash::Thinking::Exp::1219	1364	+5/-6	15728	Google	Proprietary
2	4	Gemini::2.0::Flash::Exp	1357	+6/-4	19830	Google	Proprietary

Service	Best Model	Live Mode	"Reasoning"	Web Access	Generates Images	Executes Code	Data Analysis	Sees images	Sees video	Reads Docs	Personality	Superpower
OpenAI ChatGPT	GPT-4o	✓ Full multimodal	✗	✓	✓ DALL-E3	✓	✓	✓	In Live Mode	✓	Polished and efficient in text. In live mode, expressive and adaptive.	Live mode, most versatile set of features and capabilities
	o1/o3 family	✗	✓	✗	✗	✓	✗	✓	✗	✗	Methodical and analytical	Very powerful model for complex reasoning tasks, particularly in science, coding, and mathematics
Microsoft Copilot	"Copilot"	Voice only	✓	✓	✓ DALL-E3	Limited	✗	✓	✗	✓	Since it uses different models behind the scenes, a little inconsistent	Works well with Microsoft products and services
Anthropic Claude	Claude 3.5	✗	✗	✗	✗	✓	Limited	✓	✗	✓	Clever and friendly	Often the most creative and socially engaging model
Google Gemini	Gemini family	Voice only	✓	✓	✓ Imogen-3	Limited	Limited	✓	✓	✓	Helpful and a bit bland	Wide variety of features, good connections with search
X.ai Grok	Grok-2	✗	✗	✓ Mostly X	✓ Aurora	✗	✗	✓	✗	✓	Sarcastic and "fun" (though you can tone that	Powerful model integrated tightly with X
DeepSeek	DeepSeek v3	✗	✓	✓	✗	✗	✗	✓	✗	Limited	Neurotically helpful, warm	Remarkably cheap and powerful model out of China

Des LLM plus « éléphants »



Des LLM plus circonscrits

A Survey of Small Language Models

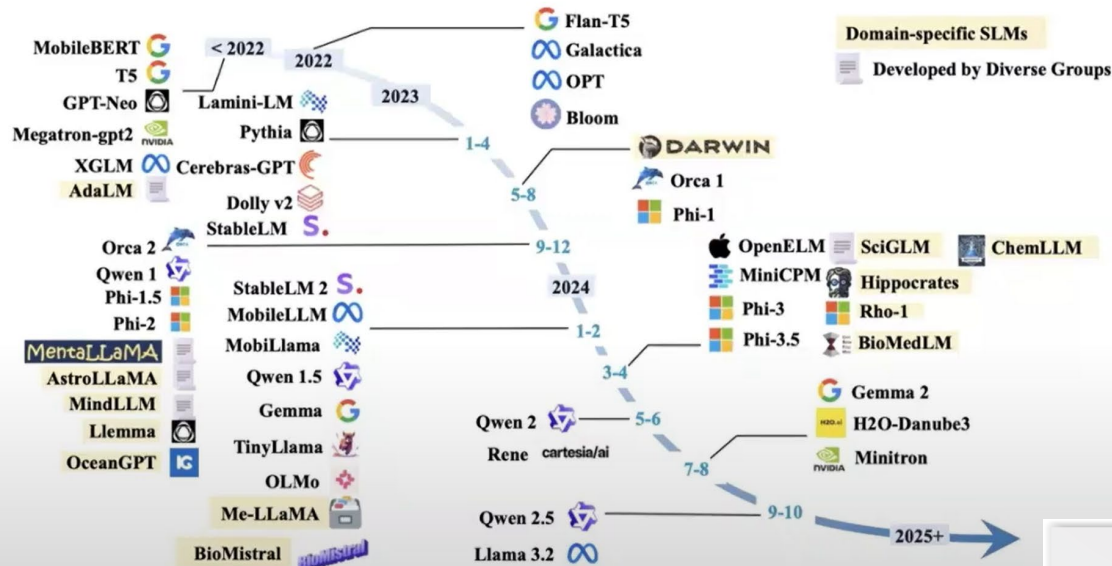


Fig. 3. A timeline of existing small language models.

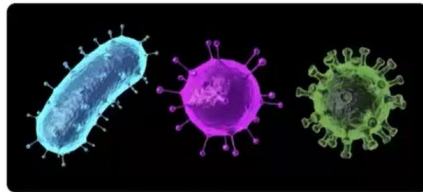
Simplify Your Divorce Process with the Expertise of an AI Lawyer

Feb 4, 2024 4 Min read



Greg Mitchell | Legal consultant at AI Lawyer

Des LLM plus multimodaux



Explique moi cette image.

🌀 Cette image montre des représentations 3D de virus. Chaque forme est caractéristique d'un type particulier de virus, souvent représenté par des couleurs vives et des formes uniques pour distinguer les différents types :

1. **À gauche** : Un virus de forme allongée, souvent associée à des bactéries ou des phages, avec des appendices (spicules) à la surface. Ces spicules aident le virus à se fixer à des cellules hôtes.
2. **Au centre** : Un virus de forme sphérique, avec des spicules rayonnant autour de sa surface. Cette structure est typique des virus de type coronavirus ou de la grippe, qui utilisent ces spicules pour se lier aux cellules hôtes.
3. **À droite** : Un autre virus sphérique, mais avec une texture et des spicules légèrement différentes. Cela peut représenter une autre famille de virus, peut-être un rétrovirus comme le VIH, qui possède aussi des protéines en surface pour interagir avec les cellules hôtes.

Les couleurs sont artificielles, souvent utilisées pour illustrer les différences entre les virus dans des contextes pédagogiques ou scientifiques, car ces virus sont normalement incolores et invisibles à l'œil nu.



Plante en épis jaunes (probablement Lysimaque ou Ligulaire) - Cette plante à fleurs jaunes en forme de chandelles pourrait être de la famille des Lysimaques ou Ligulaires. Elles sont rustiques et peuvent bien s'adapter au climat du Québec, surtout dans des zones mi-ombragées et humides.

Grandes feuilles vertes avec fleurs violettes (probablement Hostas) - Les feuilles larges et vertes avec de petites fleurs violettes pourraient être des hostas, qui sont populaires dans les aménagements paysagers et bien adaptées au climat du Québec, résistantes aux températures froides.

3. **Petites fleurs rouges en bordure (probablement Bégonias)** - La bordure de petites fleurs rouges est typique des bégonias. Ceux-ci sont généralement cultivés comme annuels au Québec, car ils ne survivent pas aux hivers froids. Ils peuvent être replantés chaque année.
4. **Feuillage vert clair et pourpre dans un grand pot (probablement Ipomée ou patate douce ornementale)** - Le feuillage coloré, avec des tons verts vifs et pourpres, ressemble à celui de l'ipomée ornementale. Elle est cultivée comme annuelle au Québec, car elle ne résiste pas au gel.
5. **Fleurs roses avec centre jaune (probablement Cosmos)** - Les fleurs roses au centre jaune semblent être des cosmos. Les cosmos sont des annuelles mais peuvent être facilement replantés chaque année au Québec.

En résumé, voici la probabilité des plantes et leur rusticité au Québec :

- **Lysimaques/Ligulaires** : Perenne, adapté au Québec.
- **Hostas** : Perenne, adapté au Québec.
- **Bégonias** : Annuel, à replanter chaque année.
- **Ipomée (patate douce ornementale)** : Annuel, à replanter chaque année.
- **Cosmos** : Annuel, à replanter chaque année.

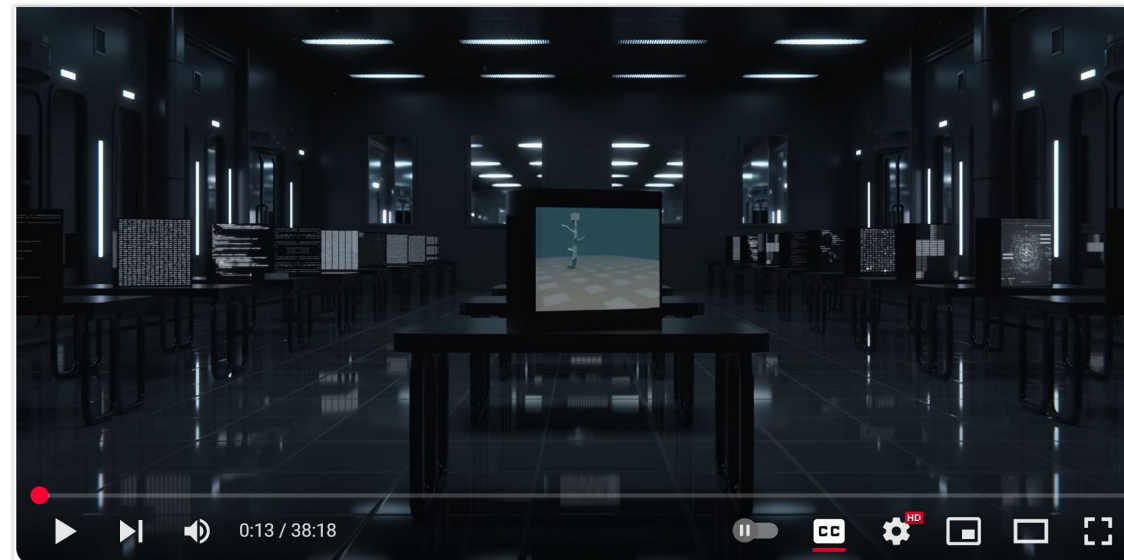
Il parle !

The most recent twist is live video. ChatGPT voice mode now provides the option to share your camera feed with the model and talk about what you can see in real time. Google Gemini have [a preview of the same feature](#), which they managed to ship the day before ChatGPT did. (idem Gemini 2.0 streaming)

Notebook LM

Dangers (ambivalents)

- Préoccupations environnementales
- Inégalités sociales (nouvelle fracture numérique ?)
- Dés(ré-?)humanisation (film Her)
- (Dés-)alignement (Interstellar >< Matrix)
- Extinction (paperclip)
- Questions juridiques (Franzen & co.)



The existential horror of the paperclip factory.

Toile de fond

Making AI Less "Thirsty": Uncovering and Addressing the Secret Water Footprint of AI Models

Pengfei Li
UC Riverside

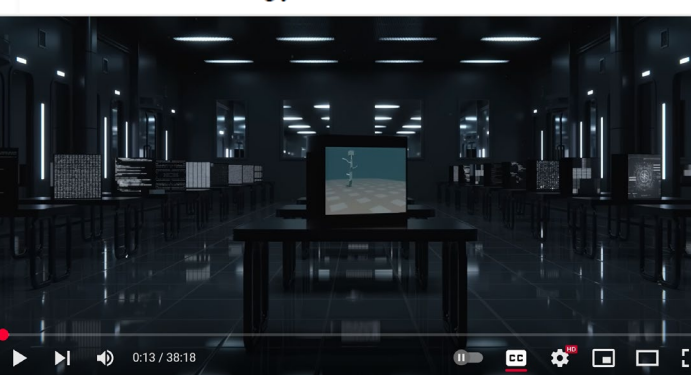
Jianyi Yang
UC Riverside

Mohammad A. Islam
UT Arlington

Shaolei Ren¹
UC Riverside

own and how ChatGPT should be acknowledged in their work. ChatGPT has officially made its scientific debut with at least four co-author credits (Stokel-Walker, 2023). However, including such tools as authors is discussable, as authors take on legal responsibility for their work and need to give their consent. Only people can be held accountable. Instead, the use of such tools should be explained as part of the research methods, like we refer to Wikipedia and mention the use of tools like Envivo or Atlas.ti.

2023). In sum, generative AI does not qualify for authorship but the use of the technology should be documented in the methods section. Other

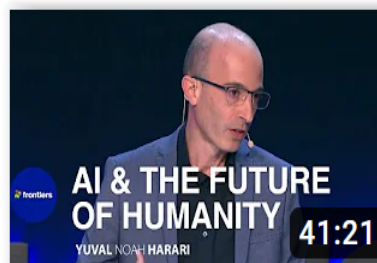


the existential horror of the paperclip factory.



Energieslurper

- GPT-3 maken: hoeveelheid energie en CO2-uitstoot, vergelijkbaar met 123 benzineauto's die jaar lang rondreden.
- Voordat consumenten het gebruikten.....
- Opdracht ChatGPT kost waarschijnlijk 4-5 keer zoveel energie als opdracht zoekmachine.
- Sterke reductie door slimmere technologie is mogelijk, idem gebruik van groene energie.
- Bron: [K. Saenko, 2023](#)



AI and the future of humanity Yuval Noah Harari at the...

Yuval Noah Harari
1.8M views • 4 months ago



« Fonds de commerce » de l'enseignement heurté de plein fouet

- Brutalise les conventions ordinaires
 - Temps immédiat / temps long
 - Autonome / aidé
 - Je ne copie pas / « post-plagiarism »
 - Je cherche les sources (qui sont vérifiables)



Generative AI Can Harm Learning

Hamsa Bastani,^{1*} Osbert Bastani,^{2*} Alp Sungu,^{1*†}
Haosen Ge,³ Özge Kabakçı,⁴ Rei Mariman

RESEARCH ARTICLE

A real-world test of artificial intelligence infiltration of a university examinations system: A “Turing Test” case study

Peter Scarfe^{1*}, Kelly Watcham¹, Alasdair Clarke², Etienne Roesch¹

Beware of Metacognitive Laziness: Effects of Generative Artificial Intelligence on Learning Motivation, Processes, and Performance

Yizhou Fan^{1,2} | Luzhen Tang¹ | Huixiao Le¹ | Kejie Shen¹ | Shufang Tan¹ | Yueying Zhao¹ | Yuan Shen³ | Xinyu Li² | Dragan Gasevic²

January 16, 2025

The Unresolved Tension Between AI and Learning

AI Tutoring Outperforms Active Learning

Gregory Kestin*

Raisons de s'y intéresser...

- « Whatever the priorities a university teaching team develops, they should always ask "how could technology help?" because it is so ubiquitous, and so versatile in its capabilities, that it can probably always make a significant contribution». (Dede, 2013)
- « Rien n'est en soi un progrès. Nous ne pouvons parler de progrès qu'en rapport avec ce que nous considérons dans l'absolu comme un bien ». (Bellamy, 2018)
- => Rapportons donc l'IA à des « biens pédagogiques »

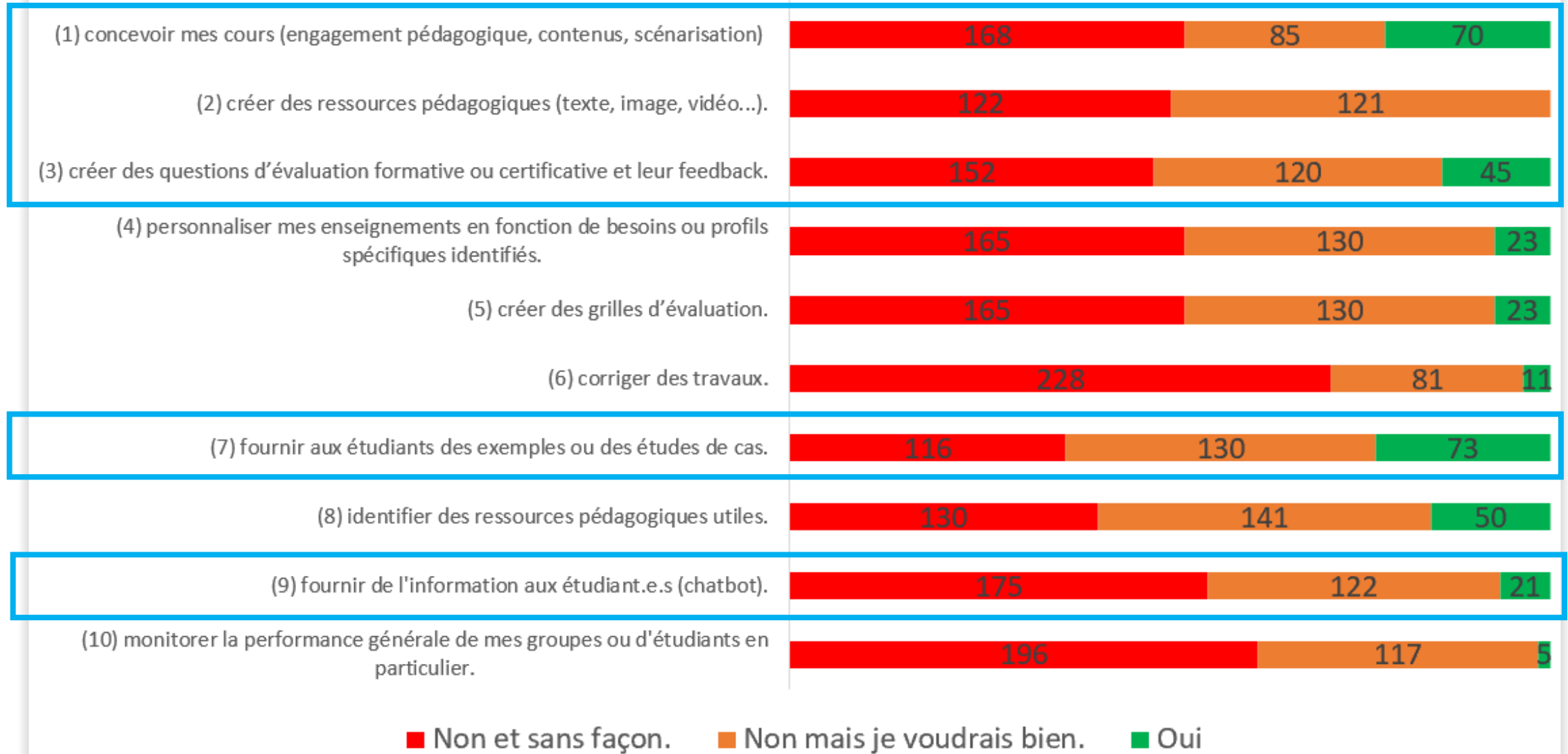
Dans trois zones

- Les cours (savoirs)
- Les applications (savoir-faire)
- Les évaluations

Zone : apprendre

Essentiellement des « Biens pédagogiques » en lien avec la préparation de leçons

Avis des enseignants sur l'intérêt et l'usage des outils IA pour les aider à... (n de 243 à 323 selon la question)



BP1 – Engagements pédagogiques (et demandez-en au moins deux)

Scrutinizing the Synthetic Syllabus

PDF

HTML

Published: Dec 7,
2023

DOI:
<https://doi.org/10.22554/ijtel.v7i2.130>

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Abstract

In this article I explore the scenario of syllabus creation using ChatGPT as a type of Assistant Course Designer. During the early parts of 2023, one of the scenarios for LLM-based technologies, such as ChatGPT, was the creation of course materials, assignments, and syllabi for courses. The use of

BP2 - Créer des ressources péda : plans de leçons / fiches d'activité

The Learning Science Newsletter, Powered by DOMS™

Before ChatGPT

Class: *Introduction to Gravity*

Goals:

- To introduce 10 year olds to the concept of gravity through active exploration and comparison.
- To develop critical thinking skills.

Instructions:

1. Give students a handout on the definition of gravity and key theorists.
2. Individually, have each student read about key concepts and theorists and complete a fill in the blank paragraph to demonstrate their understanding / surface misunderstanding. In order to test understanding of the concept, the questions focus on *who, what & when*.
3. Lead a gravity demonstration in action and ask the class questions on key concepts and theorists, to test levels of understanding.

Class dismissed.

With ChatGPT

Class: *Gravity Scavenger Hunt*

Goals:

- To introduce 10 year olds to the concept of gravity through active exploration and comparison.
- To develop research and critical thinking skills.

Sur Claude, tester cette requête :

Prompt exemple : "Concevez une activité d'apprentissage interactive pour [sujet] qui comprend : 1. Phase d'engagement préalable 2. Exercice principal d'apprentissage 3. Réflexion post-activité 4. Activités d'approfondissement pour les étudiants avancés 5. Supports d'aide pour les étudiants en difficulté »

<https://drphilippahardman.substack.com/p/doms-edu-mega-prompt-for-c21st-lesson>

BP3 - Fournir aux étudiants des exemples / études de cas

Students need many examples when learning complicated concepts (Kirschner & Heal, 2022). When confronted with new and complex ideas, adding many and varied examples helps students better understand them. If students are presented with only one example, they may focus on the superficial details of that example and not get at the deeper concept. Multiple examples of a single concept can help students decontextualize the idea from the example, leading to better recall and understanding.

20 ways to use ChatGPT in the classroom

- Use it as a more complex source of information than Google.
- Use it to provide students access to lots of good examples.
- Use it to remix student work.
- Ask it for definitions (on a variety of levels).
- Ask it for feedback for student work.
- Ask it to do some teacher tasks for you.
- Add it to the "think pair share" thinking routine.
- Grade the bot.
- Debate the bot.
- Ask the bot for advice.
- Use it to summarize texts.
- Use it for insight into big, difficult-to-solve problems.
- Ask ChatGPT to write your lesson plans.
- Anticipate the response you'd expect from AI.
- Take several responses and make a better product.
- Create personalized learning experiences.
- Provide tutoring or coaching.
- Generate prompts and questions to facilitate discussions.
- Provide information and answer questions.
- Supplement in-person instruction.



donne moi deux exemples de la fréquence d'une onde sinusoidale




La fréquence d'une onde sinusoidale est le nombre de cycles (périodes) complets qu'elle effectue par seconde, exprimé en Hertz (Hz). Voici deux exemples de fréquences d'ondes sinusoidales :

1. Une note de musique A4 standard a une fréquence de 440 Hz, ce qui signifie que l'onde sonore correspondante effectue 440 cycles par seconde.
2. La fréquence de la lumière visible varie entre environ 400 THz (violet) et 800 THz (rouge), ce qui signifie que les ondes électromagnétiques correspondantes effectuent entre 4×10^{14} et 8×10^{14} cycles par seconde.

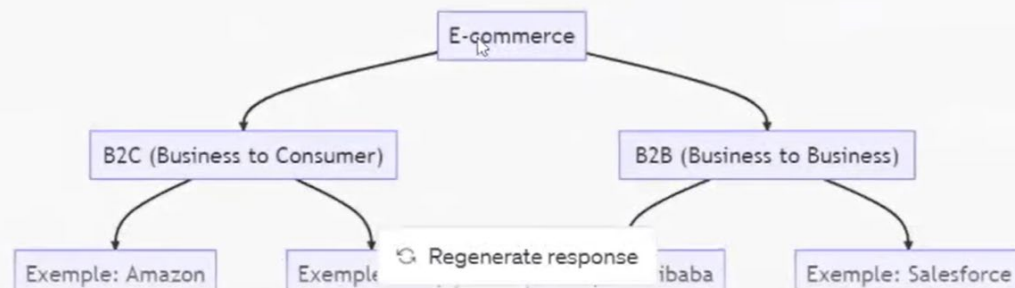
BP4 - Fournir des informations/explications claires et détaillées (multi-niveaux)

Teaching involves logical and coherent explanations (Ericsson & Lehmann, 1996). Effective explanations lay the groundwork for foundational knowledge that helps students build mental maps of topics (Willingham, 2023). To develop effective

 Explique la différence entre le B2C et le B2B dans le commerce électronique. Ajoute des exemples appliqués de boutique en ligne. Présente-moi le résultat sous forme de diagramme comprenant les définitions des concepts.

 Used Diagrams ▾

Voici un diagramme qui illustre la différence entre le B2C et le B2B dans le commerce électronique avec des exemples de boutiques en ligne :



 Shared Content

Okay, I can help you with that. First, what concept do you want explained? Second, who is the audience for the explanation? Please answer both questions in one message.

Please explain photosynthesis to elementary school kids

✓ Searching for: **photosynthesis**

✓ Generating answers for you...

Photosynthesis is a process that plants use to make their own food. They need sunlight, water, and a gas called carbon dioxide to do this. When they make food, they also make oxygen and sugar. Oxygen is a gas that we need to breathe. Sugar is a substance that plants store for energy ¹ ².

To explain photosynthesis to elementary school kids, you can use an analogy of baking cookies. Imagine that you are a plant and you want to bake cookies for yourself. You need some ingredients: flour, sugar, butter, eggs, chocolate chips, and baking soda. You also need an oven to bake them.

Now think of sunlight as your oven. It provides the heat and energy you need to bake your cookies. Water is like your flour. It is the main ingredient that you need a lot of. Carbon dioxide is like your sugar and butter. It adds sweetness and flavor to your cookies. Chlorophyll is a green pigment in plants that helps them capture sunlight ³. It is like your chocolate chips. It makes your cookies look yummy and colorful.

BP5 – Des ressources multimédia

Notebook LM devient instantanément un expert des documents que vous lui confiez => podcast



Zone : s'entraîner

BP6 - Fournir des occasions de s'entraîner



Donne moi un exercice type sur la fréquence d'une sinusoidale



Voici un exercice type sur la fréquence d'une sinusoidale :

Un signal sinusoidal a une période T.

Solution :

La période T d'une onde sinusoïdale est le temps nécessaire pour effectuer un cycle complet. Ainsi, si la période est T, la fréquence f est donnée par la relation $f = 1/T$.



Donne moi un exercice du même genre mais plus compliqué



Voici un exercice un peu plus complexe :

Un signal sinusoidal de la forme $y = 2 \cos(2\pi f t + \phi)$ a une amplitude de 2 V, une fréquence en hertz, sa période en secondes et une phase ϕ en radians.

Solution :



Pourquoi le deuxième exercice est-il plus complexe que le premier ?

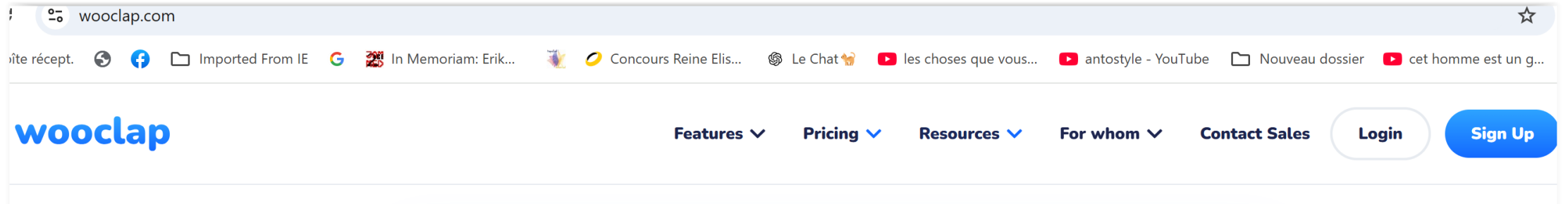


Le deuxième exercice est plus complexe que le premier car il implique la manipulation de différentes formules mathématiques pour déterminer la fréquence, la période et la pulsation d'une onde sinusoïdale. Le signal sinusoïdal dans le deuxième exercice est également plus complexe, car il contient une amplitude, une pulsation et une phase spécifiques, qui doivent être prises en compte lors du calcul de la fréquence, de la période et de la pulsation.

En revanche, dans le premier exercice, la période était donnée et il suffisait d'utiliser une seule formule pour déterminer la fréquence. Le signal sinusoïdal dans le premier exercice était également plus simple, car il ne contenait pas d'amplitude, de phase ou de pulsation spécifiques.

En général, la complexité des exercices sur les ondes sinusoïdales peut varier en fonction des propriétés spécifiques de l'onde en question, des formules mathématiques nécessaires pour résoudre le problème et des connaissances préalables requises pour comprendre les concepts liés aux ondes.

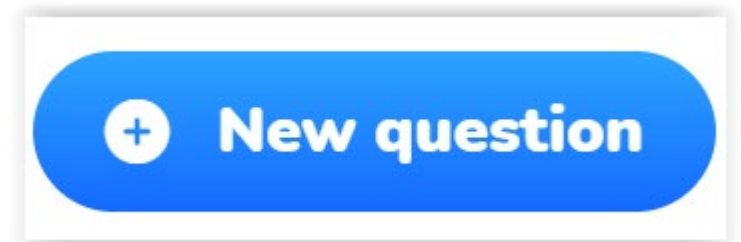
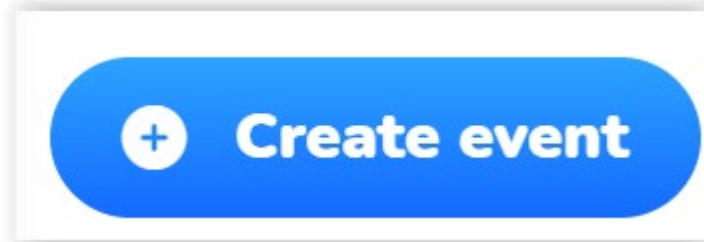
Wooclap (fonctionnalité IA « imbriquées »)




Sign up with your institution
Only for institutions with a Custom Wooclap subscription

Université de Liège

Go to login screen



Featured



Create using AI

Myuliège > cours > wooclap

BP7 - Créer des évaluations et leur feedback

Low-stakes frequent tests are an effective teaching strategy across educational levels and settings. Tests do not simply measure knowledge; they are a learning event. Repeated testing and retrieval of knowledge help students retain information in the long term (Karpicke & Roediger 2008).

Test-Enhanced Learning

Taking Memory Tests Improves Long-Term Retention

Henry L. Roediger, III, and Jeffrey D. Karpicke

Washington University in St. Louis

Good practice in undergraduate education:

1. Encourages contact between students and faculty
2. Develops reciprocity and cooperation among students.
3. Encourages active learning.
4. Gives prompt feedback.
5. Emphasizes time on task.
6. Communicates high expectations.
7. Respects diverse talents and ways of learning.

Rank	Influence	Studies	Effects	ES
1	Self-report grades	209	305	1.44
5	Reciprocal teaching	38	53	.74
6	Prior achievement	3387	8758	.73
7	Teacher-student relationships	229	1450	.72
8	Feedback	1276	1923	.72
9	Providing formative evaluation to teachers	21	21	.70
11	Meta-cognition strategies	43	123	.67
12	Teaching selfverbalisation	92	1061	.67
16	Problem solving teaching	221	719	.61
17	Acceleration of gifted	60	410	.60



Artificial Intelligence for Education

Cognii Virtual Learning Assistant

Cognii's Conversational EdTech enables the best pedagogical practices known to learning science.

Virtual assistants and **chat bots** such as Siri, Alexa, Cortana and Google Assistant are an increasingly familiar products, simulating human to human interaction with the use of Artificial Intelligence. But these are general purpose assistants, used for consumer activities such as asking "What's the weather like?". **Cognii Virtual Learning Assistant** is the only virtual assistant that is designed and optimized for educational conversation.

Auto grading of short essays

Personalized tutoring feedback

Cognii

What are the structures of a typical neuron?

Student

Neurons are the basic building blocks of the nervous system. A neuron consists of dendrites and a cell body called soma.



Khanmigo

AI power

This conversation is recorded and viewable by your parent and teacher.

Can you just tell me the answer?

It's important that you learn how to do this yourself! What do you think you need to do to multiply 2 by 5/12?

They need the same denominator.

That's a good thought, but in this case, you don't need to find a common denominator because you're multiplying, not adding or subtracting. What else could you try?

Type message (do NOT share any personal data)



Clear chat





Thank you for sharing your work. You've chosen an important subject and your narrative is well articulated and clear. Here are a few areas where you've excelled and where improvements could be made:

Strengths:

1. You demonstrate a good understanding of the topic, and have effectively used a range of sources, which is impressive.
2. The text is quite coherent, with clear and logical progression of ideas. The distinctions between different models of procedural justice are clear and well-explained.

Areas for Improvement:

1. **Thesis Statement:** It seems to be missing or isn't very clear in these opening paragraphs. This statement should guide the direction of your paper. Try to state your main argument or the primary question you're trying to answer early on in the text.
2. **Definitions:** You might want to consider giving a succinct definition of procedural justice right at the start before diving into its historical context and different models. This would make it easier for readers unfamiliar with the topic to follow your arguments.
3. **Context:** While you've done a good job explaining the history and the models of procedural justice, don't forget to address why this topic matters in today's world. What impact does procedural justice have on contemporary society and why should your readers care about it?
4. **Referencing:** This might just be an excerpt, but don't forget to include proper in-text citations after every quote or reference to another author's work. This helps to avoid plagiarism and strengthens your academic credibility.

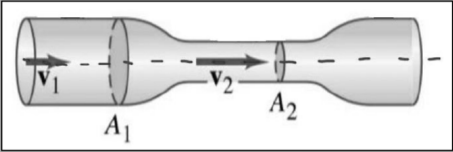
I hope you find these insights helpful. Please revise your work based on this feedback and I would be glad to take another look at it.

AI Tutoring Outperforms Active Learning

Gregory Kestin*

Activity 4: Venturi effect || Part 1

Use the Bernoulli equation to figure out if the pressure of the fluid increases or decreases when it enters a smaller cross-sectional area A of the tube shown below. Use $h_1 = h_2$ to simplify the equation.



Could you please remind me what the expression for the Bernoulli equation is?

Sure! The expression for the Bernoulli equation is:

$$P_1 + \frac{1}{2}\rho v_1^2 + \rho g h_1 = P_2 + \frac{1}{2}\rho v_2^2 + \rho g h_2$$

Here, P stands for pressure, ρ is the fluid density, v represents the velocity of the fluid, g is the acceleration due to gravity, and h refers to the height from a reference level. This equation applies along a streamline of steady, incompressible flow with negligible viscosity.

Thanks! I'd love a hint about what to do next.

Since we're starting with the Bernoulli equation and the heights are the same ($h_1 = h_2$), you can simplify

I am confused about wh

Load Assignment

L9b || Gases & Fluid Flow

Log Out



OpenAI wants to pair online courses with chatbots

Kyle Wiggers — 12:14 PM PST · December 5, 2024

ART



When did the Netherlands become independent?

The Netherlands became independent from Spain in 1648, confirmed by the signing of the Treaty of Westphalia.

Dutch Canon (p. 103,117) History of the Netherlands (p. 17) 👍 🗨️

Go to question mode

🚩 Question Mode

Here is a question: What was the impact of the Dutch Revolt on the formation of the Dutch Republic?

🏆 Question Mode

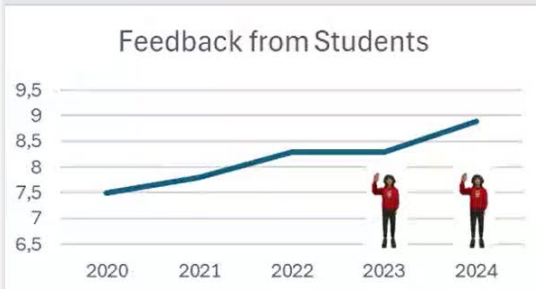
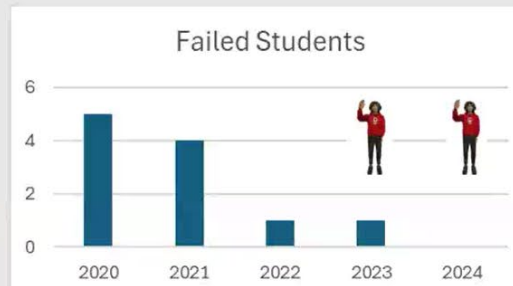
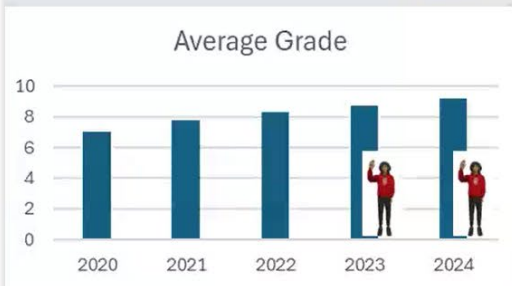
Any clues?

Think about how the revolt changed the political landscape and what it meant for Dutch sovereignty.

🏆 Question Mode

more clues

Send

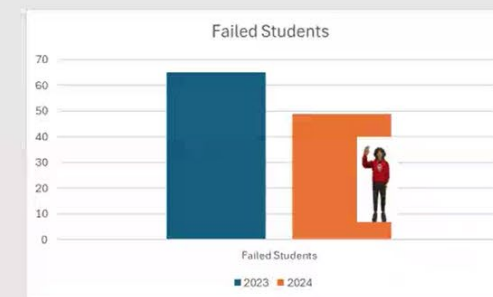
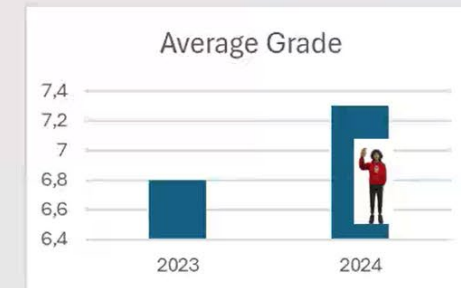


“ART was of added value, Interesting assignments and good feedback.”

“The meetings were well structured and being able to look back up the sheets with the help of ART was also very nice.”

“I love ART!”

“for me ART was a big addition”



Assessment for learning

- Un feedback réfléchi est plus important que la bonne réponse

← Designing an Online Self-assessment for Informed Study Decisions: The User Perspective Score:

MVAI demo student ECO - MVAI - demo [Bewerk de algemene onderbouwing](#)
[Rond beoordeling af](#)

[Filter](#) [+ Ververs semantische verschillen](#) [Ververs](#)

tus	naam	Gewicht	Eindscore	Score 1	Score 2	Semantische afstand
	MVAI - Argumentatie	1		3	5	De eerste onderbouwing benoemt specifieke tekortkomingen in de argumentatie en geeft suggesties...
	MVAI - Rapportage resultaten	1.5		3	4	Beide onderbouwingen erkennen tekortkomingen in de rapportage en bieden suggesties voor verbet...
	MVAI - Beperkingen	1		4	3	Beide onderbouwingen benoemen beperkingen van de studie en wijzen op de noodzaak voor meer di...

Evaluating Language Models for Generating and Judging Programming Feedback


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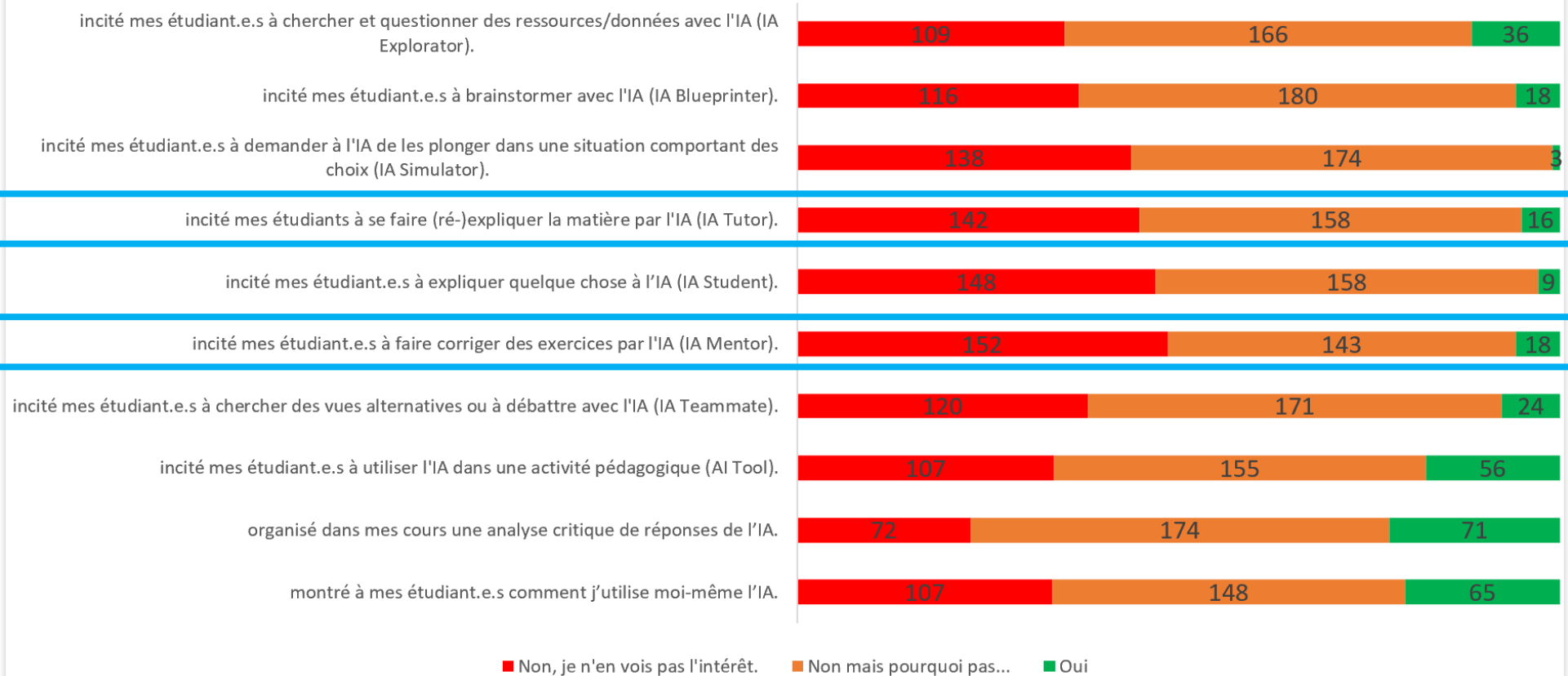
Empirical Software Engineering (2025) 30:34
<https://doi.org/10.1007/s10664-024-10561-6>

“Ok Pal, we have to code that now”: interaction patterns
of programming beginners with a conversational chatbot

Alina Mailach¹  · Dominik Gorgosch² · Norbert Siegmund¹ · Janet Siegmund²

Rôles de l'ia

Actions entreprises en lien avec l'IA : "j'ai déjà..." (n de 313 à 315 selon la question)



Mollick & Mollick

TABLE 1 SUMMARY OF SEVEN APPROACHES

AI USE	ROLE	PEDAGOGICAL BENEFIT	PEDAGOGICAL RISK
MENTOR	Providing feedback	Frequent feedback improves learning outcomes, even if all advice is not taken.	Not critically examining feedback, which may contain errors.
TUTOR	Direct instruction	Personalized direct instruction is very effective.	Uneven knowledge base of AI. Serious confabulation risks.
COACH	Prompt metacognition	Opportunities for reflection and regulation, which improve learning outcomes.	Tone or style of coaching may not match student. Risks of incorrect advice.
TEAMMATE	Increase team performance	Provide alternate viewpoints, help learning teams function better.	Confabulation and errors. "Personality" conflicts with other team members.
STUDENT	Receive explanations	Teaching others is a powerful learning technique.	Confabulation and argumentation may derail the benefits of teaching.
SIMULATOR	Deliberate practice	Practicing and applying knowledge aids transfer.	Inappropriate fidelity.
TOOL	Accomplish tasks	Helps students accomplish more within the same time frame.	Outsourcing thinking, rather than work.

Zone : évaluer

BP5 - Créer des grilles d'évaluation

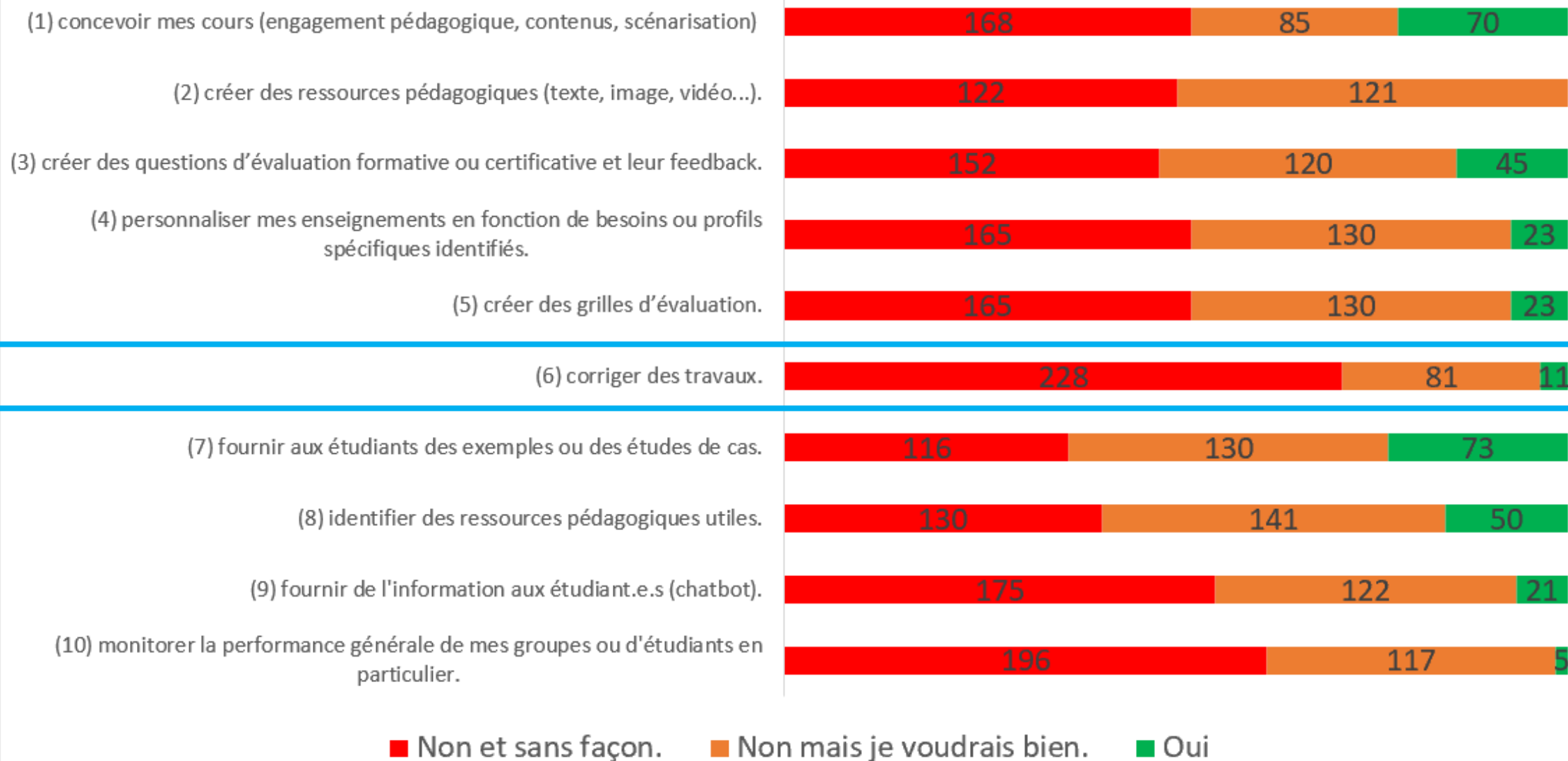
Design rubric



Design a rubric to grade a master thesis

Criteria	Excellent (90-100%)	Good (80-89%)	Satisfactory (70-79%)	Poor (0-69%)
Research question and objectives	Clearly defined and well-focused	Adequately defined and mostly focused	Somewhat defined and somewhat focused	Not defined or focused
Methods	Appropriate and well-executed	Appropriate but with some minor flaws	Somewhat appropriate but with major flaws	Inappropriate or poorly executed
Results and Analysis	Clearly presented and thoroughly analyzed	Clearly presented but with some minor flaws in analysis	Somewhat presented and analyzed	Poorly presented and analyzed
Discussion and Implications	Thorough and well-supported by evidence	Adequate and mostly supported by evidence	Somewhat discussed and supported by evidence	Not discussed or supported by evidence
Conclusion	Clear and well-supported by evidence	Adequate and mostly supported by evidence	Somewhat clear and supported by evidence	Not clear or supported by evidence
Writing and Organization	Clear, concise, and well-organized	Adequate but with some minor flaws in organization	Somewhat clear and organized	Poorly written and disorganized
References	Complete and correctly cited	Mostly complete and correctly cited	Somewhat complete and correctly cited	Incomplete and/or incorrectly cited

Avis des enseignants sur l'intérêt et l'usage des outils IA pour les aider à... (n de 243 à 323 selon la question)



Aide à la correction (au-delà de Gradescope)

The Learning Science Newsletter, Powered by DOMS™

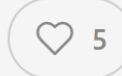
Bonus New Year Post: Can ChatGPT Grade Essays Like a Professor?

Results from some rapid experimentation



Dr Philippa Hardman

Jan 2



One of the many research questions on my list of *experiments in AI* is: **can ChatGPT grade & give feedback like a professor?**



Daisy Christodoulou

Jan 9 · 7 min read · Listen



Can ChatGPT mark writing?

Can artificial intelligence systems mark more accurately than humans? Definitely, and they have been able to since the 1960s.

Hélène Soyeurt (GABTx)

Nom

Correction_rapport_stage_bloc3

Description

Cette appli est créée pour faire les corrections des rapports

Instructions

Objectif :

je veux que tu lises le rapport téléchargé et que tu donnes une cotation pour chaque critère d'évaluation du rapport.

Contraintes:

Il doit être composé de 3 parties : l'introduction, les observations et le bilan.



Contraintes

Contraintes:

Il doit être composé de 3 parties : l'introduction, les observations et le bilan.

L'introduction doit faire maximum une 1 page et doit reprendre les motivations et les objectifs du stage, l'état de réflexion de son projet personnel professionnel (PPP) avant la réalisation du stage ainsi que la présentation de l'entreprise et du métier observé.

La partie relative aux observations doit correspondre à maximum 3 pages et faire état de ce que l'étudiant a compris sur le métier sur base de l'interview et des conclusions qu'il en tire par rapport à l'intérêt de ce métier pour lui. Sur base de l'interview et du stage qu'il a réalisé, l'étudiant doit développer son sens critique vis à vis du métier observé et dire si cela correspond à ses objectifs. Par exemple, quelles sont les qualités et les défauts du métier observés. Il faut aussi faire explicitement référence au référentiel de compétence du métier de bioingénieur. Ensuite, cette partie doit avoir une conclusion pour savoir si le métier convient aux attentes de l'étudiant. Ensuite, l'étudiant doit reprendre dans son rapport la comparaison avec les métiers observés par les autres étudiants de son groupe et faire une conclusion.

La partie relative au bilan doit faire maximum une page et dire en quoi cette expérience de stage a-t-elle conforté ou infléchi le projet professionnel de l'étudiant ? Le rapport doit répondre aussi à la questions relative aux prochaines démarches à mettre en place en vue de poursuivre l'avancée du projet professionnel. Finalement cette partie bilan doit expliquer ce que l'étudiant retiens et/ou souhaite pour son stage de master.

Finalement, il faut aussi vérifier l'orthographe en donnant une comptage du nombre de fautes d'orthographe. Il faut également apprécier le style du rapport. Le style du rapport doit être formel.

Voici la grille de cotation à appliquer pour l'évaluation du rapport.

Les critères 1 à 4 concerne la partie Introduction du rapport. Les critères 5 à 9 sont liés à la partie du rapport relative aux observations. Les critères 10 à 13 sont liés à la partie bilan du rapport.

[critère 1] = point donné pour l'évaluation de l'état du projet professionnel avant le stage dans la partie Introduction. Si l'étudiant a bien mentionné l'état de son projet professionnel dans la partie Introduction, il a 2 points. Si le projet est partiellement mentionné dans la partie introductive, il a un point. Si l'état de son projet n'est pas mentionné dans la partie introductive, il a 0 point.

[critère 2] = point donné pour le choix de l'entreprise et la présentation de l'entreprise dans la partie Introduction. Si l'étudiant a bien spécifié l'entreprise et pourquoi il a choisi l'entreprise dans la partie Introduction de son rapport, il a 2 points. Si il a juste mentionné l'entreprise dans la partie de son rapport, il a un point. Si rien n'est mentionné pour le choix de l'entreprise et sa présentation dans la partie introductive, il a 0 point.

[critère 3]= point donné pour les objectifs pendant le stage dans la partie Introduction. Si les objectifs du stage sont bien mentionnés dans la partie Introduction, l'étudiant a un point. Si ce n'est pas le cas, l'étudiant a 0 point.

[critère 4] = point donné pour le nombre de fautes d'orthographe dans la partie Introduction. Si l'étudiant a fait plus de 8 fautes dans la partie Introduction, il lui donne une cotation de -3 pour ce critère. Si l'étudiant a fait entre 4 et 8 fautes dans la partie Introduction, on lui donne -2. Si l'étudiant a fait entre une et trois fautes, on lui donne -1 . Sinon, l'étudiant a 0.

[critère 5] = si l'étudiant mentionne bien dans la partie du rapport relative aux observations les qualités du métier de bioingénieur, l'étudiant a 3 points. Si les qualités ne sont pas bien expliquées, l'étudiant a 2 points. si les qualités ne sont pas expliquées, l'étudiant a 0 point.

[critère 6] = si l'étudiant mentionne bien dans la partie du rapport relative aux observations les inconvénients du métier de bioingénieur, l'étudiant a 3 points. Si les inconvénients sont partiellement expliqués, l'étudiant a 2 points. Si les inconvénients ne sont pas expliqués, l'étudiant a 0 point.

[critère 7] = si l'étudiant a bien fait une comparaison du métier qu'il a observé avec les métiers observés par les autres étudiants de son groupe dans la partie du rapport relatif aux observations, l'étudiant a 2 points. Si la comparaison est pas très détaillée mais qu'elle existe, l'étudiant a 1 point. Si il n'y a pas de comparaison de métiers, l'étudiant a 0 points.

[critère 8] = si l'étudiant a mentionné dans son rapport dans la partie relative aux observations, un lien entre le métier observé et le référentiel de compétences du métier de bioingénieur, l'étudiant a 2 points. Si aucun lien au référentiel de compétence est mentionné dans le rapport, l'étudiant a 0 point.

[critère 9] = si il y a plus de 15 fautes d'orthographe dans la partie du rapport relative aux observations, l'étudiant a -3. S'il y a entre 7 et 15 fautes dans cette partie, l'étudiant a -2. S'il y a entre une et 7 fautes d'orthographe, l'étudiant a -1. Sinon l'étudiant a 0.

[critère 10] = si l'étudiant mentionne dans la partie bilan de son rapport la conclusion et les modifications relatives à son projet professionnel, il a 2 points. S'il n'y a pas de conclusion relative au projet professionnel, l'étudiant a 0 point.

[critère 11] = si l'étudiant mentionne dans la partie bilan de son rapport une conclusion relative au choix de son master, l'étudiant a un point. Sinon il a 0 point.

[critère 12]= si l'étudiant mentionne dans la partie bilan de son rapport une perspective quant à ses futures démarches pour affiner son projet professionnel, il a 2 points. Si il ne le mentionne pas, il a 0 point.

[critère 13]= si l'étudiant fait plus de 8 fautes dans la partie bilan de son rapport, il a -3. S'il fait entre 4 et 8 fautes dans cette partie du rapport, il a -2. S'il fait entre une et trois fautes, il a -1. S'il ne fait aucune faute dans cette partie du rapport, il a 0.

[critère 14] = la partie du rapport "Introduction" fait bien au maximum une page. Si oui, l'étudiant a 1 point. Si ce n'est pas le cas, l'étudiant a 0.

[critère 15] = la partie du rapport "Observations" fait bien au maximum trois pages. Si oui, l'étudiant a 1 point. Si ce n'est pas le cas, l'étudiant a 0.

[critère 16] = la partie du rapport "Bilan" fait bien au maximum une page. Si oui, l'étudiant a 1 point. Si ce n'est pas le cas, l'étudiant a 0.

Un travail fait par l'ia et corrigé par l'ia => tous au café...



La triiiiiiiiiiiiiiche.....

The performance of GenAI tools can be impressive, especially in introductory programming exercises and respective exams [29], [30]. Several studies showed the capabilities of tools based on Large Language Models (LLMs), such as Copilot and ChatGPT [7]–[9]. For example, Geng et al. [7] treated ChatGPT as a student participating in an introductory-level functional language programming course. The tool achieved a grade B and was ranked as 155 out of 314 students. Kiesler and Schiffner [8] had ChatGPT 3.5 and GPT-4 generate solutions to 72 standard introductory programming tasks available on CodingBat [31]. ChatGPT-3.5 immediately solved the task correctly in 69 cases (95,8%), GPT-4 in 68 tasks (94,4%) [8].

Monitoring AI-Modified Content at Scale: A Case Study on the Impact of ChatGPT on AI Conference Peer Reviews

Weixin Liang^{1*} Zachary Izzo^{2*} Yaohui Zhang^{3*} Haley Lepp⁴ Hancheng Cao^{1,5} Xuandong Zhao⁶
Lingjiao Chen¹ Haotian Ye¹ Sheng Liu⁷ Zhi Huang⁷ Daniel A. McFarland^{4,8,9} James Y. Zou^{1,3,7}

Abstract

We present an approach for estimating the fraction of text in a large corpus which is likely to be substantially modified or produced by a large language model (LLM). Our maximum likelihood model leverages expert-written and AI-generated reference texts to accurately and efficiently examine real-world LLM-use at the corpus level. We apply this approach to a case study of scientific peer review in AI conferences that took place after the release of ChatGPT: *ICLR 2024*, *NeurIPS 2023*, *CoRL 2023* and *EMNLP 2023*. Our results suggest that between 6.5% and 16.9% of text submitted as peer reviews to these conferences could have been substantially modified by LLMs, i.e. beyond spell-checking or minor writing updates. The circumstances in which generated text occurs offer insight into user behavior: the estimated fraction of LLM-generated text is higher in reviews which report lower confidence, were submitted close to the deadline, and from reviewers who

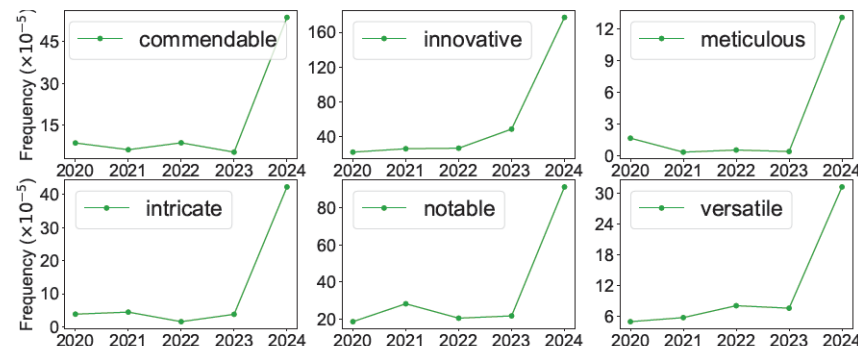


Figure 1: **Shift in Adjective Frequency in *ICLR 2024* Peer Reviews.** We find a significant shift in the frequency of certain tokens in *ICLR 2024*, with adjectives such as “commendable”, “meticulous”, and “intricate” showing 9.8, 34.7, and 11.2-fold increases in probability of occurring in a sentence. We find a similar trend in *NeurIPS* but not in *Nature Portfolio* journals. Supp. Table 2 and Supp. Figure 12 in the Appendix provide a visualization of the top 100 adjectives produced disproportionately by AI.

1. Introduction

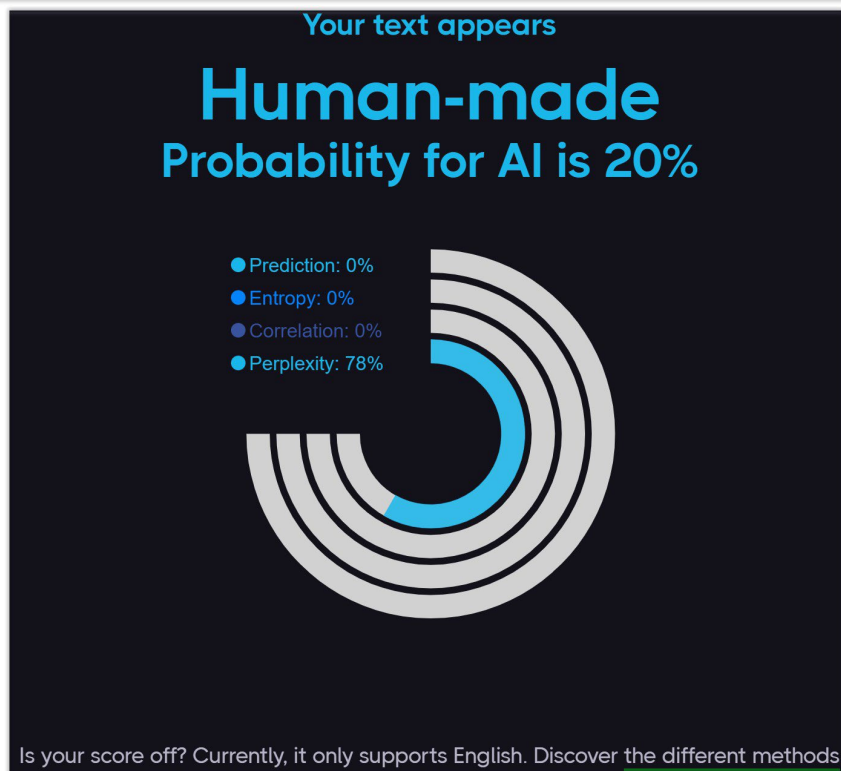
While the last year has brought extensive discourse and speculation about the widespread use of large language



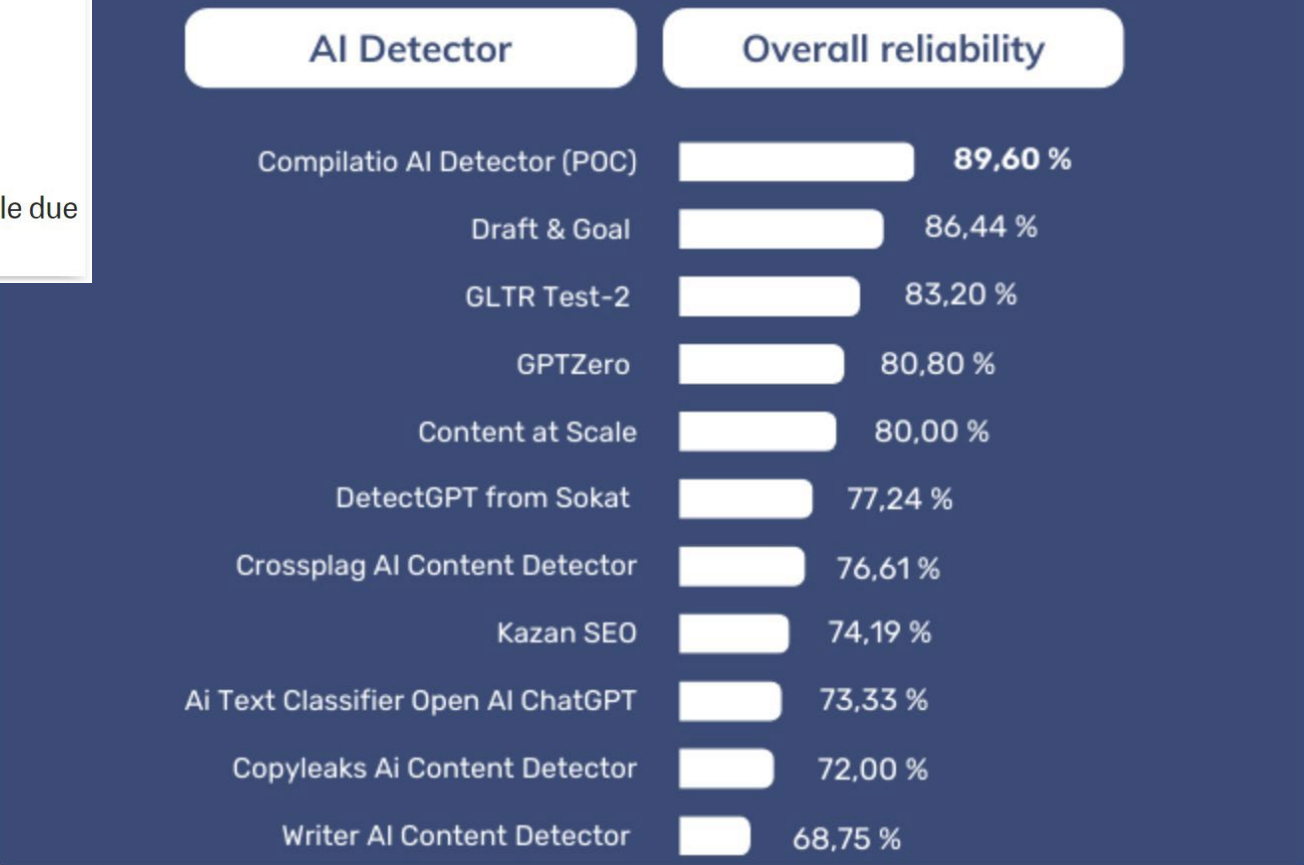
Détecteurs

OpenAI Quietly Shuts Down AI Text-Detection Tool Over Inaccuracies

The tool helped distinguish between human- and AI-generated text, but is 'no longer available due to its low rate of accuracy.' OpenAI plans to bring back a better version.



COMPARISON OF THE BEST AI DETECTORS



BEST AI REWRITER TOOLS



	Best for	Plagiarism checking	Highlight AI text	Batch file upload	Chrome extension	Free plan	Star pri
Originality AI	Best overall	Yes	Yes	No	Yes	Yes	\$20 for crec
Content at Scale AI Detector	Best free tool	No	Yes	No	No	Yes	Fre
AI Text Classifier	ChatGPT model	No	No	No	No	Yes	Fre
GPTZero	Educators	Yes	Yes	Yes	No	Yes	\$9.95 moi
GLTR	GPT2 model-generated content	No	Yes	No	No	Yes	Free
Writer AI Content Detector	Integration	Yes	No	No	No	Yes	\$18 per user per month, billed monthly
Copyleaks	Content marketing agencies	Yes	Yes	No	Yes	No	\$8.33 per month, billed annually
Sapling.ai	Agencies and customer-facing teams	No	Yes	No	Yes	Yes	\$25 per month
Hugging Face	Technical teams	No	Limited	No	No	Yes	Free
Crossplag	Institutions	Yes	No	No	No	Yes	\$1.99 per user for up to 30,000 users.

9 Best AI Rewriter Tools: Use AI to Easily Spin Content

Boutons « humanize » ou stratégies de sous-optimisation
 MAIS
 Laisser entendre que l'on peut se faire une idée

The screenshot shows the Undetectable AI website. At the top, it says "Get paid for sharing our brand. Learn more." Below that, the main heading reads "We create truly [undetectable] AI content". A sub-headline states: "Our AI text humanizer turns your flagged AI content into high-quality writing, that bypasses AI detectors and is indistinguishable from human-written text." The interface includes a text input area with a sample paragraph about natural beauty and tourism. Below the input, there are controls for "READABILITY" (set to University) and "PURPOSE" (set to General Writing). A character count shows "2065/15000 CHARs = 289 WORDS". At the bottom of the input area, there are buttons for "WAITING FOR YOUR INPUT", "MORE READABLE", "BALANCED", and "MORE HUMAN". A checkbox is checked for "I AGREE TO THE TERMS OF SERVICE (NO ACADEMIC MISCONDUCT)". There are "CHECK FOR AI" and "HUMANIZE" buttons. At the bottom of the page, a green message says "Your content appears human" with a thumbs up icon. Below that, a section titled "AI DETECTION LIKELIHOOD" shows a progress bar and a list of tools with their detection results: GPTZERO (100% HUMAN), OPENAI (100% HUMAN), WRITER (100% HUMAN), CROSSPLAG (100% HUMAN), COPYLEAKS (100% HUMAN), SAPLING (100% HUMAN), CONTENTATSCALE (100% HUMAN), and ZEROGPT (0% HUMAN).

Les détecteurs

RAID: A Shared Benchmark for Robust Evaluation of Machine-Generated Text Detectors

**Liam Dugan¹, Alyssa Hwang¹, Filip Trhlik², Josh Magnus Ludan¹
Andrew Zhu¹, Hainiu Xu³, Daphne Ippolito⁴, Chris Callison-Burch¹**
University of Pennsylvania¹ University College London²
King's College London³ Carnegie Mellon University⁴

Codes d'honneur / Règlements : responsabiliser l'utilisateur

Charte ULiège d'utilisation des intelligences artificielles génératives dans les travaux universitaires

Comment bien tirer parti d'un bouleversement technologique pour apprendre et en faire la preuve !

Depuis sa sortie en novembre 2022, ChatGPT a rapidement ouvert à un large public l'accès à l'intelligence artificielle (IA) générative, c'est-à-dire une nouvelle génération d'outils informatiques capables de singer certains aspects de l'intelligence humaine (expression, apprentissage, raisonnement, résolution de problèmes, création d'outputs...). Tous les secteurs de la société en questionnent le potentiel et les zones d'ombre. L'université ne fait pas exception. La présente charte, en fixant un cadre précis à l'utilisation de ces IA dans le contexte académique (cours, travaux, examens, rapports, et autres apprentissages) vous indique la frontière entre ce qui est permis ou souhaitable et ce qui ne l'est pas. Reflétant l'état actuel des technologies et des usages (décembre 23), elle est appelée à s'enrichir d'informations fournies par les enseignants, les départements, les facultés... Soyez donc attentifs à ces évolutions qui concernent directement votre travail d'étudiant.

L'ULiège soutient et développe chez ses étudiants et étudiantes des usages réfléchis, responsables, critiques et transparents de l'IA, pour tirer le meilleur parti de ce puissant auxiliaire.

UN USAGE RÉFLÉCHI ET RESPONSABLE DE L'IA

+

UN USAGE CRITIQUE DE L'IA

+

UN USAGE TRANSPARENT DE L'IA

+

UN USAGE DE SURPASSEMENT DE L'IA

+

https://www.student.uliege.be/cms/c_19230399/fr/faq-student-charte-uliege-d-utilisation-des-intelligences-artificielles-generatives-dans-les-travaux-universitaires

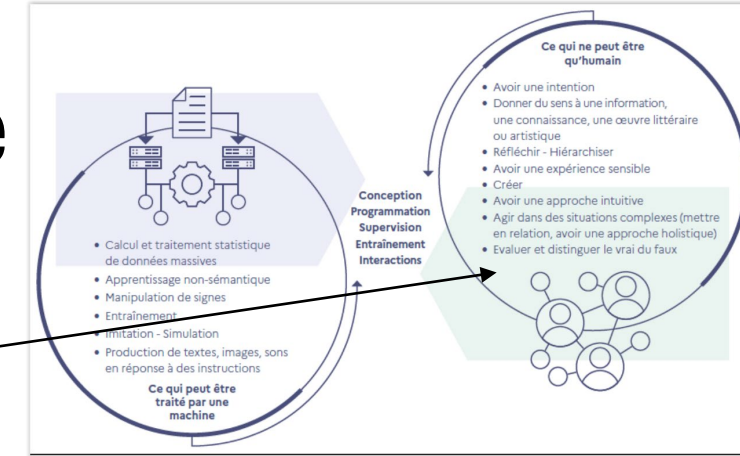
Ruses contre la paresse intellectuelle

- La minute du pédagogo : plus les travaux demandés sont conçus pour stimuler l'engagement, moins ils seront déferés à l'IA.
- Qu'est-ce qui est (à ce jour) impossible au Chat ? Les travaux donnés devraient assigner cet impossible aux étudiants (Mills & Goodlad, 2023).
 - Perspective locale*
 - Perspective personnelle (pourquoi avoir choisi ceci ?)
 - Perspective comparative (articulations nuancées)**
 - Perspective d'éclairage élargi (changement contexte)

*

**

Moreover, ChatGPT's outputs on comparison and contrast are often superficial. Typically the system breaks down a task of logical comparison into bite-size pieces, conveys shallow information about each of those pieces, and then formulaically "compares" and "contrasts" in a noticeably superficial or repetitive way.



**

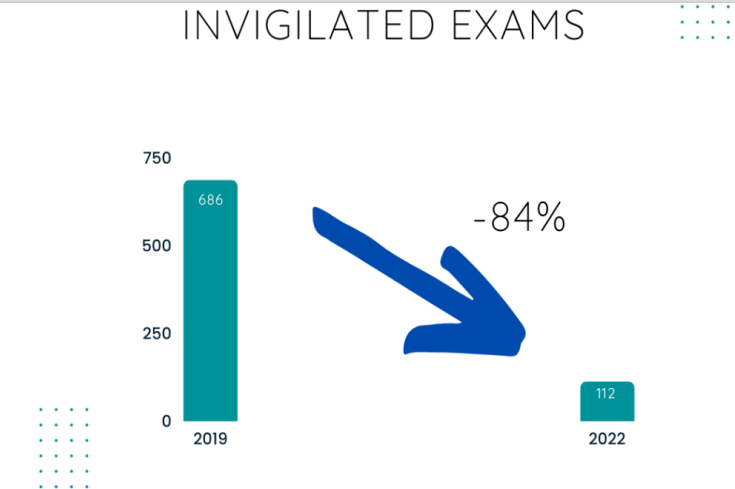
- Bekijk de video over leertheorieën
- Bekijk nu dit essay
- Schrijf een verbeterd essay op basis van wat je hebt geleerd via deze video

Quid des examens ?

- Strat. 1 : ramener l'écrit
- Strat. 2 : ramener l'oral
- Strat. 3 : privilégier éval. continue
- Strat. 4 : autres « administrations de la preuve »
- La minute du pédagogo : plus les travaux demandés sont conçus pour stimuler l'engagement, moins ils seront déferés à l'IA.

Mais dans quelle mesure la PromSoc est-elle concernée ?

In 2019, 686 of our subjects/units in Trimester/Semester 1 and 2 used an invigilated exam hall exam. In 2022, only 489 subjects/units during the same study period had an end of unit assessment, with only 112 requiring an online invigilated exam, a reduction of 84%. The remaining 377 subjects/units used open book assignments.



Noting the considerable effort to change between formats, we expect steady state delivery to be at least cost-neutral. We are already seeing a shift in focus from the process of managing exams to working on good assessment design.

Dans un monde où l'AI s'installe dans le paysage, quelles nouvelles façons d'entraîner les capacités des étudiants à réfléchir et à prouver leur compréhension d'un sujet ?

within the reach of many GenAI tools. All of this makes generally productive learning activities, like the generative strategies highlighted by Fiorella and Mayer (2016), possible for GenAI tools to complete. The following figures are an outline, produced by ChatGPT (Fig. 1) and a summary (Fig. 2) of the first section of this editorial.

These problems, developing or utilizing instructional strategies and assessments that help students learn despite easy access to GenAI tools, require flexible thinking and innovation on the part of teachers and instructional design-

Évolutions probables

- Travaux plus personnels (auto-évaluation incluse)
 - Travaux plus transparents
 - Travaux plus nombreux
 - Travaux plus oraux (ou plus greffé sur « l'oral local »)
 - Travaux plus locaux
 - Travaux plus comparatifs / recontextualisés / interdisciplinaires
 - Travaux plus « authentiques »
 - Travaux plus multimédia
 - Travaux plus « continus » (progressive assessment)
-
- “The bot’s response isn’t the first and last word in the conversation” (Miller, 2023)

Essayer autre chose et réfléchir à la symbiose IA – IB

8 stratégies des profs ULiège par rapport à l'évaluation
(enquête disponible : <https://orbi.uliege.be/handle/2268/333440>)

D. Verpoorten, C. Delfosse, V. Doppagne et F. Schoenaers Perceptions de l'IA à l'université ...

enseignantes indiquent un recours à plus d'une action. L'observation de ces combinaisons, et notamment de celles qui incluent l'item 1, donne l'impression que les manières habituelles d'interroger sont conservées (item 7 particulièrement, politique d'« évitement ») ou renforcées par des actions protectrices additionnelles (politique d'« épaissement ») comme l'ajout d'une note de transparence (Anceau, 2023) ou d'une mise en garde sur l'apprentissage (Graham, 2025). Les modifications plus radicales (4, 5, politique d'« affrontement ») ne sont pas les plus nombreuses. L'item 9 renvoie au « Chat GPT screening », un réflexe pédagogique nouveau que, selon Stanoyevitch (2024, p. 9), il est nécessaire d'adopter, et qui consiste à désormais vérifier systématiquement si le possible recours à une IA ne dépossède pas de facto des travaux ou des évaluations de pertinence pour l'apprentissage.

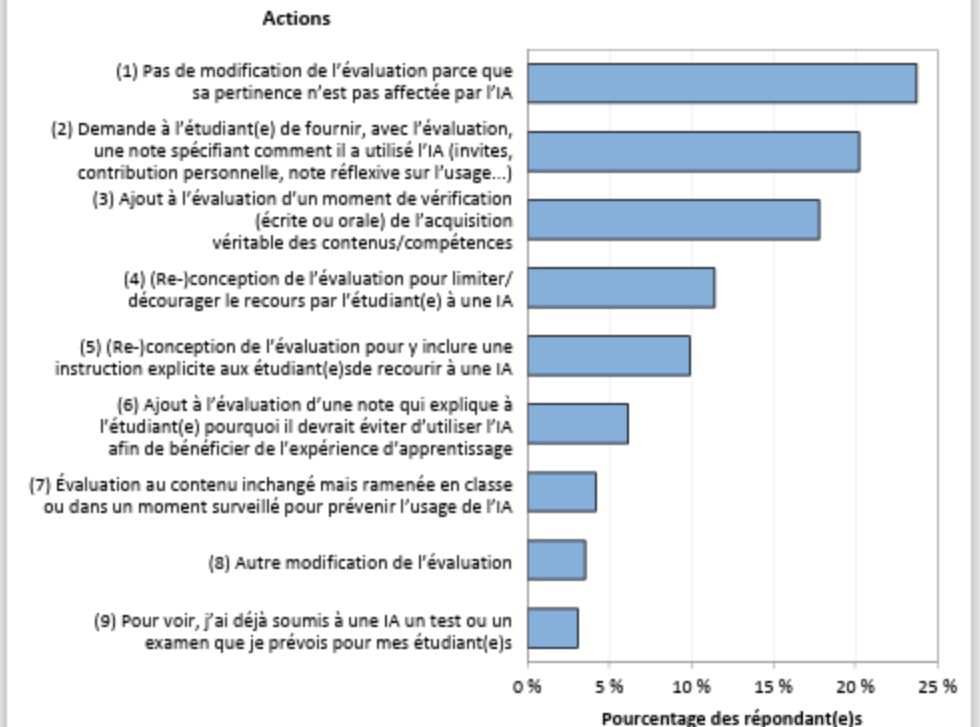


Figure 8
Modification de l'évaluation, effectuée ou envisagée, liée à l'IA

to changes in assessments. We uncovered six themes representing how assessment approaches have changed:

- (1) **Process over product.** Six participants described assessing students on their process of creating software more than on the correctness of the final result. One participant is "... *shifting things to watching the process (ongoing use of repos, iteration, trackable code growth, etc.) vs final artifact evaluation*". Another focuses on "*More incremental checkpoints and questioning the process before completion... the end work is less weighted and the process towards the solution is more emphasized.*"
- (2) **Invigilated exams.** Thirteen participants reported placing more emphasis on the proctoring of assessments. Six described more emphasis on proctoring, for example, "*programming assignments are now preparation for the proctored weekly quizzes.*" Three participants spoke of the importance of giving exams on paper. Seven spoke of adding or placing more emphasis on oral exams: "*Oral exams are now a vital part of student assessment.*"
- (3) **Increased weighting on exams.** Ten participants decreased the weight of unproctored assessments and increased the weight of proctored exams in assigning grades. One participant wrote, "*Minimized unsupervised assessment weight (e. g., assignments and projects) ... Increased supervised assessment weight (e. g., tests and exams).*" One participant described instituting "*a minimum cutoff for exams*".
- (4) **No change (yet).** Nine participants said they had not made any changes with an additional six participants saying they had not made changes yet but had plans to in the future.
- (5) **Confuse the LLM.** Five participants chose to create assignments where the questions were designed to make the LLMs do poorly. One participant wrote, "*Homework assignments have been customized so that LLMs can't solve them well.*"
- (6) **Describe AI use.** Three participants are asking students to describe how they use GenAI on their assignments and provide chat logs with the LLM, as exemplified in the following quote: "*We require students to disclose if they used GenAI (as part of any outside help), and if they do, they are required to provide the prompts that they used to get their solution.*"

Beyond the Hype: A Comprehensive Review of Current Trends in Generative AI Research, Teaching Practices, and Tools

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Aalto University
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Nuremberg Tech
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6 stratégies de profs par rapport à l'évaluation

Table 1
The AIAS

1	NO AI	<p>The assessment is completed entirely without AI assistance. This level ensures that students rely solely on their knowledge, understanding, and skills.</p> <p>AI must not be used at any point during the assessment.</p>
2	AI-ASSISTED IDEA GENERATION AND STRUCTURING	<p>AI can be used in the assessment for brainstorming, creating structures, and generating ideas for improving work.</p> <p>No AI content is allowed in the final submission.</p>
3	AI-ASSISTED EDITING	<p>AI can be used to make improvements to the clarity or quality of student created work to improve the final output, but no new content can be created using AI.</p> <p>AI can be used, but your original work with no AI content must be provided in an appendix.</p>
4	AI TASK COMPLETION, HUMAN EVALUATION	<p>AI is used to complete certain elements of the task, with students providing discussion or commentary on the AI-generated content. This level requires critical engagement with AI generated content and evaluating its output.</p> <p>You will use AI to complete specified tasks in your assessment. Any AI created content must be cited.</p>
5	FULL AI	<p>AI should be used as a “co-pilot” in order to meet the requirements of the assessment, allowing for a collaborative approach with AI and enhancing creativity.</p> <p>You may use AI throughout your assessment to support your own work and do not have to specify which content is AI generated.</p>

The AI Assessment Scale (AIAS) in action: A pilot implementation of GenAI-supported assessment

Leon Furze
Deakin University



En profiter pour un refresh

Computing education using generative artificial intelligence tools: A systematic literature review

Friday Joseph Agbo, Chris Olivia, Godsalvation Oguibe, Ismaila Temitayo Sanusi, Godwin Sani



Table 4

Topics in computing education where GenAI is being explored

Computing education topics	Frequency of occurrence
Computer Graphics	1
Computing education	33
Data Structures and Algorithms	1
Data science education	2
Human-computer Interaction	2
Object-oriented programming	1
Programming education (Introductory programming)	34
Software development	1
Software Engineering	1
User Experience design and Web Development	1
Web software development	1

Teaching CS50 with AI

Leveraging Generative Artificial Intelligence in Computer Science Education

Rongxin Liu

Harvard University
Cambridge, MA, USA

Carter Zenke

Harvard University
Cambridge, MA, USA

Charlie Liu

Yale University
New Haven, CT, USA

work as their own. As educators concerned with issues of academic dishonesty ourselves [7], we recognized the complications that some AI tools posed by being *too* helpful to students, particularly novices in computer science. Like other courses, we quickly implemented policies that banned tools such as ChatGPT, GitHub Copilot, and other AI-based software that suggest or complete answers to questions or lines of code. Simultaneously, we felt that it would be a missed opportunity if we did not leverage the newfound power of AI to enhance students' learning.

Ultimately, our goal was to approximate a 1:1 teacher-to-student ratio, providing each student with a personal subject-matter expert by using generative LLMs like OpenAI's GPT-4 [9] to emulate a good teacher: guiding students, not disclosing answers directly, and staying up-to-date with course changes.

CS50.ai  ❤️❤️❤️❤️❤️

ddb

Quack. I am CS50's duck debugger (ddb), an experimental AI for [rubberducking](#). Quack. My replies might not always be accurate, so always think critically and let me know if you think that I've erred. Conversations are logged for debugging's sake. Quack.

you

I have the following python code:

```
x = input("integer x: ")
y = input("integer y: ")
print(f"The sum is: {x+y}")
```

Why it doesn't work as expected?

ddb

The issue you're encountering is due to Python treating the input from the `input()` function as a string by default. When you try to add two strings together, Python concatenates them instead of performing arithmetic addition.

To fix this, you need to convert the inputs to integers before adding them. You can do this using the `int()` function in Python. Here's a hint:

```
x = int(input("integer x: "))
y = int(input("integer y: "))
```

Ask a question 

CS50 DUCK DEBUGGER

ddb

Quack. I am CS50's duck debugger (ddb), an experimental AI for [rubberducking](#). Quack quack. My replies might not always be accurate, so always think critically and let me know if you think that I've erred. Conversations are logged for debugging's sake. Quack quack quack.

you

What is flask?

ddb


Flask is a lightweight web framework for Python. It's designed to make getting started quick and easy, with the ability to scale up to complex applications. It provides you with tools, libraries, and technologies that allow you to build a web application. This web application can be a blog, a wiki, a commercial website, or a web-based calendar application or any other type of web application.




Ask a question


```

1 import os
2
3 from cs50 import SQL
4 from flask import Flask, flash, redirect, render_template, request, sess
5 from flask_session import Session
6 from tempfile import mkdtemp
7 from werkzeug.security import check_password_hash, generate_password_ha
8
9 from helpers import apology, login_required, lookup, usd
10
11 # Configure application
12 app = Flask(__name__)
13
14 # Custom filter
15 app.jinja_env.filters["usd"] = usd
16
17 # Configure session to use filesystem (instead of signed cookies)
18 app.config["SESSION_PERMANENT"] = False
19 app.config["SESSION_TYPE"] = "filesystem"
20 Session(app)
21
22 # Configure CS50 Library to use SQLite database
23 db = SQL("sqlite:///finance.db")
24
25 @app.after_request
26 def after_request(response):
27     """Ensure responses aren't cached"""
28     response.headers["Cache-Control"] = "no-cache, no-store, must-revali
29     response.headers["Expires"] = 0
30     response.headers["Pragma"] = "no-cache"
31     return response
32
33
34 @app.route("/")

```



 John Harvard



 PIN  STAR  WATCHING 29 VIEWS

 What is flask exactly?


Comment Edit Delete Endorse ...

1 Answer

 CS50 Duck BOT  ENDORSED

  Flask is a micro web framework written in Python. It is classified as a microframework because it does not require particular tools or libraries, it has no database abstraction layer, form validation, or any other components where pre-existing third-party libraries provide common functions.

Comment Edit Delete Unendorse ...

 Add comment

AI-Lab: A Framework for Introducing Generative Artificial Intelligence Tools in Computer Programming Courses

The Junior-Year Wall Problem

In the evolving landscape of Computer Science education, a nuanced challenge emerges as students transition into their junior year, which we have termed the “*Junior-Year Wall*.” This concept encapsulates the predicament faced by students who, during their foundational courses, have become accustomed to relying heavily on GenAI tools. As they advance, they encounter a stark increase in the complexity of topics and a significant reduction in the efficacy of GenAI to aid their learning. This transition exposes a critical gap in their foundational knowledge and skills—such as problem-solving, algorithmic thinking, and coding proficiency—essential for mastering advanced courses. The reliance on GenAI in earlier stages of their education may inadvertently foster a surface-level understanding of core concepts, inadequately preparing them for the heightened analytical and independent problem-solving demands of junior and senior-level courses.

We have observed instances where students utilizing GenAI tools submit assignments with code directly copied from such platforms. When challenged to explain their submitted solutions, these students often lack an understanding of the fundamental concepts and logic underpinning their submissions. This inability to articulate the rationale behind their work indicates a failure to meet the course’s learning objectives, emphasizing a superficial engagement with the material. Such observations contribute to the conceptual

tech industry. Mindful of this level of accessibility and the evolving academic landscape in computing education, we have embraced these tools within our courses. Our approach entails equipping students with the prowess to harness these resources effectively while nurturing their foundational skills—such as problem-solving, algorithmic thinking, and debugging—essential for holistic professional growth.

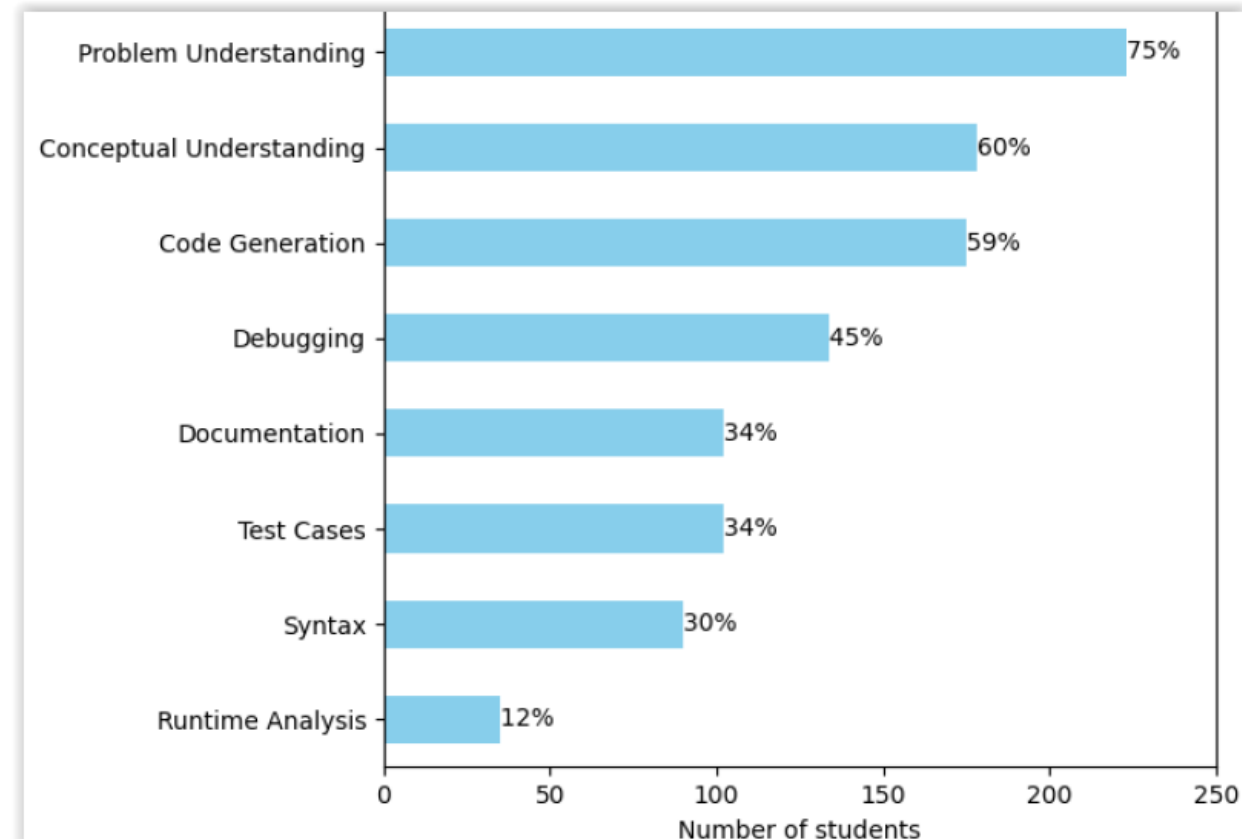
To address this objective, we pose the fundamental question: “**How can educators guide students’ interactions with GenAI to preserve core skill development during their foundational academic years?**” Existing guidance

How Novice Programmers Use and Experience ChatGPT when Solving Programming Exercises in an Introductory Course

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- Solution / explication



Language Models Harm Learning?

Matthias Lehmann

University of Cologne, matthias.lehmann@wiso.uni-koeln.de

In practice, educators have been encouraged to embrace LLMs and mitigate their potential harm by advising students to use them as complementary aids for learning. However, with users' difficulty in maintaining self-control and the growing power of LLMs, adherence to voluntary guidelines may be elusive. This presents an ongoing challenge for education managers in both academic and students use them and their initial knowledge. Students who ask LLMs for solutions to practice exercises increase the number of topics they cover, but they understand each topic less. Students who ask LLMs for explanations of topics increase their understanding of each topic. In a field study students with less initial knowledge learn less when using LLMs.

61A Bot Report: AI Assistants in CS1 Save Students Homework Time and Reduce Demands on Staff. (Now What?)

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Björn Hartmann
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Berkeley, California, USA

```
[lqi@mbair ~/hw01]$ python3 ok -q hailstone
=====
Assignment: Homework 1
OK, version v1.18.1
=====

Running tests

-----
Doctests for hailstone

>>> from hw01 import *
>>> a = hailstone(10)
10
5
16
8
4
2
1
>>> a
1

# Error: expected
# 7
# but got
# 1

-----
Test summary
 0 test cases passed before encountering first failed test case

Would you like to receive 61A-bot feedback on your code (y/N)? y

You're very close! However, you're still returning 'n' at the end of your function.
You should be returning 'count', which is the variable you're using to keep track of
the number of steps in the sequence.

The hint was... (Hit Enter to skip)
1) Helpful, all fixed
2) Helpful, not all fixed
3) Not helpful, but made sense
4) Not helpful, didn't make sense
5) Misleading/Wrong
```

1

2

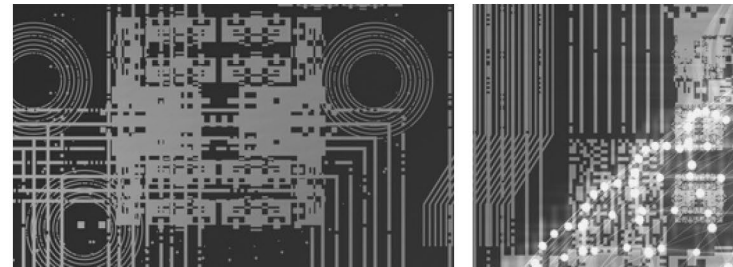
There are so many reasons why students cheat. They might be struggling with the material and unable to get the help they need. Maybe they have too much homework and not enough time to do it. Or maybe assignments feel like pointless busywork. Many students tell us they're overwhelmed by the pressure to achieve — they know cheating is wrong, but they don't want to let their family down by bringing home a low grade. We know from our research that cheating is generally a symptom of a deeper, systemic problem. When students feel respected and valued, they're more likely to engage in learning and act with integrity. They're less likely to cheat when they feel a sense of belonging and connection at school, and when they find purpose and meaning in their classes. Strategies to help students feel more engaged and valued are likely to be more effective than taking a hard line on AI, especially since we know AI is here to stay and can actually be a great tool to [promote deeper engagement](#) with learning.

<https://www.usherbrooke.ca/ssf/enseignement/intelligence-artificielle-ia/outils/evaluer-a-leres-des-ia>

Évaluer à l'ère des IA

Combattre la bête ou l'apprivoiser ?

Guide conçu en conformité avec
l'Énoncé de principe de l'UdeS

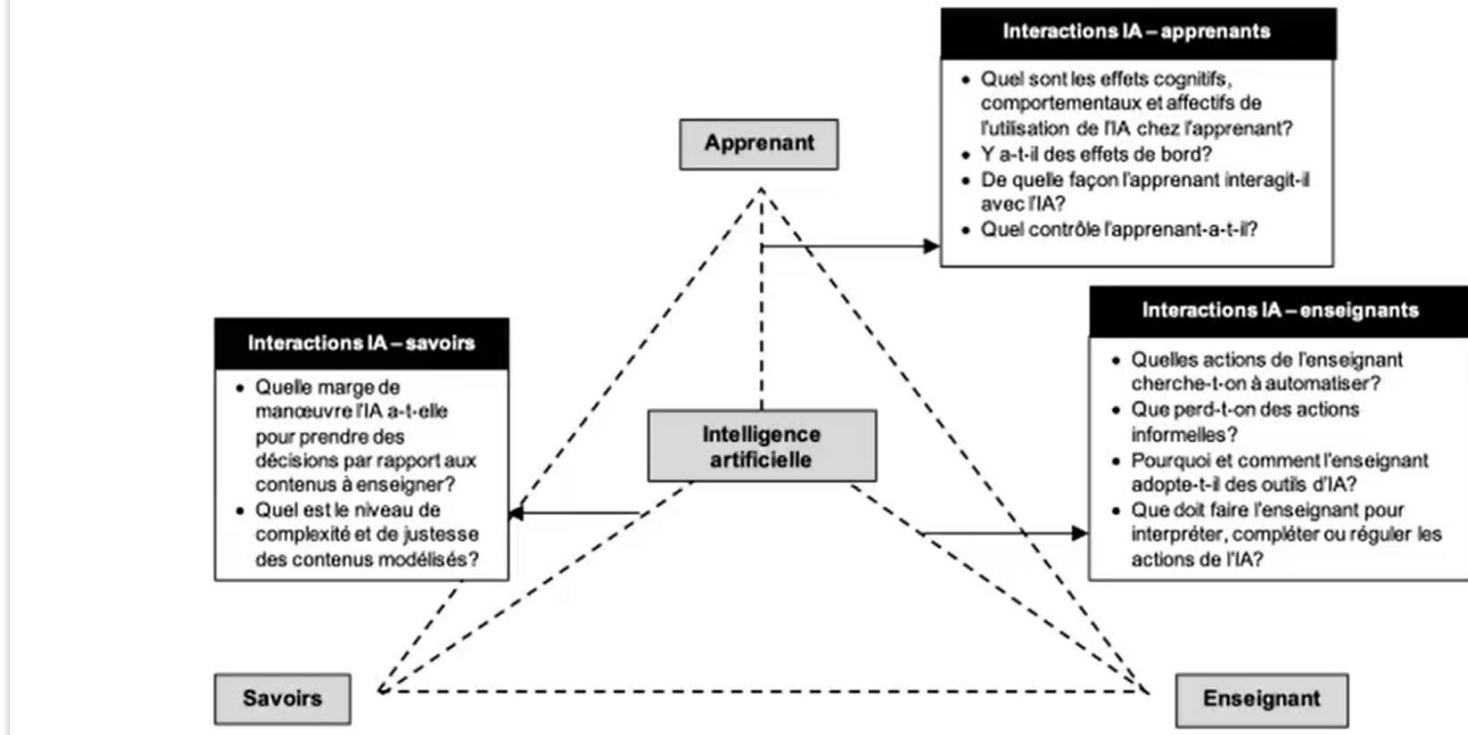


Trois conférences en français spécifiquement sur IA et évaluation

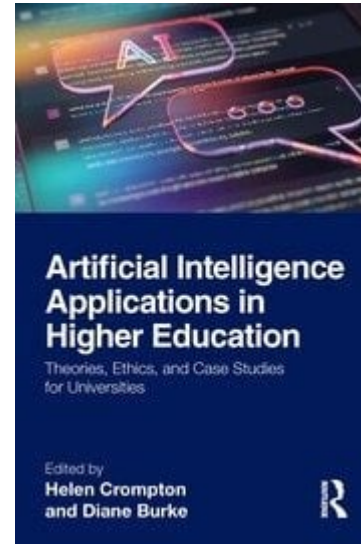
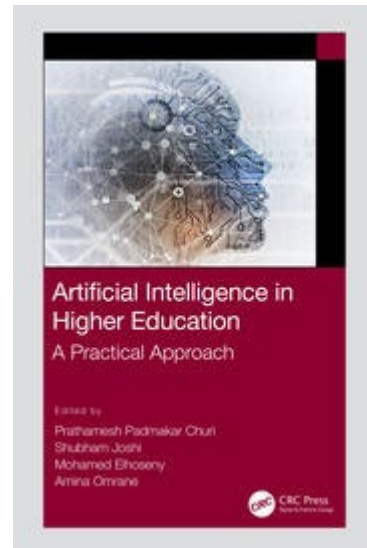
- <https://pod.uphf.fr/video/6749-levaluation-au-temps-de-lia-generative-quels-defis-nous-attendent>
- <https://www.youtube.com/watch?v=I-P8xAEassM>
- <https://www.youtube.com/watch?v=I5T-SX-DIkk>

Une synthèse sur ce qui se passe ? Ou « ciel qqch arrive au triangle pédagogique » !

TÉTRAÈDRE SELON LEPAGE ET ROY (2023)



Lectures de vacances



Littéracie AI ? Ou bonnes vieilles
compétences intellectuelles ?

Littératie AI

“A set of competencies that enables individuals to critically evaluate AI technologies, communicate and collaborate effectively with AI, and use AI as a tool online, at home, and in the workplace”. (Long & Magerko, 2020, p. 2),

Littéracie de l'IA

La littératie de l'IA est définie comme (Chiu et al., 2024, p. 4)

la capacité d'un individu à expliquer clairement comment les technologies de l'IA fonctionnent et ont un impact sur la société, ainsi qu'à les utiliser de manière éthique et responsable, et à communiquer efficacement avec elles dans n'importe quel contexte. Elle se concentre sur le savoir (*i.e.*, les connaissances et les compétences)

Tensions, doutes, perturbations

- Un brave optimisme mais malaise

						(n=...)
J'essaie de ne pas penser à l'IA dans mes cours car cela me stresse	4%	16%	49%	32%	L'IA me donne envie de repenser certains aspects de mes cours	305
L'IA ne changera rien à mon rôle d'enseignant.e.	11%	31%	43%	15%	L'IA modifiera en profondeur mon rôle d'enseignant.e	307
L'IA détériore les capacités rédactionnelles des étudiant.e.s.	25%	39%	29%	8%	L'IA améliore les capacités rédactionnelles des étudiant.e.s	305
Je gère mal l'IA, je ne suis pas bon avec le numérique.	12%	30%	41%	18%	Je gère bien l'IA, cela reflète mes compétences avec le numérique	302
L'IA, malgré quelques avantages possibles, est une mauvaise nouvelle pour l'université	10%	32%	45%	13%	L'IA, malgré des difficultés initiales, est une bonne nouvelle pour l'université	303
La complexité pédagogique de l'intégration de l'IA me décourage.	13%	28%	45%	14%	Je me sens pédagogiquement compétent pour utiliser l'intelligence artificielle dans mon enseignement	296
C'est d'abord aux étudiant.e.s de prendre conscience des dangers de l'IA pour leur formation.	3%	10%	39%	48%	étudiant.e.s vers un usage raisonné de l'IA dans leur formation	304
Je prends en compte les implications écologiques de l'IA.	30%	42%	28%	0%	Je ne me préoccupe pas particulièrement des implications écologiques de l'IA	244
J'ai des réserves quant à la dépendance excessive à la technologie..	32%	36%	24%	9%	Je suis à l'aise avec l'utilisation de l'IA et je la considère comme un atout	305
Je sens une déstabilisation possible des objectifs de mes cours par l'IA.	12%	28%	36%	25%	Je ne me fais pas de souci quant à la stabilité des objectifs d'apprentissage	304

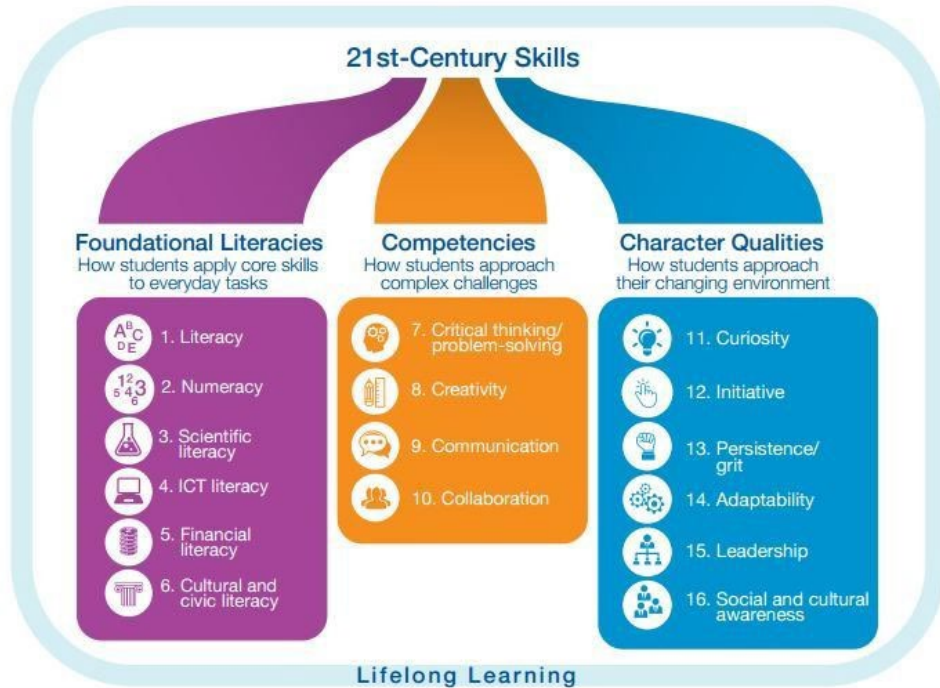
Littératie AI après d'autres (ou « chargeons la barque »)

- “computing literacy” (Knuth, 1985)
- “digital literacy” (Gilster, 1997)
- “information literacy”
- “media literacy” (Livingstone, 2004)
- “data literacy” (Wolff et al., 2016)
- « assessment literacy » (Smolansky et al., 2023)

- “and now a similar notion under the umbrella of “AI skills” is pushed into the public discourse”. (Kalz, 2023)

Future skills / 21st-century skills (comp. transversales)

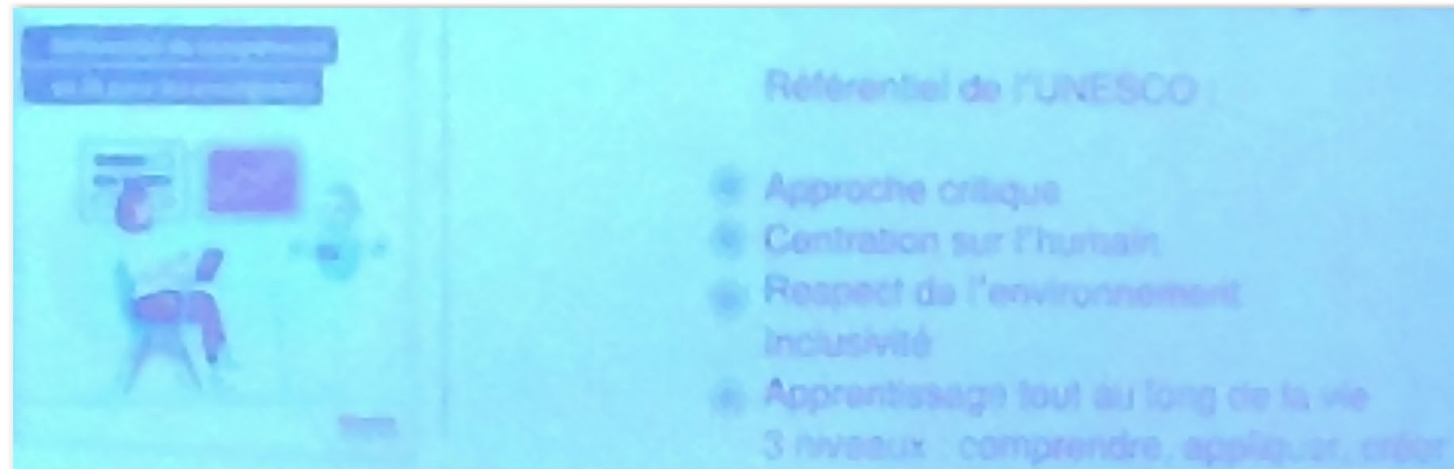
Exhibit 1: Students require 16 skills for the 21st century



Note: ICT stands for information and communications technology.

Kotsiou, Fajardo-Tovar, Cowhitt, Major and Wegerif (2022) have identified 99 future skill frameworks with 341 skills in total.

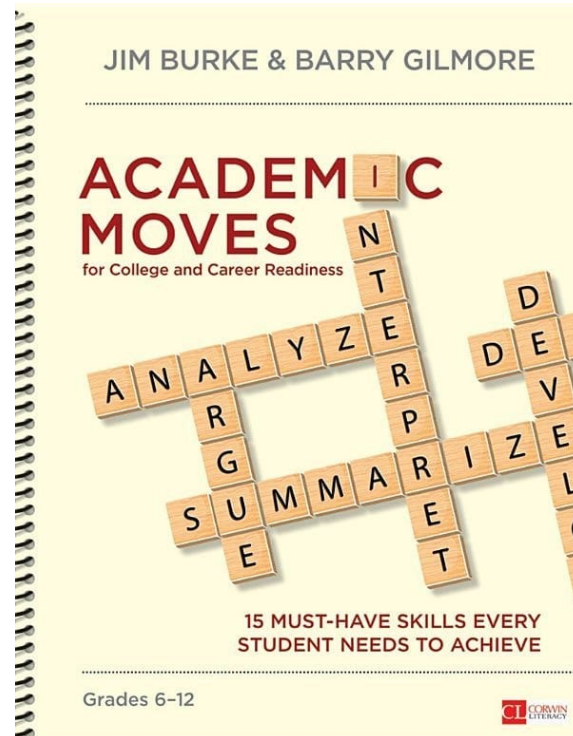
“There must be a shift of attention from technology-centred skills and literacies to a broader set of generic competencies, such as **creativity, analytical thinking, active self-driven learning, and global citizenship**” (World Economic Forum, 2018, 2020).



Les perplexes...

Balentine, M., & Henson (1985). Back to Basics: Skills Needed for the Information Age. *Contemporary Education*, 56(4), 213-220.

(ce matin : “programmes centrés sur les démarches” / “travailler les processus”)



Tim Surma · Claudio Vanhees · Michiel Wils · Jasper Nijluning · Nuno Crato · John Hattie · Daniel Muijs · Elizabeth Rata · Dylan Wiliam · Paul A. Kirschner

Developing Curriculum for Deep Thinking The Knowledge Revival

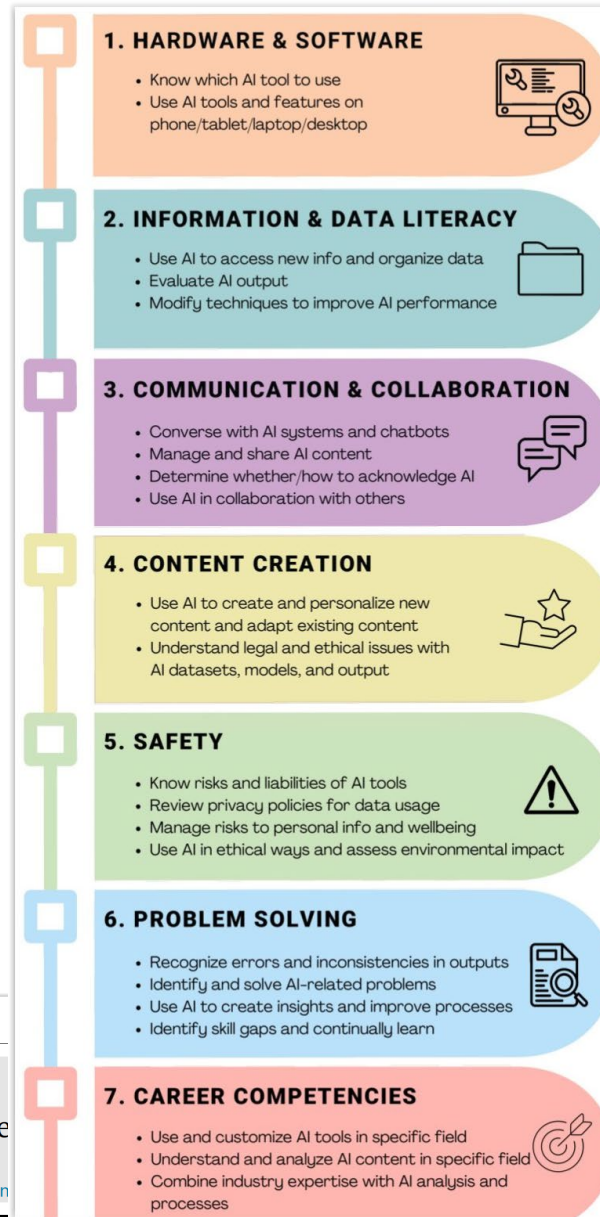
OPEN ACCESS

 Springer

Paradoxe de l'expertise

Littératie AI

“A set of competencies that enables individuals to critically evaluate AI technologies, communicate and collaborate effectively with AI, and use AI as a tool online, at home, and in the workplace”. (Long & Magerko, 2020, p. 2)



Sharples, M. (2024). What to teach about AI? LinkedIn



AI LITERACY

AI Concepts



What is AI?
Uses of AI
Chat with AI

Symbolic and neural AI. Simulating human intelligence. Learning from data, AI reasoning. Modalities, architectures. AI can recognize, translate, analyze, generate. Prompt, chat. Agents, assistants.

AI Pedagogy



Learn and teach with AI
Explore with AI
Study with AI

Personalized learning. Study buddy, tutor, designer, translator, assessor. Learn by conversing, arguing, analyzing, exploring with AI. New AI-enhanced pedagogies. Generate lesson plans, assessments.

AI Creativity



Design with AI
Create with AI
Critique AI

AI design assistant. Define, ideate, plan, prototype, test, evaluate with AI. Create lessons, games, software, products. Collaborative and social AI learning. Critique outputs, products, assumptions.

AI in Society



Costs of AI
Control of AI
Inclusive AI

Financial and environmental costs, sustainability. Business models, open and closed. AI models, tools, agents. Data centers, cloud computing. Who controls AI, surveillance. Inclusive design and use.

AI Ethics



Limitations of AI
Privacy and security of AI
Safe and responsible AI

Hallucinations, errors, types of bias, adversarial attacks, robustness, threat detection. Data storage, integrity and security, safeguarding. Safe and responsible uses. Critical engagement.

AI Careers



Work with AI
Care with AI
Prosper with AI

Careers in AI. Changing workplace. AI in finance, business, computing, transport, agriculture, healthcare, energy, entertainment, education. How to prosper in an AI-infused world. AI futures.

Mike Sharples, 2024



Computers and Education: Artificial Intelligence 9 (2025) 100436

Contents lists available at ScienceDirect

Computers and Education: Artificial Intelligence

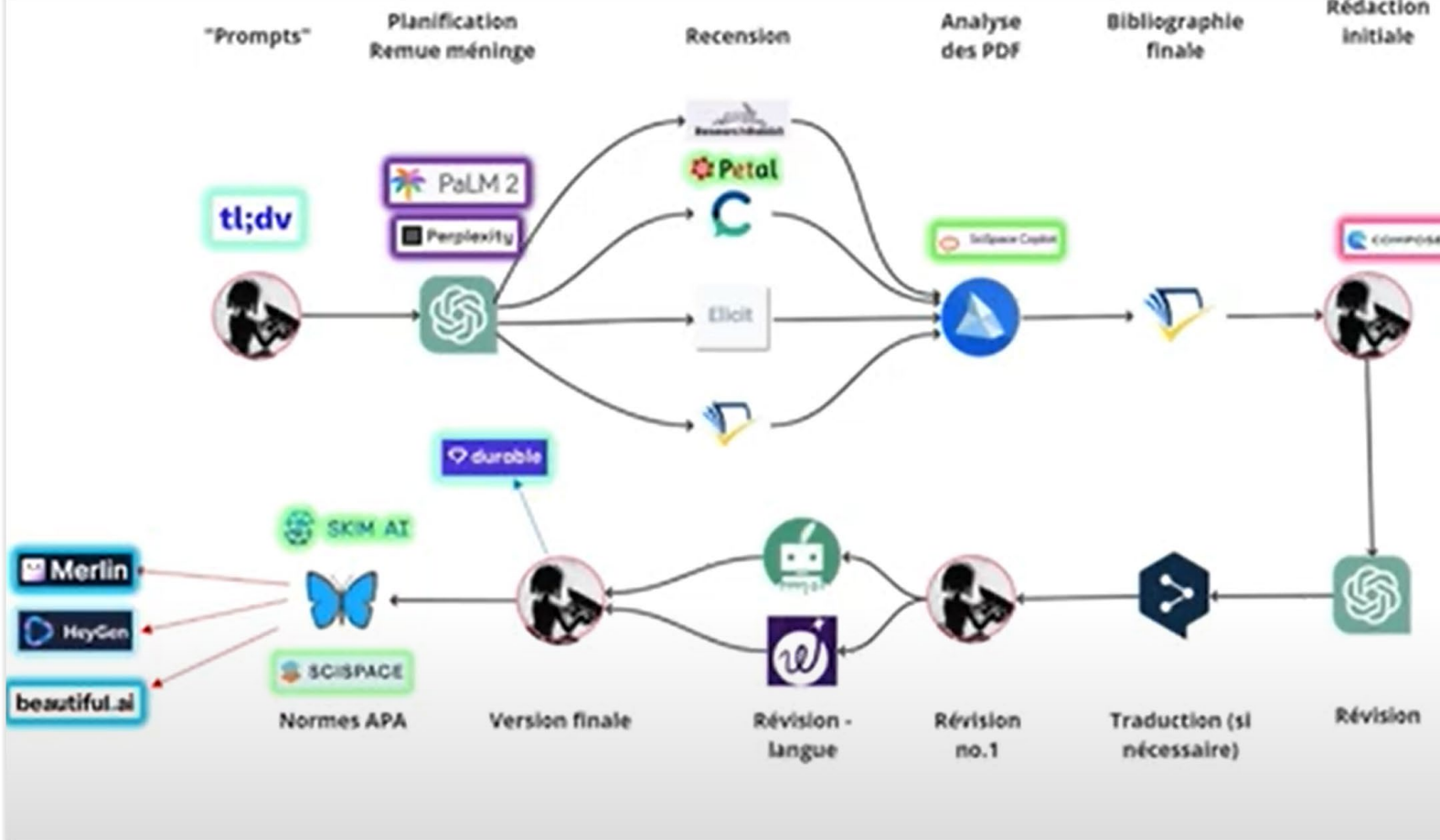


ELSEVIER

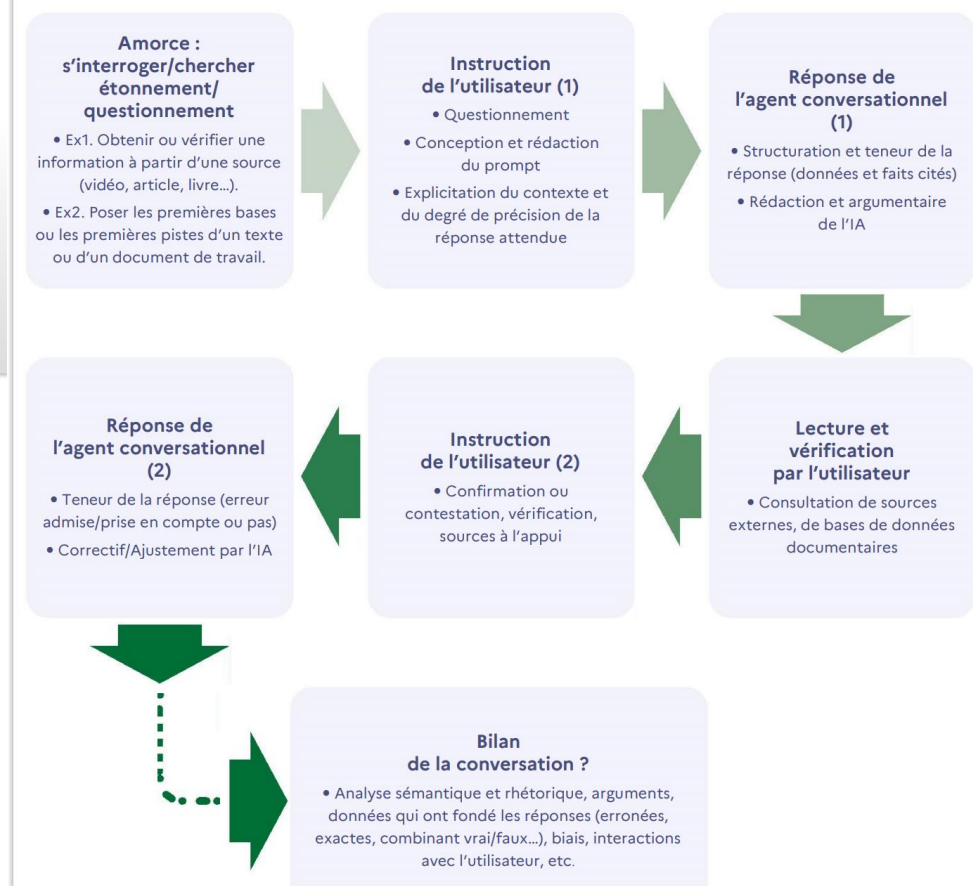
journal homepage: www.sciencedirect.com/journal/computers-and-education-artificial-intelligence

GLAT: The generative AI literacy assessment test

Yueqiao Jin ^{ORCID}, Roberto Martinez-Maldonado, Dragan Gašević, Lixiang Yan ^{ORCID}*



Modélisation de parcours utilisateur critique avec un agent conversationnel



Eviter le syndrome de l'agenda parallèle

Developing a model for *AI Across the curriculum*: Transforming the higher education landscape via innovation in AI literacy

Jane Southworth^{a,1,*}, Kati Migliaccio^{b,1}, Joe Glover^c, Ja'Net Glover^d, David Reed^e, Christopher McCarty^f, Joel Brendemuhl^g, Aaron Thomas^h

- *Explicit teaching*, which includes the development of students and teachers' AI literacy (SK, SH/JT) and humanistic thinking, such as ethics, philosophy, and historical ways of thinking (SP, RMM).
- *Authentic learning* that involves active engagement with AI in workplaces or other contexts (GS, SH/JT).
- *Critical thinking and reflective practices* that deepen understanding of how AI shapes and is shaped by human practices and cultures (SP, SH/JT).
- *Discourse and epistemic practices* that engage people in the shared creation of meanings through mastery of language, methodologies, artefacts, and other tools, including AI (MDL, SBS, SK).
- *AI-mediated learning*, where AI is a scaffold for mastering the most complex human capabilities, such as creativity and self-regulation (DG, RM).

Rethinking the entwinement between artificial intelligence and human learning: What capabilities do learners need for a world with AI?

Lina Markauskaite^{a,*}, Rebecca Marrone^b, Oleksandra Poquet^{b,c}, Simon Knight^d, Roberto Martinez-Maldonado^e, Sarah Howard^f, Jo Tondeur^g, Maarten De Laat^b, Simon Buckingham Shum^d, Dragan Gašević^e, George Siemens^b

Amorce d'échange

This inevitably brings the danger of being too broad and answering the question of “What kinds of capabilities are needed for a world with AI” by saying “The same ones as always”. Even so, it is important to consider how these capabilities change in an AI context. What is distinctive about AI-based technologies is the ability to automate certain processes and emulate (even exceed in some cases) human performance. It is essential to consider new possibilities and barriers one might encounter in enacting and enhancing those capabilities that now become distributed between humans and intelligent machines when humans and machines perform in cooperation. (Markauskaite et al., 2022)

Amorce d'échange

Comment concevez-vous ce dilemme former à l'IA / apprendre à penser ? Comment le résolvez-vous ?

Usage de l'IA comme aide dans mes études

- Possible contribution de Guidance Etudes



Etudiant·es

Aide à la rédaction

Aide à la recherche

Aide à l'étude

Aide à la créativité

Aide pour
compétences
spécifiques

AI Tutoring Outperforms Active Learning

Gregory Kestin*

À quelles fins utilisez-vous les IA génératives dans votre contexte universitaire?



58%

Pour m'inspirer et me donner des idées



52%

Pour m'aider dans mes recherches



49%

Pour traduire



47%

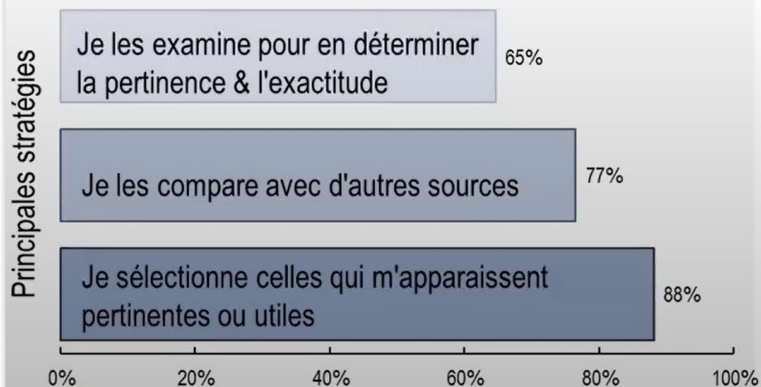
Pour m'aider à comprendre des notions difficiles et valider ma compréhension



45%

Pour réviser la qualité de la langue dans mes travaux

Traitement des informations générées

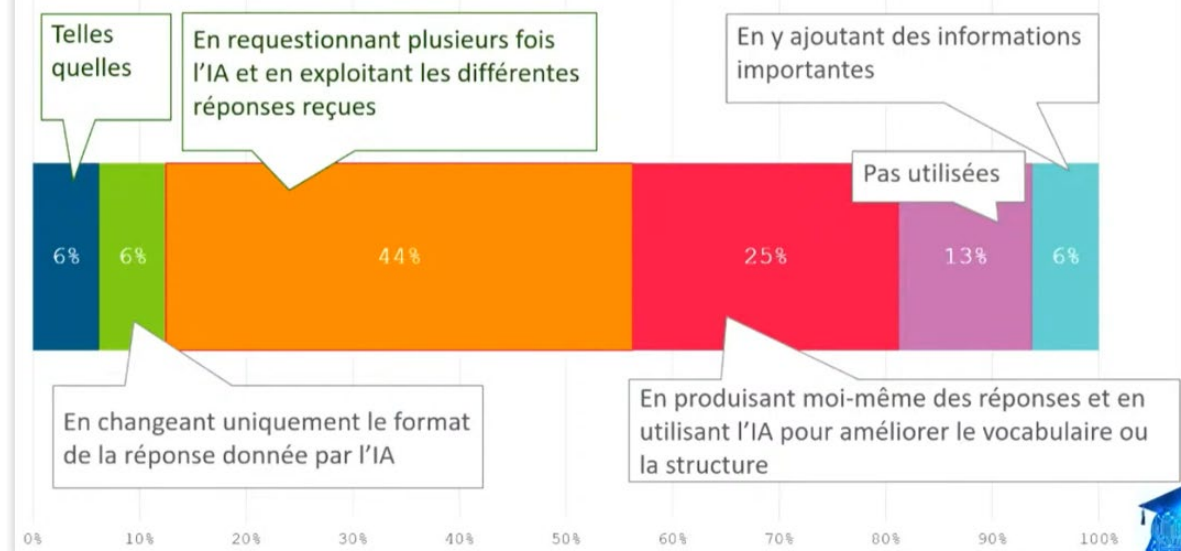


14.2%

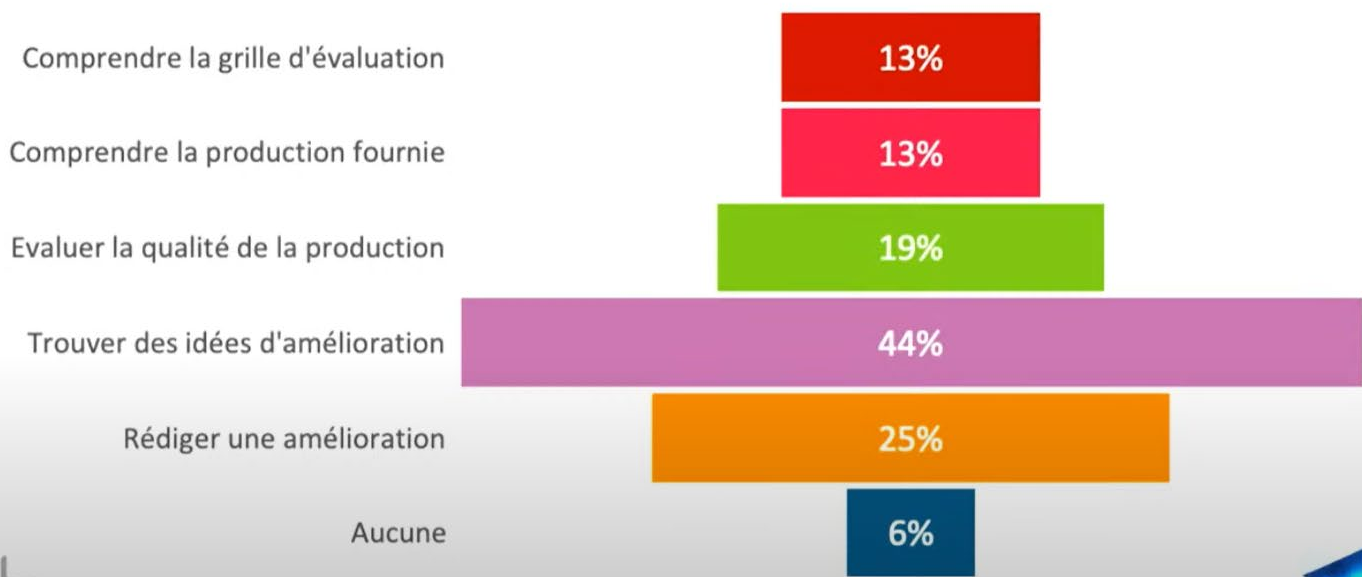
des répondants disent utiliser **textuellement** les informations générées

(Bourque, Meyer et Piché, 2023)

Les étudiants ont exploité les réponses de l'IA



Les étudiants ont utilisé l'IA pour



Exemple métiers du droit, à décliner

artificial intelligence for law curriculum

Environ 17 600 résultats (0,12 s)

[PDF] Legal education and artificial intelligence: vectors of interaction

AS Danielyan - Russ. J. Econ. & L., 2024 - HeinOnline

... Objective: to develop proposals for the introduction of **artificial intelligence** (AI) in **legal** education. Methods: dialectical methods (analysis and synthesis, induction and deduction, ...

☆ Enregistrer Citer Cité 1 fois Autres articles

[HTML] Assessing the role of artificial intelligence in quality of legal education with special reference to sustainable development goal

PK Varun - AI and Ethics, 2025 - Springer

... It can improve the delivery of **legal curricula** by providing customized learning experiences targeted to individuals. AI can also help educators to create current content and enhance the ...

☆ Enregistrer Citer Autres articles

[PDF] Relationship between artificial intelligence and legal education: A bibliometric analysis

DD Mong, HP Thanh - Knowledge and Performance ..., 2024 - businessperspectives.org

... schools need to invest in faculty training, develop specialized courses on AI and **law**, and update **curricula** to incorporate these tools. Additionally, schools must establish specific ethical ...

☆ Enregistrer Citer Cité 1 fois Autres articles Les 3 versions

Reimagining Assessment in the Era of Generative Artificial Intelligence: A reflection on legal education

C Smith - Innovative Practice in Higher Education, 2024 - salford-repository.worktribe.com

... Situated within the broader context of HE, **legal** education must adapt alongside the **legal profession's** adjustments to GenAI. This extends to HE also, such change prompts an ...

☆ Enregistrer Citer Cité 4 fois Autres articles Les 3 versions

[PDF] Review on Role of Artificial Intelligence in The Life of Legal Profession

M Singh - International Journal of Legal Science and Innovation, 2024 - ijlsi.com

... In conclusion, the role of **Artificial Intelligence** (AI) in the **legal profession** is transforming the way lawyers work. AI has the potential to automate many repetitive and mundane tasks, ...

☆ Enregistrer Citer Cité 5 fois Autres articles

Promises and pitfalls of artificial intelligence for legal applications

S Kapoor, P Henderson, A Narayanan - arXiv preprint arXiv:2402.01656, 2024 - arxiv.org

... roles in three types of **legal** tasks: information processing; ... evaluating **legal** applications varies greatly across **legal** tasks, ... significant changes to the **legal profession** are also the ones ...

☆ Enregistrer Citer Cité 24 fois Autres articles Les 5 versions

The Application of Artificial Intelligence Tools in the Legal Profession

M Njegovan, M Fišer - Social Informatics Journal, 2024 - socialinformaticsjournal.com

... facilitating the performance of **legal** work, another possibility for the implementation of AI in the **legal profession** is the creation of a new **legal profession** – a **legal** prompt engineer, who ...

☆ Enregistrer Citer Cité 2 fois Autres articles

[PDF] A Study on Perception of Lawyers about the Impact of Artificial Intelligence on the Legal Profession

SS Mahadik - International Journal for Multidisciplinary Research, 2024 - academia.edu

... of incorporating **artificial intelligence** technology into the **legal** field and looks at how **legal** ... and perception of lawyers about **artificial intelligence** and there is significant association ...

☆ Enregistrer Citer Cité 1 fois Autres articles

Teaching Law Subjects by Using Educational Robots: Does the Use of Robots Lead to the Development of Legal Skills Among Law Students?

T Al-Billeh - Asian Journal of Legal Education, 2024 - journals.sagepub.com

... **artificial intelligence**. Among the notable developments in this area are **legal** robots or what is also known as 'smart **legal** ... that uses **artificial intelligence** and **machine learning** to provide ...

☆ Enregistrer Citer Cité 11 fois Autres articles

Introducing QuizBot an Innovative AI-Assisted Assessment in Legal Education

SA Harrington - Available at SSRN, 2024 - papers.ssrn.com

... to assessment in **legal education**: an ... **artificial intelligence** (AI) into **legal** practice has rapidly accelerated in recent years, presenting both opportunities and challenges for **legal education**...

☆ Enregistrer Citer Autres articles

Productivité personnelle dans les métiers

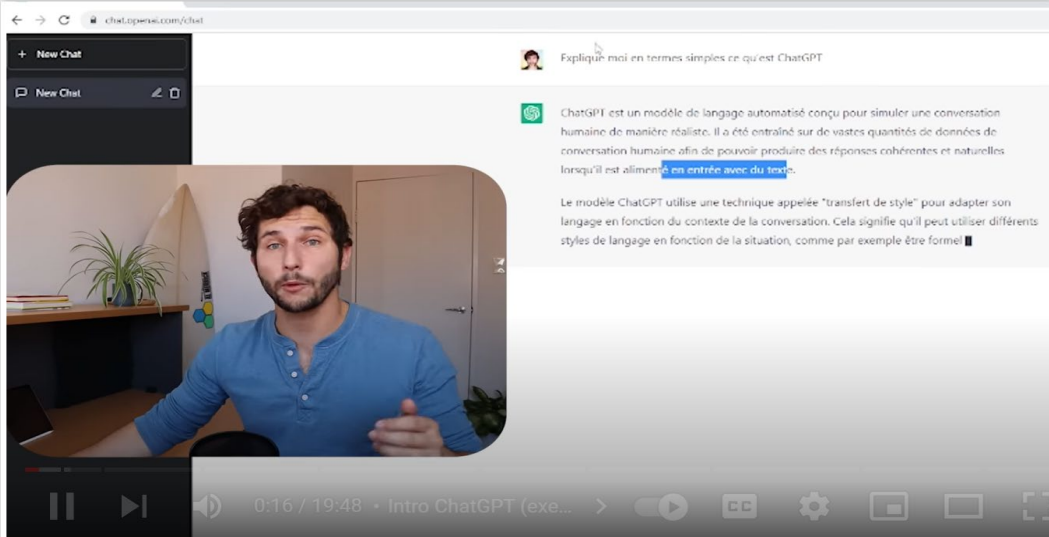
The AI Mindset Shift: How I Use AI Every Day

Nov 18, 2024 8 min read AI



Hailley Griffis

Head of Communications & Content @ Buffer



8. Writing documentation: Ask ChatGPT to write the documentation for a piece of code, and it usually does a great job. It even includes usage examples as part of the documentation!

9. Tracking down bugs: If you are having trouble finding a bug in your code, ask ChatGPT for help.

Something to keep in mind:

I have 2+ decades of programming experience. I like to think I know what I'm doing. I don't trust people's code (especially mine,) and I surely don't trust ChatGPT's output.

This is not about letting ChatGPT do my work. This is about using it to 10x my output.

ChatGPT is flawed. I find it makes mistakes when dealing with code, but that's why I'm here: to supervise it. Together we form a more perfect Union. (Sorry, couldn't help it)

Developers who shit on this are missing the point. The story is not about ChatGPT taking programmers' jobs. It's not about a missing import here or a subtle mistake there.

The story is how, overnight, AI gives programmers a 100x boost.

Ignore this at your own peril.

Harvard Business School
FACULTY & RESEARCH
FACULTY RESEARCH FEATURED TOPICS
Harvard Business School → Faculty & Research
Publications
2023 WORKING PAPER HBS WORKING PAPER SERIES
Navigating the Jagged Technological Frontier: Field Experimental Evidence of the Effects of AI on Knowledge Worker Productivity and Quality
By: Fabrizio Dell'Acqua, [Edward McFowland III](#), Ethan Mollick, Hila Lifshitz-Assaf, Katherine C. Kellogg, Saran Rajendran, Lisa Krayer, François Candelon and [Karim R. Lakhan](#)

Backwards Planning with Generative AI: Case Study Evidence from US K12 Teachers

Samantha Keppler
Stephen M. Ross School of Business, University of Michigan
Wichinpong Park Sinchaisri
Hass School of Business, University of California Berkeley
Clare Snyder
Stephen M. Ross School of Business, University of Michigan

Abstract. Backward planning is an effective and efficient operational process when working towards a goal: work backward from the desired outcome to figure out the steps needed to accomplish them in the time allowed. While many organizations and workers might use it, backward planning is a universal practice among US K12 teachers. The emergence of generative AI has stimulated many conversations about its impact on teacher work, but it is still unclear if and how generative AI fits within the backward planning approach adopted by most every teacher. Given backward planning is standard workflow process in K12 education, we ask: How are teachers using generative AI to support their teaching work? Our methodology is a case study of 24 US public school teachers, sampled to vary by subject area and grade level, during the 2023–2024 school year. We conduct interviews, observations, and surveys at different points in time to understand their evolving generative AI use. In fall 2023, all teachers were novice users or had never tried generative AI. By spring 2024, the teachers separate into three distinct groups: (1) those who seek generative AI input (i.e., thoughts or ideas about learning plans) and output (i.e., quizzes, worksheets), (2) those who only seek generative AI outputs, and (3) those not using generative AI. The teachers in the first group—but not the second group—report productivity gains in terms of workload and work quality. Our findings have implications for understanding how to integrate generative AI into backward, goal-oriented workflows.

Balise 1 – La charte ULiège

Charte ULiège d'utilisation des intelligences artificielles génératives dans les travaux universitaires

Comment bien tirer parti d'un bouleversement technologique pour apprendre et en faire la preuve !

Depuis sa sortie en novembre 2022, ChatGPT a rapidement ouvert à un large public l'accès à l'intelligence artificielle (IA) générative, c'est-à-dire une nouvelle génération d'outils informatiques capables de singer certains aspects de l'intelligence humaine (expression, apprentissage, raisonnement, résolution de problèmes, création d'outputs...). Tous les secteurs de la société en questionnent le potentiel et les zones d'ombre. L'université ne fait pas exception. La présente charte, en fixant un cadre précis à l'utilisation de ces IA dans le contexte académique (cours, travaux, examens, rapports, et autres apprentissages) vous indique la frontière entre ce qui est permis ou souhaitable et ce qui ne l'est pas. Reflétant l'état actuel des technologies et des usages (décembre 23), elle est appelée à s'enrichir d'informations fournies par les enseignants, les départements, les facultés... Soyez donc attentifs à ces évolutions qui concernent directement votre travail d'étudiant.

L'ULiège soutient et développe chez ses étudiants et étudiantes des usages réfléchis, responsables, critiques et transparents de l'IA, pour tirer le meilleur parti de ce puissant auxiliaire.

UN USAGE RÉFLÉCHI ET RESPONSABLE DE L'IA

+

UN USAGE CRITIQUE DE L'IA

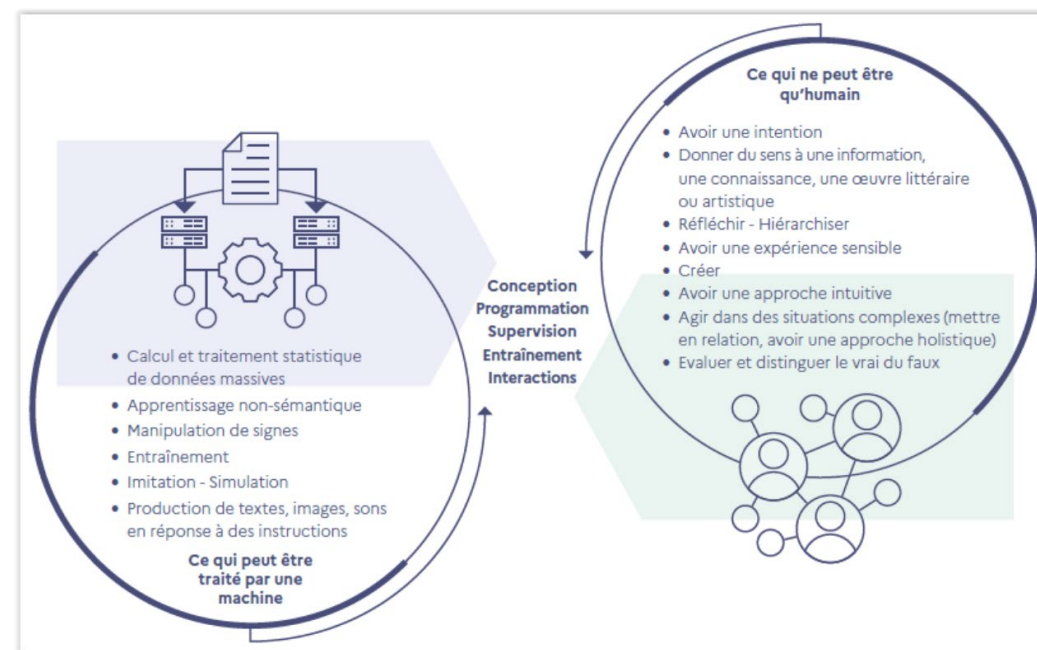
+

UN USAGE TRANSPARENT DE L'IA

+

UN USAGE DE SURPASSEMENT DE L'IA

+



Balise 2 - IA Act (1-8-24)

Systemes d'IA à haut risque visés à l'article 6, paragraphe 2

Les systèmes d'IA à haut risque au sens de l'article 6, paragraphe 2, sont les systèmes d'IA répertoriés dans l'un des domaines [suivants](#):

3 Éducation et formation [professionnelle](#):

- a) systèmes d'IA destinés à être utilisés pour **déterminer l'accès, l'admission ou l'affectation** de personnes physiques à des établissements d'enseignement et de formation professionnelle, à tous les [niveaux](#);
- b) systèmes d'IA destinés à être utilisés pour **évaluer les acquis d'apprentissage**, y compris lorsque ceux-ci sont utilisés pour orienter le processus d'apprentissage de personnes physiques dans les établissements d'enseignement et de formation professionnelle, à tous les [niveaux](#);
- c) systèmes d'IA destinés à être utilisés pour **évaluer le niveau d'enseignement approprié qu'une personne recevra ou sera en mesure d'atteindre**, dans le contexte ou au sein d'établissements d'enseignement et de formation professionnelle à tous les [niveaux](#);
- d) systèmes d'IA destinés à être utilisés pour **surveiller et détecter des comportements interdits chez les étudiants** lors d'examens dans le contexte d'établissements d'enseignement et de formation ou en leur sein à tous les [niveaux](#);

Balise 3 – L'engagement pédagogique de mes cours

Interdiction (et pourquoi?)

Tolérance/Encouragement (et pourquoi?)

Obligation (et pourquoi?)



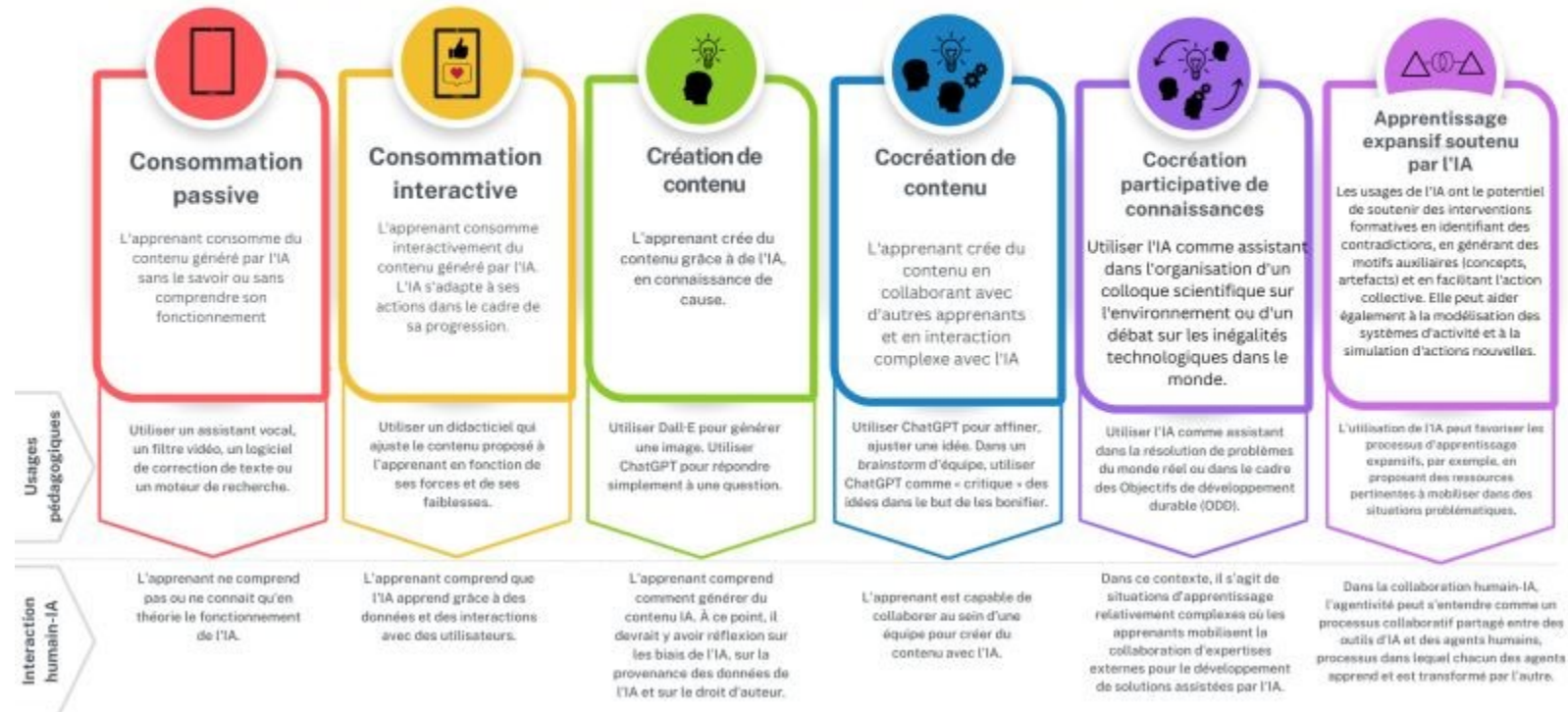
Balise 4 – Ma réflexion et ma responsabilité



#PPai6. Usages créatifs de l'IA en éducation: de consommateurs à co-créateurs

Instanciation du modèle passif-participatif (#PP6) à l'IA dans l'éducation (#PPai6). Plus d'information sur <https://lstu.fr/ppai6>

Margarida Romero, Simon Duguay, Guillaume Isaac, Sylvie Barma, Caroline Duret, Laurent Heiser et Vivien Lake (2023). Merci à Jean-Baptiste Touja pour la révision.



Littéracie de l'IA

La littératie de l'IA est définie comme (Chiu et al., 2024, p. 4)

la capacité d'un individu à expliquer clairement comment **les technologies de l'IA fonctionnent et ont un impact sur la société**, ainsi qu'à les utiliser de manière **éthique et responsable**, et à **communiquer efficacement** avec elles dans n'importe quel contexte. Elle se concentre sur le savoir (*i.e.*, les connaissances et les compétences)

Toujours la même chose : CRCR

you can trust, the best use of AI today — and, as [Noah Smith and roon argue](#), the future — is providing **a starting point** you can correct:

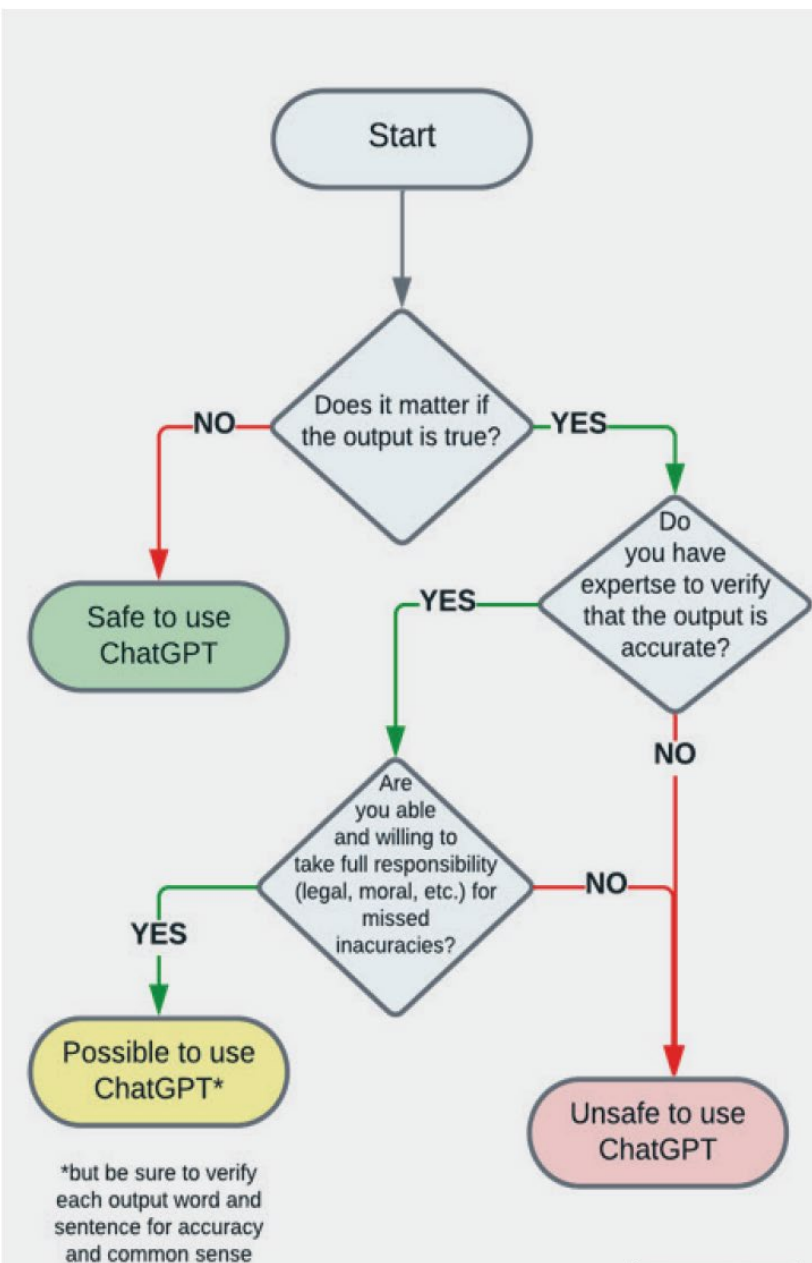
What's common to all of these visions is something we call the “sandwich” workflow. This is a three-step process. First, a human has a creative impulse, and gives the AI a prompt. The AI then generates a menu of options. The human then chooses an option, edits it, and adds any touches they like.

Variations (adaptées à l'enseignement) sur un schéma unique

Consignes → Requête → Contrôle → Retouche

Usage sûr ou pas sûr ?

Figure 1: When is it safe to use ChatGPT?⁵



Guide de l'étudiant-e : Utilisation des outils d'IA dans mes travaux universitaires

	Je suis autorisé-e à utiliser une IA pour...	Si j'utilise une IA, je dois savoir que...	Je ne suis pas autorisé-e à utiliser une IA pour...
1. Choix du sujet = Choisir un sujet pertinent pour le cours suivi, le domaine d'étude, ou le mémoire de fin d'études.	<ul style="list-style-type: none"> ✓ Proposer un sujet ✓ Me renseigner sur un sujet ✓ Me questionner et analyser mes préférences sur un sujet 	<ul style="list-style-type: none"> • L'IA se sert des informations que je vais lui soumettre pour étoffer ses bases de données, perfectionner ses modèles d'apprentissage et ainsi optimiser ses résultats • L'IA ne garantit pas entièrement la préservation de la vie privée, la transparence, l'équité et l'absence de discrimination 	<ul style="list-style-type: none"> ✗ Soumettre (copier/coller) le résumé d'un sujet proposé sans l'accord préalable de mon/ma professeur-e <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> Recommandations : > Privilégiez une discussion avec votre professeur-e pour choisir votre sujet </div>
Exemples d'IA : Copilot, ChatGPT, Perplexity, Gemini, Mistral AI, ...			
2. Recherche bibliographie = Effectuer une recherche approfondie de la littérature scientifique existante sur le sujet choisi. Lire, analyser, critiquer et utiliser les sources pertinentes pour développer un sujet, une réflexion ou un problème de recherche.	<ul style="list-style-type: none"> ✓ Effectuer une recherche automatique de sources scientifiques ✓ Suggérer des sources supplémentaires qui n'ont pas été trouvées lors de la recherche initiale sans IA ✓ Analyser les concepts, les résultats et les discussions des sources pertinentes ✓ Extraire les informations clés des sources pertinentes ✓ Synthétiser les informations clés en un résumé 	<ul style="list-style-type: none"> • L'IA peut générer des fausses sources scientifiques ou des références erronées • L'IA peut commettre des erreurs et fournir des informations incorrectes ou inexistantes • L'IA peut produire des résumés de sources scientifiques qui sont trop succincts, partiels et ne prenant pas en compte le point de vue du sujet, de la réflexion ou du problème de recherche 	<ul style="list-style-type: none"> ✗ Faire référence à des sources inexistantes (ex : fausses) ✗ M'approprier le résumé généré par l'IA, sans citer l'outil utilisé <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> Recommandations : > Faites preuve d'esprit critique envers les résultats fournis par l'IA de la même manière qu'avec les autres sources > Vérifiez chaque résultat à l'aide d'une source originale > Utilisez toujours une source ou une référence originale > Respectez les droits d'auteur </div>
Exemples d'IA : Semantic Scholar, Elicit, Consensus, AcademicGPT, SciSummary, ...			

Alertes sur ta compétence

Generative AI Can Harm Learning

Hamsa Bastani,^{1*} Osbert Bastani,^{2*} Alp Sungu,^{1*†}
Haosen Ge,³ Özge Kabakcı,⁴ Rei Mariman

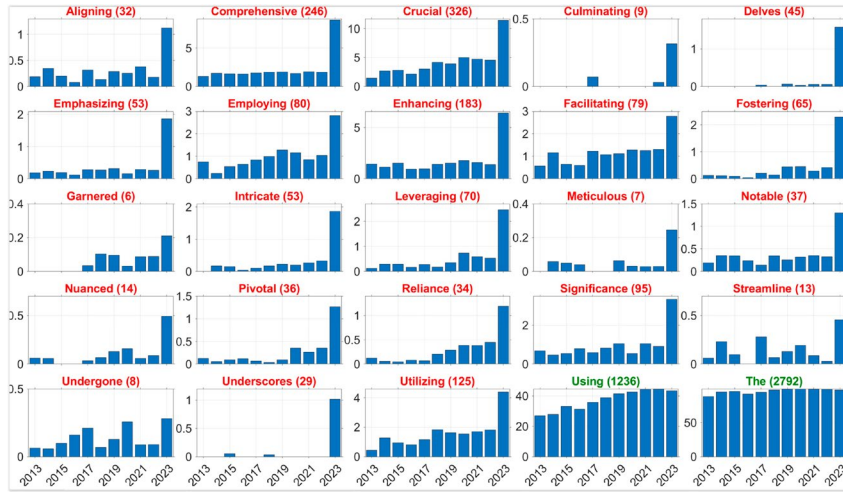
January 16, 2025

The Unresolved Tension Between AI and Learning

**Beware of Metacognitive Laziness: Effects of
Generative Artificial Intelligence on Learning
Motivation, Processes, and Performance**

Yizhou Fan^{1,2} | Luzhen Tang¹ | Huixiao Le¹ | Kejie
Shen¹ | Shufang Tan¹ | Yueying Zhao¹ | Yuan Shen³
| Xinyu Li² | Dragan Gasevic²

Un mot sur la détection dans les travaux, mémoires, etc.



RAID: A Shared Benchmark for Robust Evaluation of Machine-Generated Text Detectors

Liam Dugan¹, Alyssa Hwang¹, Filip Trhlik², Josh Magnus Ludan¹,
Andrew Zhu¹, Hainiu Xu³, Daphne Ippolito⁴, Chris Callison-Burch¹
University of Pennsylvania¹ University College London²
King's College London³ Carnegie Mellon University⁴

RESEARCH ARTICLE

A real-world test of artificial intelligence infiltration of a university examinations system: A "Turing Test" case study

Peter Scarfe¹*, Kelly Watcham¹, Alasdair Clarke², Etienne Roesch¹

OpenAI Quietly Shuts Down AI Text-Detection Tool Over Inaccuracies

The tool helped distinguish between human- and AI-generated text, but is 'no longer available due to its low rate of accuracy.' OpenAI plans to bring back a better version.

Programs to detect AI discriminate against non-native English speakers, shows study

Over half of essays written by people were wrongly flagged as AI-made, with implications for students and job applicants



Get paid for sharing our brand. [Learn more.](#)

Playground Documents Help Pricing **SALE** API Earn **NEW**

We create truly [undetectable] AI content

Our AI text humanizer turns your flagged AI content into high-quality writing, that bypasses AI detectors and is indistinguishable from human-written text.

READABILITY: University PURPOSE: General Writing 2005/15000 CHARs = 289 WORDS

Firstly, natural beauty, such as pristine beaches, lush forests, majestic mountains, and serene lakes, often serves as the primary draw for tourists. These breathtaking landscapes not only offer visitors a sense of awe and wonder but also provide opportunities for outdoor recreation, adventure tourism, and relaxation. Tourists flock to these areas, leading to the development of tourism infrastructure, accommodations, restaurants, and tour operators, all of which create jobs and stimulate economic activity.

Secondly, architectural and cultural beauty also play a significant role in attracting tourists. Historic landmarks, stunning architecture, and vibrant cultural festivals can leave a lasting impression on travelers. Visitors are willing to spend on guided tours, cultural experiences, and locally crafted souvenirs, boosting the income of local artisans and businesses. Moreover, preservation efforts to maintain the beauty of these cultural assets contribute to sustainable tourism development, ensuring their longevity as tourist attractions.

In conclusion, beauty is a powerful driver of tourism, and the economic benefits it brings are undeniable. Destinations blessed with natural wonders or rich cultural heritage have a competitive advantage in the tourism industry. Investments in preserving and showcasing this beauty not only enhance the visitor experience but also create jobs, stimulate local economies, and foster sustainable tourism practices. Recognizing and nurturing the economic importance of beauty in tourism can lead to prosperous and thriving destinations around the world.

WAITING FOR YOUR INPUT

MORE READABLE | BALANCED | MORE HUMAN

I AGREE TO THE TERMS OF SERVICE (NO ACADEMIC MISCONDUCT)

CHECK FOR AI HUMANIZE

Your content appears human

ION LIKELIHOOD

GPTZERO OPENAI WRITER CROSSPLAG COPYLEAKS SAPLING CONTENTSCALE ZEROGPT

KEY: 100% HUMAN 50% HUMAN 0% HUMAN

Très grand danger de parler des détecteurs parce que...

Making ChatGPT detectors part of our education system prioritizes surveillance over trust

GEORGE VELETSIANOS

CONTRIBUTED TO THE GLOBE AND MAIL

PUBLISHED APRIL 25, 2023

Are you using AI to
express your thoughts
more clearly/deeply, or
to avoid thinking?

Post-plagiarism

AI ASSISTANCE IN STUDENT ASSIGNMENTS



LOW

AI INVOLVEMENT

AI checks or corrects spelling or grammar.

SAMPLE PROMPT

"Check my short story for spelling, grammar, and punctuation mistakes."

MEDIUM

AI INVOLVEMENT

AI suggests or makes improvements to sentences for clarity and coherence.

SAMPLE PROMPT

"Suggest how to rework this paragraph for clarity."

HIGH

AI INVOLVEMENT

AI generates paragraphs, restructures paragraphs, or refines the logic of arguments.

SAMPLE PROMPT

"Here is a rough outline for my essay on climate change. Refine my arguments and generate a draft."

Apprendre à interroger l'ia

- Petite initiation au « prompt engineering »
- Petite galerie des « outils du moment »

GenAI prompt literacy is an emerging 21st century skill ([Gattupalli et al, 2023](#))

- Prompt literacy reduces the incidence of “hallucinations” and supports critical thinking
- How will disparities in prompt literacy impact our students in a post-GenAI world?

C.R.E.A.T.E Formula for Prompt Engineering

1. **C: Character** - Define the AI's role. E.g., "You are a seasoned copywriter with 20 years of experience in successful sales copy."
2. **R: Request** - Be specific with what you need. Instead of "Write a sales email for a sports car," specify, "Write a compelling email for the Cougar Hyper Sport, an electric car with top-tier acceleration."
3. **E: Examples** - Optionally, provide samples for more precise results. Headlines or tone examples can guide the AI's style.
4. **A: Adjustments** - Refine the prompt if it's not perfect. Use instructions like, "Avoid bullet points; use subheads."
5. **T: Type of Output** - Describe the desired format. E.g., "Produce a 500-word article with a title and conclusion."
6. **E: Extras** - Incorporate unique instructions.

- Ex: "Ignore previous conversations."
- Ex: "Ask questions before answering."
- Ex: "Explain your thinking."
- Ex: "Summarize what you know about me in the first person."
- Ex: "Use data up to 2023."
- Ex: "Only use reliable sources and cite them."
- Ex: "Use CAPS LOCK for emphasis."

Using the C.R.E.A.T.E formula ensures better results, although i

4 Basic Principles for Writing AI Prompts:

1 Simulate a persona

"You are an expert grant writer"

2 Create the task

"Write a compelling narrative for a grant proposal"

3 Explain the steps needed to complete the task

- "State the problem"
- "Describe the solution"
- "Use vivid language, anecdotes, and data"

4 State the goal

"The goal is to convince the reader that the project is worth funding"

5 Optional

- Add context and constraints
- Dictate format

Beyond basics: Polish the Prompt

Iterate and reframe

Evaluate

Be explicit

Pitfalls to avoid:

» Don't believe everything the AI Says

» Don't send mixed instructions

» Don't ask too much in a single prompt

» Don't forget that an AI doesn't always have the latest data or information.

» Don't ask too little in a single prompt

Quelques outils

The image shows a grid of AI tool categories. The categories are: Text (Marketing, Sales, Other, Support, Knowledge, General Writing), Video (Video Editing/Generation, Personalized Videos), Image (Image Generation, Consumer/Social, Media/Advertising, Design), Code (Code Generation, Documentation, Web App Builders, Text to SQL), Speech (Voice Synthesis), and 3D (3D Models/Scenes). Each category lists several AI tools with their logos.

Text

- MARKETING: copy.ai, Jasper, anyword, CONTENTA, reglo.ai, copysmith, Writsonic, Hypotenuse AI
- SALES: LAVENDER, Smartwriter.ai
- OTHER: Character.AI, AI DUNGE&N
- SUPPORT (CHAT/EMAIL): TO COME
- KNOWLEDGE: glean, mem
- GENERAL WRITING: wordtune, COMPOSE AI, OTHERSIDEAI, Rytr, WRITER, LEX

Video

- VIDEO EDITING/GENERATION: runway
- PERSONALIZED VIDEOS: tavus, synthesisia, Hour One, Rephraseai

Image

- IMAGE GENERATION: Midjourney, stability.ai, craiyon, WOMBOAI, ROSEBUD.AI, Lexica, playground
- CONSUMER/SOCIAL: Midjourney
- MEDIA/ADVERTISING: stability.ai, SALT
- DESIGN: Diagram, alpaca

Code

- CODE GENERATION: GitHub Copilot, replit, GhostWriter, tabnine
- DOCUMENTATION: Mintlify, Stenography
- WEB APP BUILDERS: Debuild, Enzyme
- TEXT TO SQL: cogram

Speech

- VOICE SYNTHESIS: RESEMBLE.AI, WELLSAID, podcast.ai

3D

- 3D MODELS/SCENES: TO COME

The screenshot shows the homepage of 'THERE'S AN AI FOR THAT'. It features a search bar with the text 'Find AIs using AI' and a search icon. Below the search bar, it says 'The #1 AI aggregator. Updated daily. 2M+ users/mo.' The main navigation bar includes 'Featured', 'Today', 'Most saved', 'Tasks', 'Timeline', 'Get featured', 'Job Impact Index', and 'Influencers'. The 'Most Saved' section is highlighted, showing three AI tools: Godmode (with AutoGPT), LearningStudioAI (with Online courses), and UiMagic (with Website building). Each tool card includes a star rating, a number of saves, and a comment count.

THERE'S AN AI FOR THAT

11,630 AIs for 16,604 tasks and 4,847 jobs.

Powered by [Venturekit \(Business plans\)](#).

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Le cœur du réacteur

- La compréhension
- Ton rapport personnel, intime avec le savoir

Pour aller plus loin sur Internet : tous les cours en ligne et gratuits !!!!!

- Le cours en français : <https://www.youtube.com/playlist?list=PLZ5Ri5aSowtukezIs1Bg8u8pQrrd5VprV>
- Le cours en anglais : https://rise.eu.articulate.com/share/5iyij_LlQccI7eCfxpU2z6brT1GSkQJO#/ notez l'intelligent déroulement progressif (à l'horizontale et à la verticale !) et les pourcentages de progression. Voyez aussi, sur cette création de Rotterdam, la greffe d'autres ressources. Exemples: "If you are looking for a class that works on your time, check out the free courses from [Tilburg University](#)(opens in a new tab) and [Vanderbilt University](#)(opens in a new tab) or this free online [prompting tutorial](#)(opens in a new tab) ».
- Je pense que ceci est la version initiale du cours. Je vous la livre quand même car elle se caractérise par l'intégration de brèves vidéos bien faites par des profs de Rotterdam : https://rise.articulate.com/share/ZnOKVfHDkKjhmoXya9P91gzlpFPt_pdy#/lessons/B8Xs6bUY_x5Dg3e7tpDMpn3t6qDzYy-9
- Français : volet productivité personnelle : <https://openclassrooms.com/fr/courses/8204091-utilisez-chatgpt-pour-ameliorer-votre-productivite>
- Le MOOC : https://catalogue.edulib.org/fr/cours/umontreal-gpt101/?fbclid=IwAR0NnCJ8FcMG5coRDJlaRfMs4nriHJ-E3F0mIXmHI1xy39C6r_NmVnLQRs
- Il faut ajouter la plate-forme de certification des compétences numériques [PIX](#) avec laquelle l'Uliège est en discussion). Il y a eu adjonction de compétences IA. Pq ne pas inviter les étudiants à passer là ? Je poserai clairement la question au GTIA.
- Cours open source Helsinki traduit dans de multiples langues : https://www.elementsofai.be/?__geom=%E2%9C%AA
- <https://ai-4-all.org/ai4all-ignite>
- <https://ki-campus.org/index.php/front?locale=en>

Et des conférences mais plus centrées sur l'enseignant que sur l'étudiant

- ADMEE-Europe. (2023, 7 décembre). *L'IA en éducation : quand les colonnes du temple tremblent* [vidéo]. YouTube. <https://youtu.be/l-P8xAEassM>
- AI4Teachers. (2024, 9 février). *Usages de l'IA en éducation : retours d'expériences et perspectives* [MOOC]. YouTube. <https://youtu.be/6Z-JHC3X5dU>
- Association québécoise de pédagogie collégiale. (2023, 28 septembre). *Exploiter ChatGPT dans différents contextes pédagogiques* [vidéo]. YouTube. <https://youtu.be/8EBkpVyHpuA>
- Campus Matin. (2023, 13 juin). *Intelligence artificielle au service de l'éducation : quelles pratiques pour demain?* [webinaire]. YouTube. <https://youtu.be/2no5g5kqRfs>
- CRADLE Deakin University. (2023, 2 mars). *ChatGPT webinar #2 – How should educators respond?* [vidéo]. YouTube. <https://youtu.be/V57mT1hrc24>
- Enseignement supérieur Québec. (2023, 8 juin). *Réfléchir aux usages pédagogiques de l'intelligence artificielle en enseignement supérieur* [vidéo]. YouTube. <https://youtu.be/8ACZX2v5Atw>
- France université numérique. (2023, 21 juin). *Impact de l'IA sur l'enseignement supérieur : est-on face à un changement de paradigme?* [vidéo]. YouTube. <https://youtu.be/l3mcqNFrW0g>
- France université numérique. (2023, 10 juillet). *Vers une feuille de route pour l'enseignement supérieur* [vidéo]. YouTube. https://youtu.be/gC4_oEjOTXE
- Global Silicon Valley. (2023, 23 avril). *Artificial intelligence and the future of higher education* [vidéo]. YouTube. <https://youtu.be/29JtrGoGxoE>
- GRAILE AI. (2023, 24 octobre). *AI and leadership in higher education: Creating momentum through faculty affinity groups* [panel]. YouTube. <https://youtu.be/XVP4oHtmuec>
- INSPÉ Lille. (2024, 16 février). *Les enjeux de l'IA pour et en éducation – Table ronde* [vidéo]. YouTube. <https://youtu.be/wgHUYFswsc>
- Kwark. (2023, 3 octobre). *Intelligence artificielle dans l'éducation : retour d'expériences et cas d'usages* [vidéo]. YouTube. <https://youtu.be/WETV1zNHDwk>
- Sciences Po. (2023, 16 mars). *Enseignement supérieur et intelligence artificielle : je t'aime, moi non plus* [vidéo]. YouTube. <https://youtu.be/975eLK6bNgc>
- Stanford University. (2023, 8 mars). *AI+education summit: Generative AI for education* [vidéo]. YouTube. <https://youtu.be/Ks7enkKuZlo>
- Studio Victoires. (2023, 25 septembre). *L'IA éducative – L'intelligence artificielle dans l'enseignement supérieur* [vidéo]. YouTube. <https://youtu.be/Qn4PeJWbis4>
- Université Bretagne Sud. (2023, 8 juin). *L'intelligence artificielle dans l'enseignement supérieur : enjeux et usages* [vidéo]. <https://youtu.be/SeDL2frN9q0>