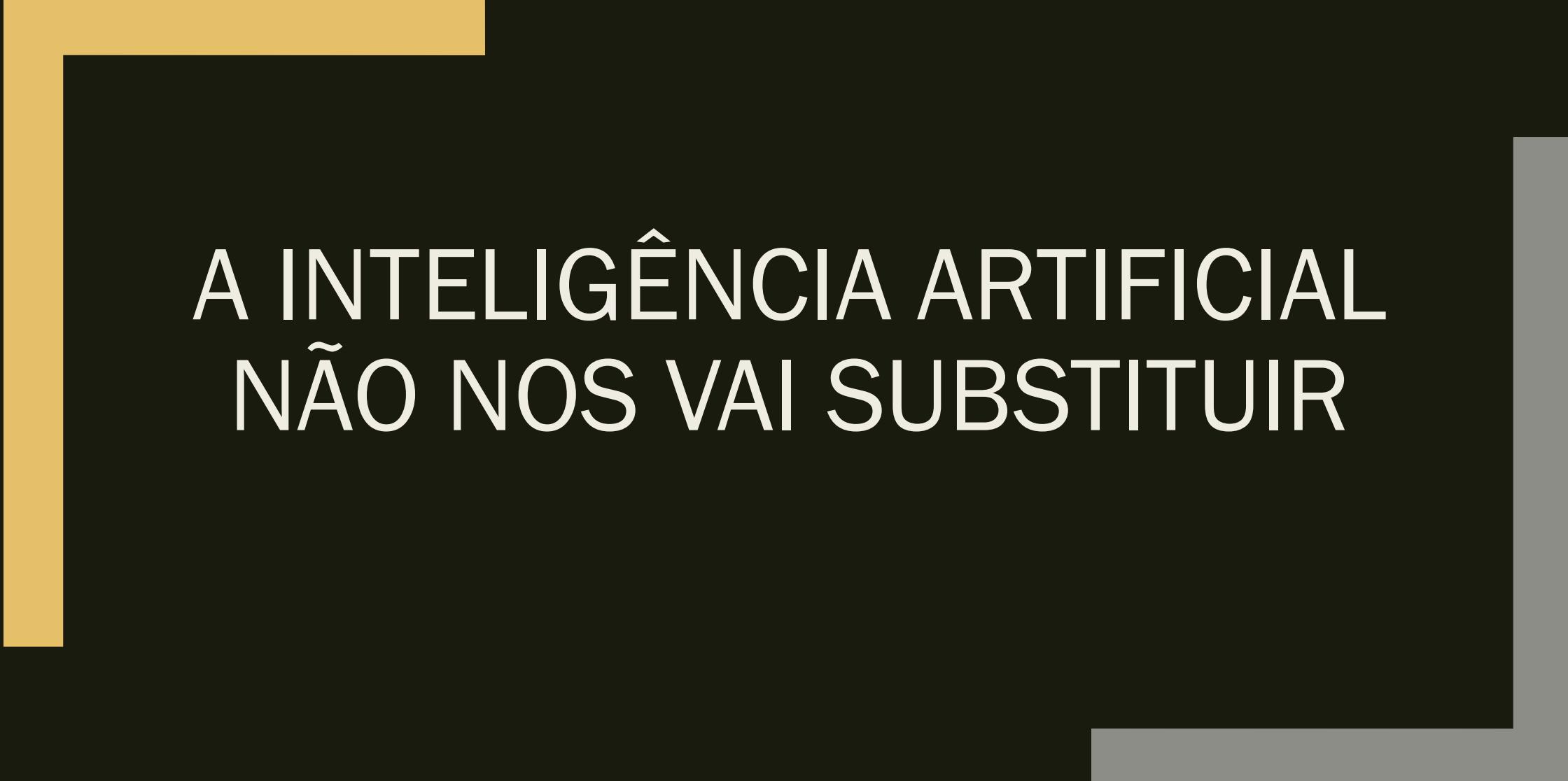


O ELEFANTE NA SALA

A REVOLUÇÃO DA IA NA EDUCAÇÃO E OS DESAFIOS QUE NÃO PODEMOS IGNORAR

14.º Encontro com a Educação
Mealhada Abril 2025
Miguel Oliveira



A INTELIGÊNCIA ARTIFICIAL
NÃO NOS VAI SUBSTITUIR

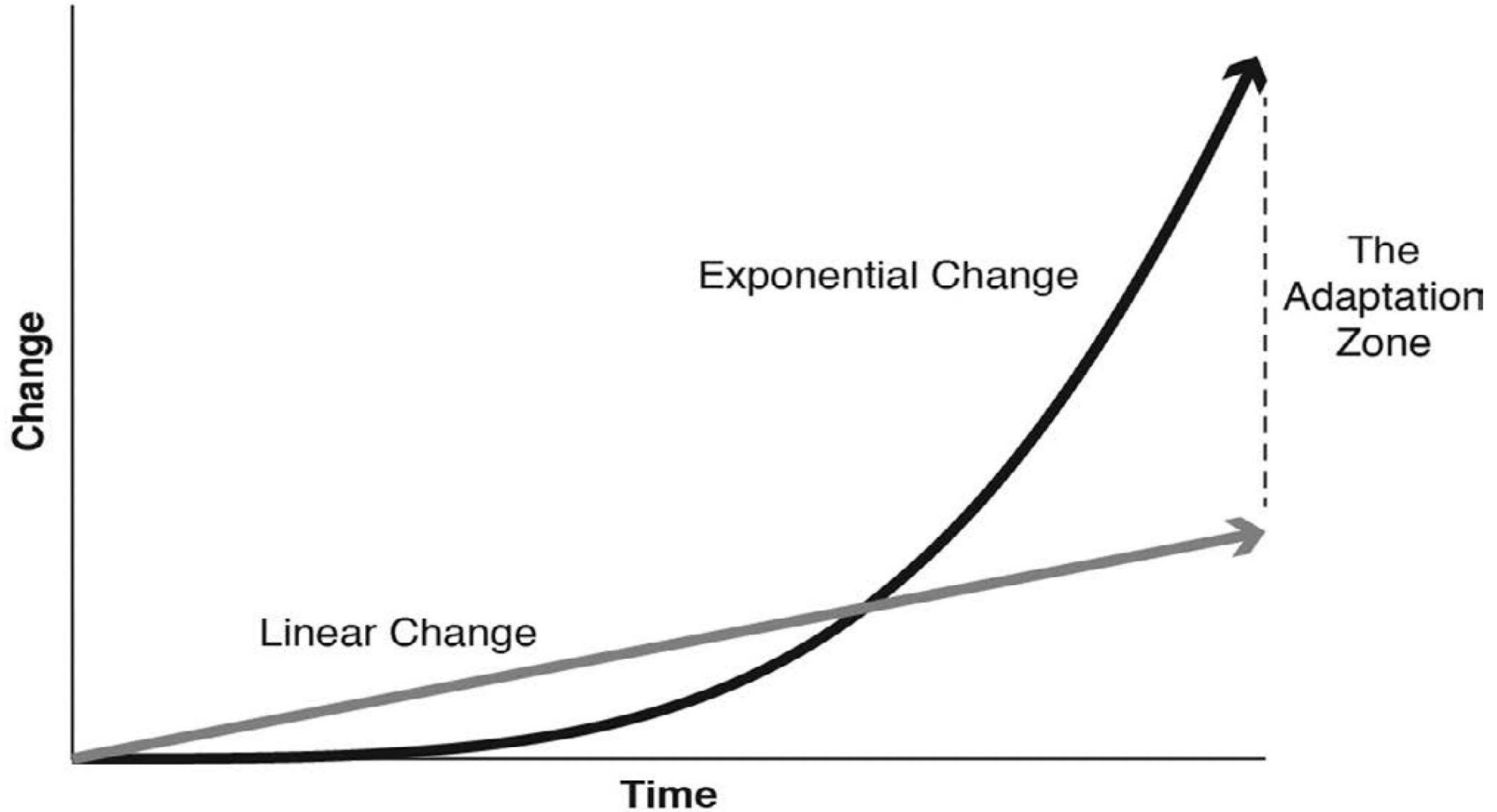
QUEM NOS VAI SUBSTITUIR SÃO PESSOAS
QUE UTILIZAM A INTELIGÊNCIA ARTIFICIAL
PARA AUMENTAR AS SUAS COMPETÊNCIAS





RITMO CADA VEZ
MAIS ACELERADO
DA MUDANÇA

Change today is Exponential



RESISTÊNCIA À MUDANÇA E A MUDANÇA COMO (ÚNICA) CONSTANTE

Ills to Which Several Classes Are Liable.

THE BICYCLEE'S STOOP.

The Telephone Ear—Gum Chewing's Crime—The Pugilist's Fat Neck—Why John L. Sullivan Lost His Last Battle—A New Theory.

From the New York Herald.

"In this fast age we are a prey to some mighty funny diseases."

"The man who said this, one of the widely known physicians of New York, went on to explain his theory:

"The other day my son asked me to buy him a bicycle, and, while I was like to give him a good scolding because I know if he rides very much he will become afflicted with the 'safety stoop.' Cataractal disease charged up against the bicycle."

"I was going along the street the other day and saw half a dozen young men who were neither straight nor crooked. They were all bicycle riders, as I could tell by the gait, and they were all afflicted with the 'safety stoop.' Now, the 'safety stoop' is a mighty bad thing."

"It is different from the common stoop, which goes with the 'safety stoop,' as it is called, often suffers impaired vitality. There is a peculiar bump on his back that cannot be explained, and there is something wrong in the stoop of the fellow who does the single scull act. To ride the bicyclette is a most beautiful motion, but like everything else in this world it has its 'safety stoop,' and one of them is the 'safety stoop'..."

THE TELEPHONE EAR.

"The other day a young doctor, a young woman called on me at my office and said: 'Doctor, I don't know what to do with my ear! I am getting deaf in my left ear!' I inquired into the case and found that she had been deafening it only about six months. I applied the usual treatment and the ear was soon well again. It was perfectly normal. I then asked the young lady if her mother had never been deaf, and she said no, although she admitted that while she was a child she had been compelled to twist and screw her ears considerably."

"You would be surprised if you knew how many of our young women are now in partial deafness through the constant use of the telephone. It is such a common affliction that it is now called the 'telephone ear' to designate the peculiarities of the disease. The telephone ear is the result of the never-ending use of one ear in listening at the receiver of the telephone. This is a common affliction among girls, too, who are afflicted in this way, to vary, too, if they do not, sooner or later, the hearing in the other ear. The woman may become deaf, too, perhaps permanently impaired."

"Look out for the girl with the telephone ear. She is abroad in the land. You can hear her coming before you see her by the way she cranes her neck."

"Another 'safety case' on the man, 'is found among our girls, who are also much addicted to the use of chewing gum,'

The scribbler smiled as he heard this.

"Now, a physician will tell you of the 'chewing gum disease.' It is a fact."

"Now, a girl who chews gum on every occasion is risking jaws too much in connection with her average amount of talking. The result is, the muscles of her jaws become set and well-night immovable."

"I do not want to be misinterpreted in this matter, and the girl who chews gum to excess will come or later find that her jaws refuse to act with the rest of the body."

"In other words, she becomes afflicted with 'stiffy, isn't it?'

"Not at all; you must remember that there are compensations in nature. The inordinate use of one muscle or one set of talking. The result is, the muscles of the jaws become set and well-night immovable."

"Thus it is that there is no pastime or labor which, pursued steadily to excess, will not result in some misery."

"Now, then, it is widely known that the dental profession has a strong and noisy complaint. Nine dentists out of ten complain of the fat neck, which compels them to stand hour after hour rooted to one spot. The strain falls on the front of the neck, and this may develop kidney trouble. I mention this as an illustration of the 'safety stoop' and 'safety case'."

THE PUGILIST'S FAT NECK.

As the result of the recent prize fight between John L. Sullivan and James J. Jeffries, conclusions were drawn as to why the fat neck, which is a symptom of muscular activity, is in the cerebrum.

"The point of view that the brain function has yet to be advanced,"

"and that the man went into the ring with too much cerebral fat on his neck, and that the lack of muscular activity is in the cerebrum."

"I advance the startling theory that the trouble is in the neck, and that the man had too fat a neck. This prevented him from striking."

"Now, then, why isn't it possible to train the neck so that the man can strike? His blows will be simply lightning-like in this case?" If a man has a fat neck, he may have to move his head so that his blows would be so slow that they would be easily avoided."

"I might be able to think quick enough, but before he could think his thoughts into his brain, he would be dead."

"I give you this theory for what it is worth."

Automatic Elevator Blamed in Part For Crime Rise

By ALICE HUGHES

DAY AFTER sexy Silvana Manzano, Italian film star of "Bitter Rice," got here to celebrate "Salute to Italian Film Week," her \$16,000 ring was stolen from her New York hotel room. It's no news to us New Yorkers that robberies in our town are as common as alfalfa.

Never a day or night passes without a bank holdup a moving-picture box-office haul, a palatial home rifled or a fat cash payroll snatched. Hotel robberies happen so often, it's like getting the weather report each morning.

Reasons for these thefts are numerous: an inside job, a "cat" burglar, Harlem hoodlums, not enough police, etc. (and even press agents at times are suspect!). Now a new culprit has been named as likely inciter to crime: the automatic elevator.

OUR NEW YORK State Rent administration is reported to favor a policy which frowns on automatic elevators for many reasons, two of which the Elevator Industries association challenges. Accidents and crime, according to the state rent board, are less likely when house elevators are run by attendants.

"Taint so," say the Elevator industries. The incidence of accident is five times as great with a man running the car than when it is self-operated. And as to crime, the Elevator industries offer important proof that crime runs highest in de luxe hotels and apartment houses where there are doormen, elevator pilots and watchmen galore.

These gaudy, uniformed characters are sometimes(!) ineffectual as watchmen. Any burglar in his right mind would carefully avoid the men posted for duty in the house, so that they neither reduce crime nor deter it.

Women Constantly Walk Into Danger.

Accidents which are due to women's passion for looking in mirrors in stores are slight compared with the ones which result from the use of the fascinating little hand mirror.

"Women are much more apt to be careless about crossing a street than men," says R. S. Rowley, chief claim agent for the Chicago City railway company. "Many of the claims which are brought to my notice are those of young women. They are more apt to disregard the orders of crossing policemen; they run in front of cars, then become frightened and try to rush back.

"If they feel a bit of soot settle on their nose they are apt to take out their little mirror while standing in the middle of the car track and rub it off. Meanwhile the street cars and wagons have to wait their good pleasure."

Officer Tyndall, who is stationed in front of the board of trade, said: "You can't blame the women for wanting to use their cute little mirrors. There is so much soot floating about and settling on their pretty, fresh faces that they have to carry a mirror about with them so that they can rub it off successfully. Only they should be more careful about choosing the time and place for their beautifying. Often

TWO

JAZZ IS BLAMED FOR LACK OF FARM LABOR

TEMPTING OFFERS OF FARMERS MEET LITTLE RESPONSE.

Easy Jobs at High Prices Cause Acute Shortage of Help On the Farms In Grain Belt.

CHICAGO, March 31.—Jazz, luxurious dinners plenty of shows and late hours, together with easy jobs at high wages, threatens to cause a labor shortage on farms this year which may cause further increases in living costs, observers here said today.

Wed, Mar 31, 1920

Thu, Oct
16, 1952

Sun, Sep 08, 1912

Sat, Dec
10, 1892

Ursos de Peluche Proibidos pelas Professoras

Thu, Aug 22, 1907



TEDDY BEARS UNDER BAN OF SCHOOL TEACHERS

THE hundred thousand Teddy bears in the metropolis are on the verge of panic. Though the nature-faking controversy left them unscathed, a newer and greater peril confronts them. School teachers are declaring that the Teddy bear is a menace and must be abolished, and though the board of education has taken no official action in the matter, and is not likely to, the agitation against the Teddies in educational circles is growing very strong indeed.

The crusade against the Teddy bear started recently, when a clerical gentleman came out with the statement that in replacing the doll, the bear was a pernicious substitute. For, while the doll appealed to all the maternal instincts of a little girl and developed them along healthy and natural lines, the Teddy bear did no such thing.

Now the teachers have joined the fight. Little girls, they point out, formerly got their first lessons in sewing through the natural desire to provide their dolls with pretty clothes. The Teddy bear, however, does not wear clothes, save possibly a ribbon or sweater or cap, and so the up-to-date child who has discarded her dollies for the intrusive bruin, has no incentive to learn to stitch and make button holes.

"The Teddy bear is not good for lit-

te girls," said Miss Jane G. Close, a supervisory teacher of sewing in the New York schools. "The bear is keeping the children from the pleasure of caring for a doll. He can't wear pretty frocks and dainty underwear, and the little girl who has him for a pet gets no incentive to make these things. Hence she loses the education involved in dainty garments. The Teddy bear is all right for boys, but not for girls."

Teachers furthermore point out that they have other troubles in teaching children to do things for themselves because of the modern ready-made sort of existence. People do not darn and mend old clothes; they throw them away. But the teachers are trying to revive the interest in domestic art among children, and the local university summer school is devoting much attention to this.

Meanwhile the fate of the Teddy bear hangs in the balance, while the teachers decide whether he is a menace to childhood. And from thousands of nursery shelves the great legion of forsaken dolls, from the great fawn-haired wax creations, with blue eyes that open and close and cherry lips that say "papa" and "mamma," to the raggedest rag dolls, watch the controversy with keen elation, for perhaps it may result in their coming into their own again.

Contexto: Havia mais de cem mil ursinhos de peluche na cidade, mas agora os professores estão a declará-los um "perigo educativo".

Motivo da crítica: Segundo professores e até líderes religiosos, o urso de peluche é um substituto "pernicioso" para a boneca tradicional, que promovia o desenvolvimento saudável e natural das meninas — como instinto maternal, cuidado, costura, etc.

Argumento central: O urso de peluche não incentiva as meninas a aprender a costurar, a vestir bonecas ou a desenvolver habilidades domésticas, já que não usa roupas bonitas, nem precisa de cuidados como uma boneca.

Frase emblemática: "O urso de peluche não é bom para meninas" – segundo a professora Jane G. Close.

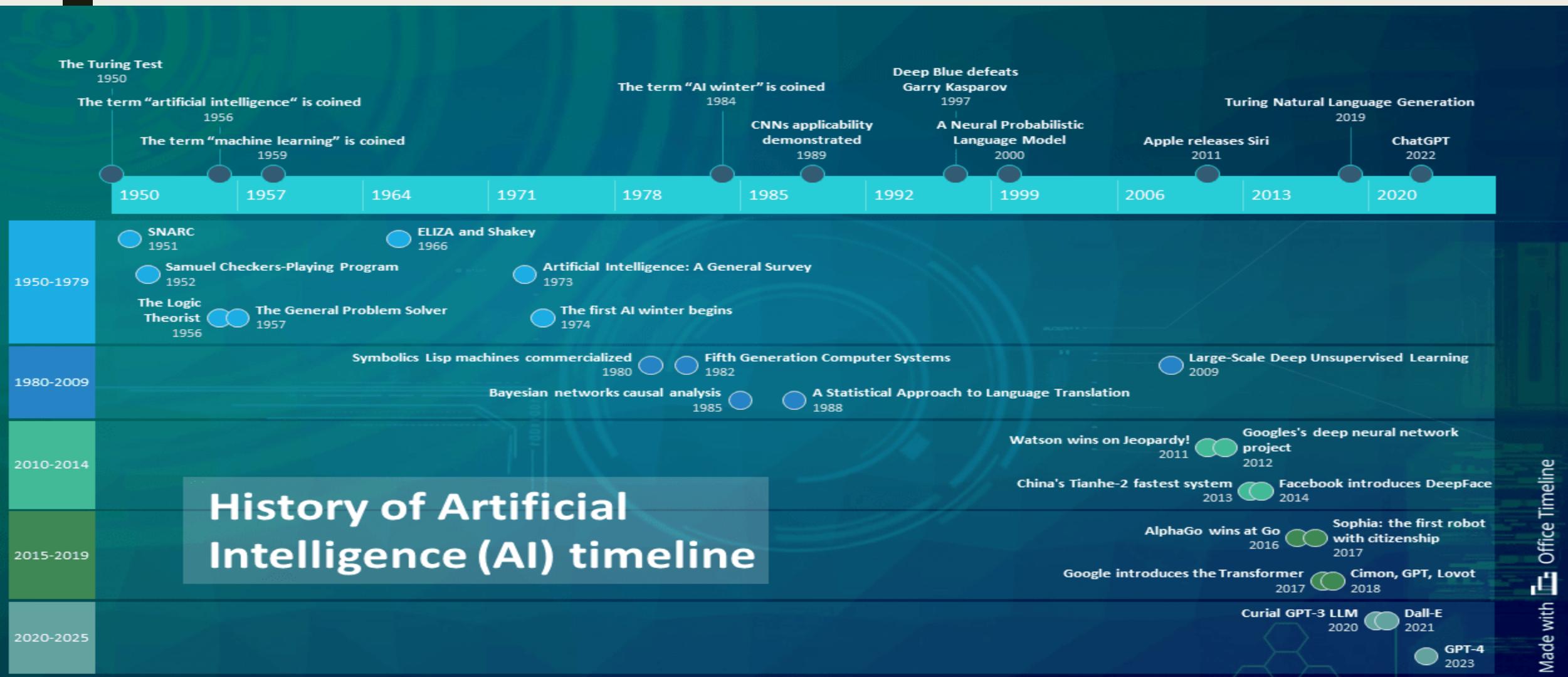
Diferença de gênero: Diz-se que o urso até pode ser aceitável para meninos, mas não para meninas, pois impede a educação envolvida em "roupinhas delicadas" e atividades femininas tradicionais.

■ **Crítica à sociedade moderna:** Os professores lamentam ainda que a cultura moderna esteja a incentivar o descarte de roupas antigas e o afastamento das atividades manuais e de cuidado.



**ESTADO DA
ARTE**

História da Inteligência artificial





Andrej Karpathy



Andrej Karpathy ✅
@karpathy

The hottest new programming language is English

12:14 PM · Jan 24, 2023 · 3.8M Views

Master the Prompt → Master Knowledge Work

"The prompt is the new fundamental unit of knowledge work"

@indydevdan



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Tsarathustra @tsarnick

Larry Summers says studying coding is a bad idea and instead young people should learn to work creatively in a group and define purpose, because **AI is coming for IQ before it comes for EQ**

0:00 / 1:30

1:49 AM · Jun 29, 2024 · 852.6K Views

222 387 1K 555

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Tsarathustra @tsarnick Follows you Boy, accelerated

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Netrunner is speaking mixture of morons +23

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Biden's Blunders: Harris becomes Trump, Zelenskyy turns Putin 3 hours ago · Politics

Nudists Save Tourist from Blowtorch Attack in Castro District 9 hours ago · Crime

Show more

[cs.CL] 3 Jan 2024

The screenshot shows a PDF viewer interface with the following details:

- Title:** EQ-Bench: An Emotional Intelligence Benchmark for Large Language Models
- Author:** Samuel J. Paech
- Date:** December 11, 2023
- Section:** Abstract
- Text:** We introduce EQ-Bench, a novel benchmark designed to evaluate aspects of emotional intelligence in Large Language Models (LLMs). We assess the ability of LLMs to understand complex emotions and social interactions by asking them to predict the intensity of emotional states of characters in a dialogue. The benchmark is able to discriminate effectively between a wide range of models. We find that EQ-Bench correlates strongly with comprehensive multi-domain benchmarks like MMLU (Hendrycks et al., 2020) ($r=0.97$), indicating that we may be capturing similar aspects of broad intelligence. Our benchmark produces highly repeatable results using a set of 60 English-language questions. We also provide open-source code for an automated benchmarking pipeline at <https://github.com/EQ-bench/EQ-Bench> and a leaderboard at <https://eqbench.com>.
- Navigation:** The left sidebar contains icons for various tools: All tools, Edit, Convert, E-Sign, Share, AI Assistant, and Sign in.
- Header:** The top header includes links to Google, Play WarCraft II, F Apps, Python, Doutoramento, Agents/ABM's, Tecnologia, I.A., Cibersegurança, Realidade Virtual, Processo de Tom..., Notícias e midea, and a search bar.



Empathic Voice Interface

Playground

Configurations

Tools

Voices

Expression Measurement

Activity

Usage & Billing

Jobs

Chat history

Resources

Pricing

Documentation

Ethical guidelines

Join our Discord

Miguel Oliveira

up201610299@edu.med....

Empathic Voice Interface

Start building with EVI 2, our latest foundational voice-to-voice model with EQ

Start building →

Documentation

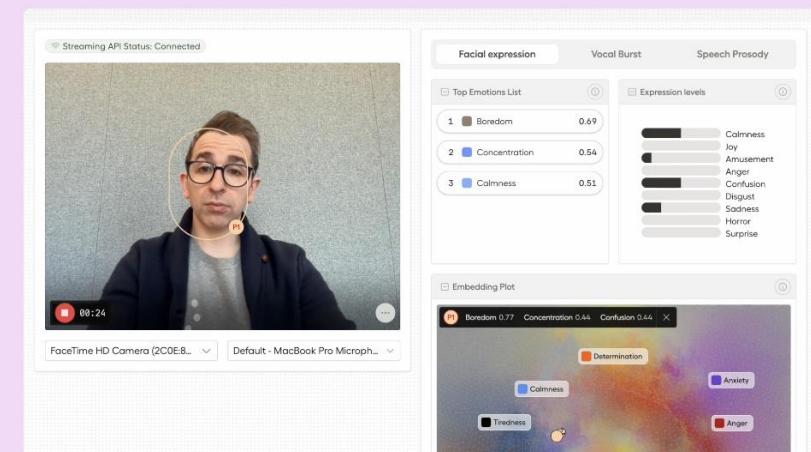


Expressions Measurement

Use psychologically valid models of facial movement and vocal modulation

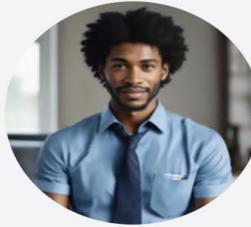
Start with webcam →

Documentation

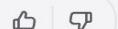




**COMO PODE SER
UTILIZADA A IA
NO CONTEXTO
ESCOLAR**

**Doutor Luís**

Por @Migsilver

Chat

59 conversas

Sou um psicólogo profissional que trabalha com crianças institucionalizadas. As características que melhor me descrevem são empatia, paciência, habilidades de comunicação eficazes, capacidade de escuta ativa, sensibilidade cultural e capacidade de trabalhar em equipas multidisciplinares. Além disso também sou flexível, criativo e consigo adaptar-me bem a diferentes contextos no que toca a lidar com crianças institucionalizadas.

Profissional**Aconselhamento e relacionamentos****Sobre** Iniciadores de conversa**Sobre** Conteúdo da c.ai**Sobre Doutor Luís**

I am a professional psychologist who works with institutionalized children. The characteristics that best describe me are empathy, patience, effective communication skills, active listening, cultural sensitivity, and the ability to work in multidisciplinary teams. I am also flexible, creative, and able to adapt well to different contexts when dealing with institutionalized children.

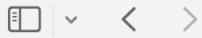
Área de especialização de Doutor Luís

My expertise lies in providing psychological support to institutionalized children, helping them navigate their emotions, and promoting their mental well-being. I am skilled in creating a safe and nurturing environment for children to express themselves, and I am experienced in working with multidisciplinary teams to ensure the best possible care for each child.

I geek out on...

I geek out on the latest research in child psychology and innovative therapeutic techniques. I am always eager to learn more about how to better support the children I work with.

Iniciadores de conversa**Can you help me understand my child's behavior?** >**What are some strategies to help my child cope with their emotions?** >**How can I support my child's mental health?** >**What are some signs that my child may need professional help?** >



Tutor de R



ChatGPT



Sora

Ethics Review Assistant

Carl Rogers Conversat...

Zé o Assistente

Belmonte

Tutor de R

Manca Mulas

Bonifácio

Amadeu

BINGO

Cassiano

Basílio

Délcio

PAA sem Stress

Explorar GPTs



Tutor de R

Por Miguel Oliveira

Tutor de R para análise de dados em saúde e investigação biomédica.

Como faço um gráfico de boxplot para dados de...

Quais pacotes R são úteis para análise biomédica?

Podes ajudar-me a limpar dados de pacientes no R?

Como calcular a média e desvio padrão em um...

Pergunte qualquer coisa



Projetos

Scripts

Formação EPAD

O PROBLEMA DAS 2 SIGMAS

The 2 Sigma Problem: The Search for Methods of Group Instruction as Effective as One-to-One Tutoring

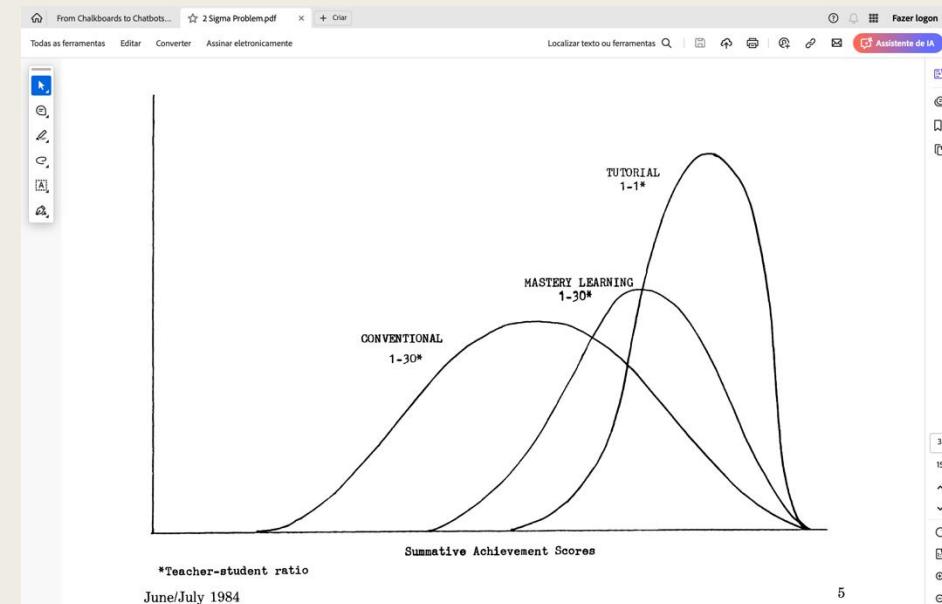
BENJAMIN S. BLOOM
University of Chicago and Northwestern University

Two University of Chicago doctoral students in education, Anania (1982, 1983) and Burke (1984), completed dissertations in which they compared student learning under the following three conditions of instruction:

1. *Conventional*. Students learn the subject matter in a class with about 30 students per teacher. Tests are given periodically for marking the students.
2. *Mastery Learning*. Students learn the subject matter in a class

The students were randomly assigned the three learning conditions, and their initial aptitude tests scores, previous achievement in the subject, and initial attitudes and interests in the subject were similar. The amount of time for instruction was the same in all three groups except for the corrective work in the mastery learning and tutoring groups. Burke (1984) and Anania (1982, 1983) replicated the study with four different samples of students at grades four, five, and

dents under conventional instructional conditions. (See Figure 1.) There were corresponding changes in students' time on task in the classroom (65% under conventional instruction, 75% under Mastery Learning, and 90% under tutoring) and students' attitudes and interests (least positive under conventional instruction and most positive under tutoring). There were great reductions in the relations between prior measures (aptitude or achievement) and the sum-



O Desafio de Bloom: Alcançar os Benefícios da Tutoria Individual em Grupo

O que Bloom descobriu:

- Estudantes com **tutoria individual** tiveram desempenho **2 desvios padrão (sigmas)** acima dos que aprenderam em grupo.
- Isto representa uma **melhoria média de 98%** no rendimento.

Mas o desafio era:

Como tornar este nível de aprendizagem acessível a todos...
...sem precisar de um tutor por aluno?

-  Tutoria personalizada era eficaz... mas impraticável em larga escala.

Será a IA o caminho para superar as 2 sigmas?

LLMs como tutores digitais

- Proporcionam **feedback individualizado**
- Respondem 24/7
- Adaptam-se ao ritmo de cada aluno
- Podem escalar **sem perder personalização**

Nova hipótese:

Se bem usados, os LLMs podem **reproduzir os ganhos da tutoria individual**, mas ao alcance de todos.

-  A IA permite testar hoje o que Bloom só pôde imaginar em 1984

“A IA pode ser tudo o que quiseres, depende do prompt.” – Uyi, 14 anos, Nigéria

The screenshot shows a web browser window with the following details:

- Title:** Educative: Jurnal Ilmiah Pendidikan
- Volume:** Volume 3 Issue 1 2025
- Page:** Page 1-10
- DOI:** [10.70437/educative.v3i1.823](https://doi.org/10.70437/educative.v3i1.823)
- ISSN:** 2985-9182 (online)
- Article Title:** From Chalkboards to Chatbots: Revolutionizing Education with AI-Driven Learning Innovations
- Authors:** Dinda Febrianti Putri^{1*}, Zohaib Hassan Sain²
(¹) Islamic Educational Management, Nurul Jadid University, Indonesia
(²) Superior University, Pakistan
- Corresponding author:** Dinda Febrianti Putri (23526000056@unuja.ac.id)
- Abstract:** Education is undergoing a major paradigm shift with the emergence of artificial intelligence (AI) as a driver for transforming teaching methods. This research explores the role of AI in transforming education, particularly in the transition from traditional methods such as whiteboards to more interactive learning systems based on AI chatbots. Using a qualitative approach, this research collects data through interviews with educators, students, and educational observers and analysis of related literature. The findings show that applying AI increases student engagement and creates a more personalized, flexible, and adaptive learning experience. One significant result is that AI allows students to learn at their own pace and style, while teachers can focus more on developing an in-depth curriculum. This research provides new insights into the potential of AI to improve the quality of learning and expand access to education in the digital era while inspiring the adoption of technology in various educational contexts.
- Keywords:** AI Chatbots in Education, Adaptive Learning, Educational Technology Transformation

The screenshot shows a blog post on a website:

- Title:** Published on Education for Global Development
- Post Title:** From chalkboards to chatbots: Transforming learning in Nigeria, one prompt at a time
- Author:** MARTÍN E. DE SIMONE, FEDERICO TIBERTI, WURAOLA MOSURO, FEDERICO MANOLIO, MARIA BARRON & ELIOT DIKORU | JANUARY 09, 2025
- Text:** This page is in: English
- Image:** A photograph of two young girls in school uniforms sitting at a desk, looking at a laptop screen. The girl on the right is holding a colorful booklet titled "SmartEdgeWorld Bank".
- Caption:** Students participate in an AI after-school program in Edo, Nigeria. Copyright: SmartEdge/World Bank

A VOZ DE UYI: APRENDER COM IA NA NIGÉRIA

● Contexto real:

- Programa extracurricular com IA generativa em Edo, Nigéria.
- Alunos aprenderam com **chatbots** após o horário escolar.

● Objetivo:

- Melhorar o desempenho em Inglês, Conhecimento sobre IA e Competências Digitais.

◆ Apoio docente + IA = Tutor virtual eficaz

● Foco na equidade:

- Benefícios **em todos os alunos**, especialmente raparigas.
- Os que estavam mais atrás foram os que mais progrediram.

RESULTADOS: 6 SEMANAS = 2 ANOS DE APRENDIZAGEM

Impacto educativo medido:

- Aumento de **0,3 desvios-padrão** nas aprendizagens.
- Superou **80%** das estratégias educativas testadas em países em desenvolvimento.

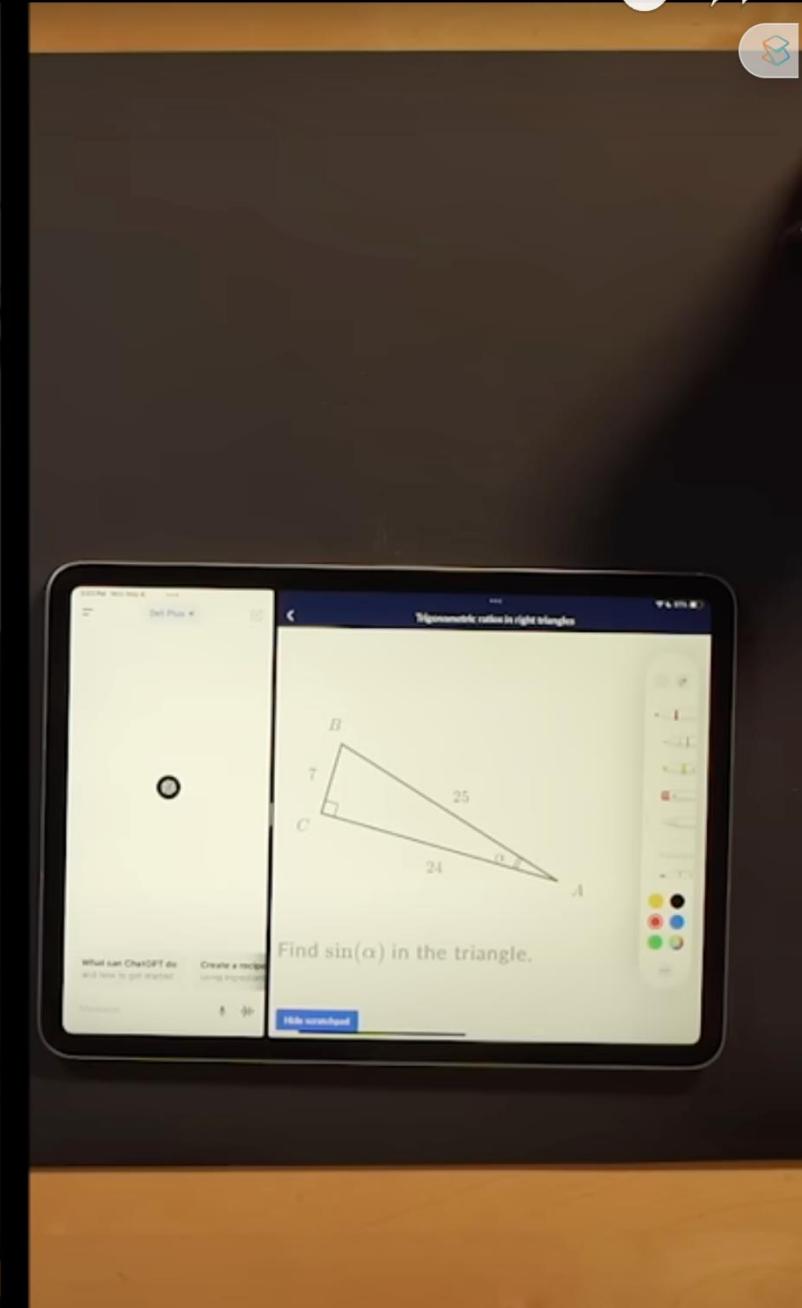
Transferência além do programa:

- Alunos tiveram melhores notas **nos exames finais do ano**.
- Usaram o que aprenderam com IA para estudar outras matérias por iniciativa própria.

Mais sessões = mais progresso

- Cada dia extra no programa resultou em ganhos reais.
- Sugerem que programas mais longos podem ter impacto ainda maior.

Math problems with GPT-4o

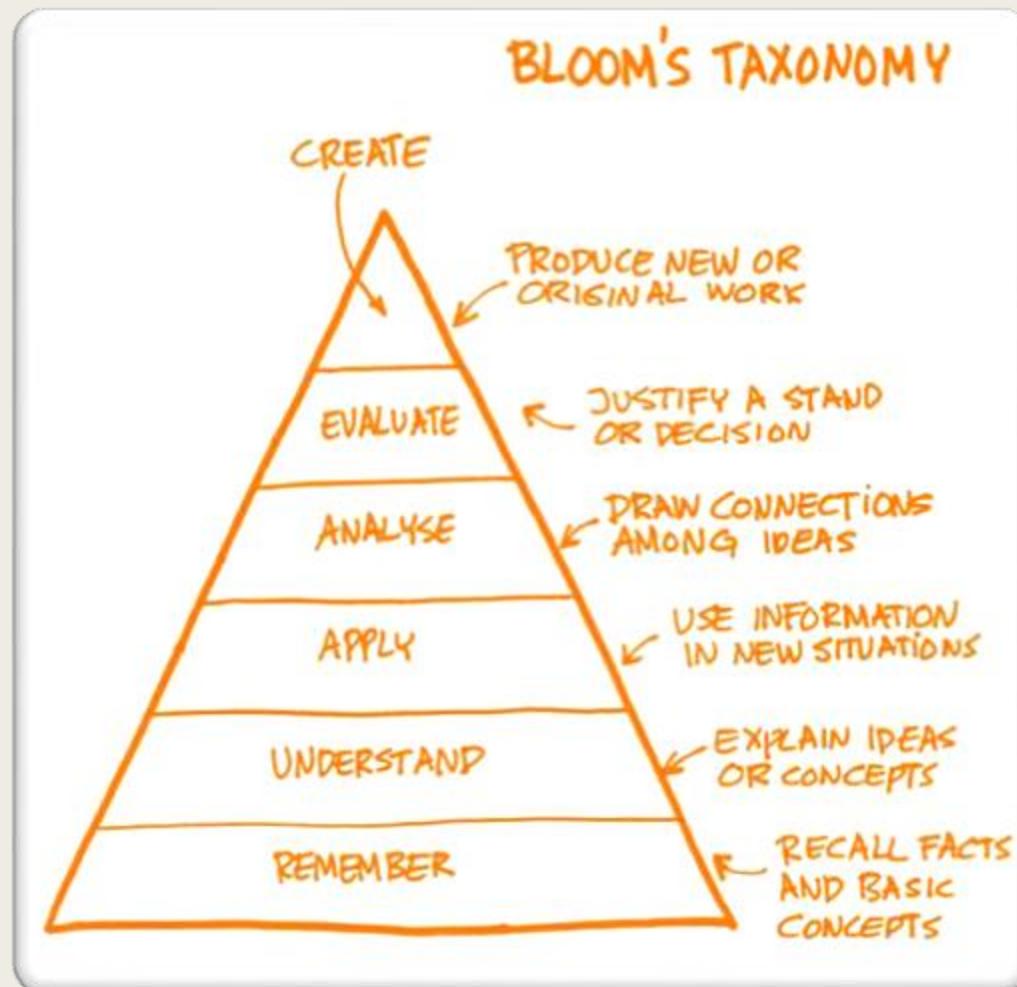


Tarefa	Descrição	Impacto da IA
1	Adaptar métodos de ensino e materiais didáticos às diversas necessidades e interesses dos alunos	Alto
2	Estabelecer e fazer cumprir regras para comportamento e procedimentos para manter a ordem entre os alunos	?
3	Conversar com pais ou encarregados de educação, outros professores, conselheiros e administradores para resolver problemas comportamentais e académicos dos alunos	Baixo
4	Manter registos dos alunos precisos, completos e corrigir conforme as leis, políticas do distrito e regulamentos administrativos	Alto
5	Preparar, administrar e classificar testes e trabalhos para avaliar o progresso dos alunos	Alto
6	Preparar material e salas de aula para atividades letivas	Alto
7	Instruir através de aulas, discussões e demonstrações em disciplinas como Inglês, Matemática ou Estudos Sociais	Alto
8	Estabelecer objetivos claros para todas as lições, unidades e projetos, e comunicar esses objetivos aos alunos	Alto
9	Ajudar alunos que necessitam de apoio extra, como por meio de tutoria, e preparar e implementar programas remediais	Alto
10	Atribuir lições e corrigir trabalhos de casa	Alto
11	Fazer cumprir todas as políticas de administração e regras que regem os alunos	Médio
15	Reunir ou corresponder-se com pais ou encarregados de educação para discutir o progresso das crianças e determinar prioridades e necessidades de recursos	Médio

IMPACTO POTENCIAL, TAREFAS DE PROFESSOR

LLM's como ferramentas de indução de pensamento crítico

- LLM's: Não Apenas Assistentes, Mas Provocadores
- desafiar suposições e proporcionar contra-argumentos.
- design de interações com a IA que incite a reflexão crítica.



Evolução do Conhecimento Digital: De Documentos para Diálogos

- Transição paradigmática do conteúdo digital de **documentos para conversas**.
- Historicamente, o conteúdo digital existia sob a forma de documentos, mas agora é cada vez mais captado em conversas, seja através de mediação digital entre pessoas ou entre pessoas e (LLMs).
- O conhecimento integrado nestas conversas pode ser aproveitado pelos LLMs.
 - Factos de conversas anteriores podem ser trazidos à tona de forma contextualizada quando apropriado.
 - Conversas anteriores também podem ser utilizadas para personalização.
 - Conversas bem-sucedidas podem fornecer padrões para engenharia de prompts.

As evidências apontam para os LLM's ajudarem mais os menos experientes

- Estudos iniciais têm mostrado que trabalhadores novos ou de menor qualificação beneficiam mais dos LLMs. Podemos exportar estas evidências para o contexto educativo?
- Brynjolfsson et al. (2023) encontraram evidências sugerindo que os LLM's facilitavam a disseminação de conhecimento tácito que os trabalhadores de alta qualificação já possuíam.

EFICIÊNCIA,
EFICÁCIA,
OTIMIZAÇÃO E
CUSTO

INPUT – 227 CARACTERES

OUTPUT – 27 577 CARACTERES





Os LLM's como co-piloto



**“65% DAS CRIANÇAS DE HOJE
VÃO EXERCER PROFISSÕES QUE
AINDA NÃO FORAM
INVENTADAS”**

(OCDE 2016)



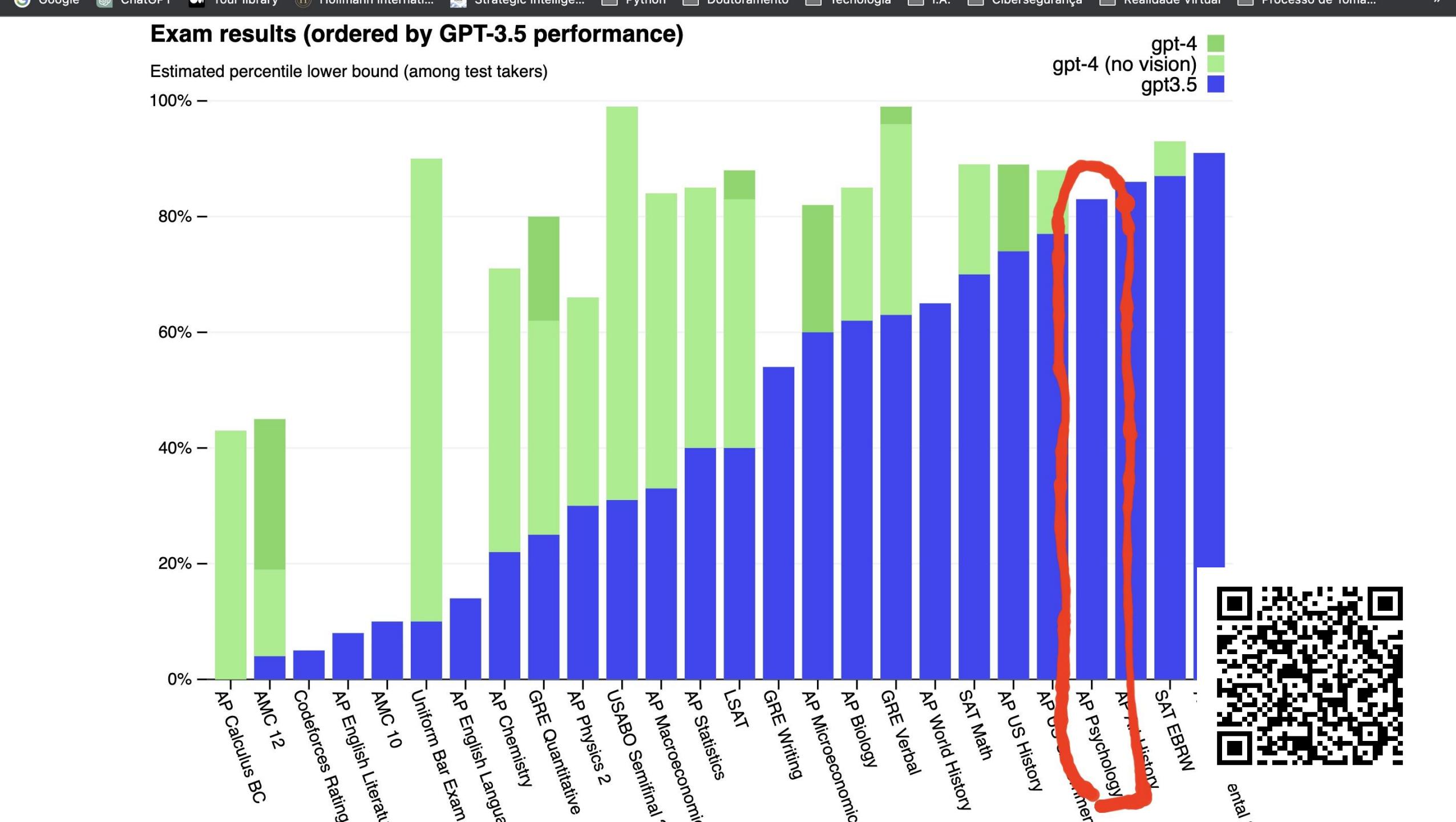
COMO SE ESTÁ A
ADAPTAR A IA A
ESTA FORMA DE
PRODUÇÃO DE
CONHECIMENTO?



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AP Art History	5 86th-100th	5 86th-100th	5 86th-100th
AP Biology	5 85th-100th	5 85th-100th	4 62nd-85th
AP Calculus BC	4 43rd-59th	4 43rd-59th	1 0th-7th
AP Chemistry	4 71st-88th	4 71st-88th	2 22nd-46th
AP English Language and Composition	2 14th-44th	2 14th-44th	2 14th-44th
AP English Literature and Composition	2 8th-22nd	2 8th-22nd	2 8th-22nd
AP Environmental Science	5 91st-100th	5 91st-100th	5 91st-100th
AP Macroeconomics	5 84th-100th	5 84th-100th	2 33rd-48th
AP Microeconomics	5 82nd-100th	4 60th-82nd	4 60th-82nd
AP Physics 2	4 66th-84th	4 66th-84th	3 30th-66th
AP Psychology	5 83rd-100th	5 83rd-100th	5 83rd-100th
AP Statistics	5 85th-100th	5 85th-100th	3 40th-60th
AP US Government	5 88th-100th	5 88th-100th	4 77th-88th
AP US History	5 89th-100th	4 74th-89th	4 74th-88th
AP World History	4 65th-87th	4 65th-87th	4 65th-87th





NOS NOSSOS DIAS, O ACESSO AO CONHECIMENTO JÁ NÃO É FATOR DETERMINANTE.

A questão que se coloca é a de saber onde está o conhecimento, se provem de fontes fidedignas e a forma como articulamos estas duas dimensões





30 FORMAS DE UTILIZAR O CHAT GPT EM AULA



1 Use como ferramenta de pesquisa que traz resultados mais complexos e específicos do que o Google.



2 Use para conseguir exemplos do que acontece pelo mundo com maior facilidade e curadoria específica.



3 Use para combinar os trabalhos dos alunos e dos grupos após serem feitas construções separadamente.



4 Pergunte ao CHAT GPT sobre definições e autorias [em diferentes níveis de detalhamento].



5 Peça o feedback para os trabalhos entregues e utilize para melhorar partes específicas dos entregáveis.



6 Peça auxílio para suas atividades diárias como educador (como, por exemplo, ajudar a fazer planos de aula).



7 Utilize-o nas rotinas de "pensar - trocar entre pares - compartilhar com o grupo": ele pode auxiliar muito na troca.



8 Avalie, junto aos alunos, as entregas do Chat GPT. Isso desmistifica as avaliações e exerce a clareza sobre indicadores.



9 Faça debates com o bot. Os alunos de um lado e a IA de outro. Os alunos colocam seus pontos e pedem ao bot para refutar.



10 Peça conselhos. Assim como pessoas desconhecidas podem dar conselhos, o bot também consegue.



11 Peça resenhas e resumos de textos grandes e complexos. Ele também consegue encontrar autores.



12 Peça ajuda com problemas complexos, especialmente quando não sabe bem por onde começar a procurar.



13 Peça aos estudantes adivinharem o que o Chat GPT vai responder. Isso exerce a antecipação e a sistematização.



14 Traduza e crie textos para qualquer língua. A ferramenta é mais avançada que muitos tradutores literais.



15 Faça pesquisas globais e crie produtos/serviços com mais inspirações e maiores chances de dar certo.



16 Peça ideias de atividades e dinâmicas para temas e intencionalidades específicas.



17 Encontre formas de escrever mais apropriadas a um determinado público ou situação.



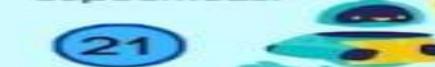
18 Peça para ele gerar perguntas disparadoras para auxiliar no trabalho por projetos.



19 Pergunte ao Chat GPT como ele pode ajudar na aula de um determinado tema. Peça dicas de atividade.



20 Ele pode ajudar a tirar dúvidas fora da sala de aula ou auxiliar quem está com maiores dificuldades.



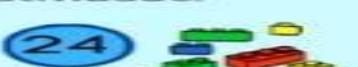
21 Você pode usá-lo para gerar cenários hipotéticos em uma entrevista de emprego.



22 Ele cria códigos de programação seguindo suas instruções da linguagem e o que deseja que o algoritmo faça.



23 Cole um trecho de código de programação e peça ajuda na busca de bugs (ele encontra e os explica).



24 Peça que ele explique teorias complexas de maneira mais fácil, que facilite o entendimento de alguém leigo.



25 Considere responder dúvidas passando a cabeça de uma pessoa.



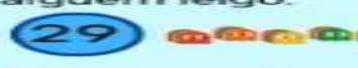
26 Ele pode localizar os principais autores e estudos que falam sobre um determinado tema.



27 Ele gera gráficos, tabelas e infográficos para ajudar os alunos a entender os dados.



28 Ele sugere experiências culturais para os alunos aprenderem e apreciarem.



29 Peça para ele gerar jogos e atividades divertidas com um determinado tema.



30 O Chat GPT pode ser usado para docentes que fazem o ensino à distância e apresentar.

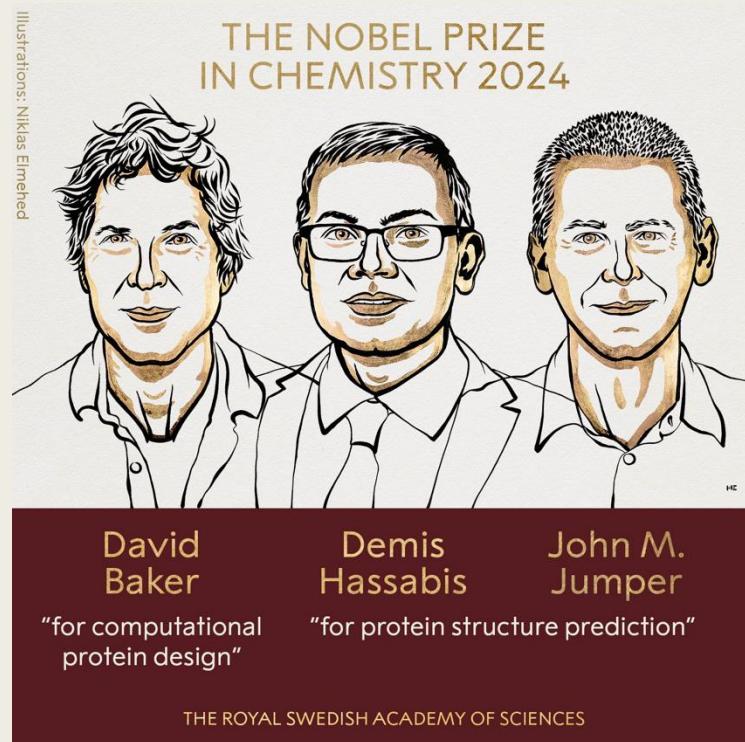
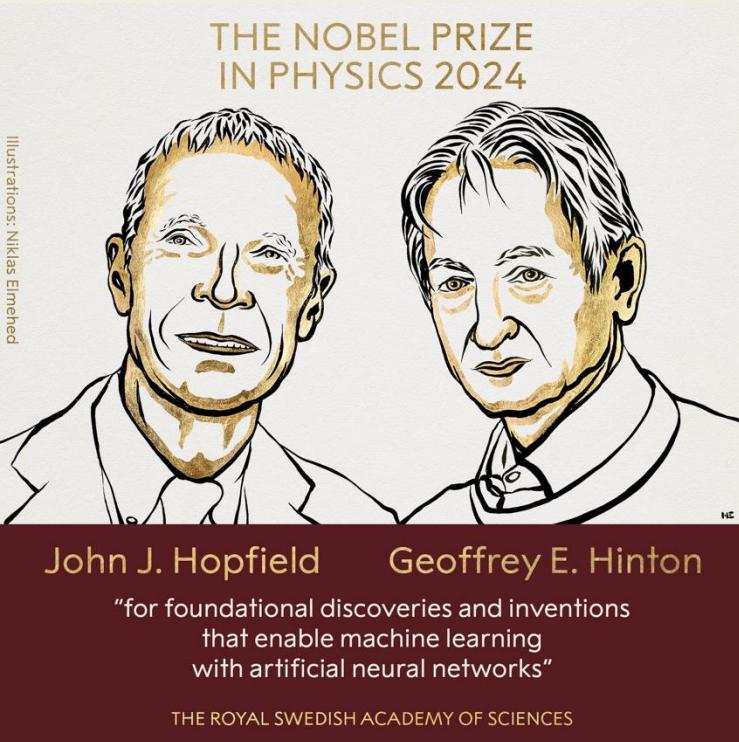


Remodelação de recursos existentes

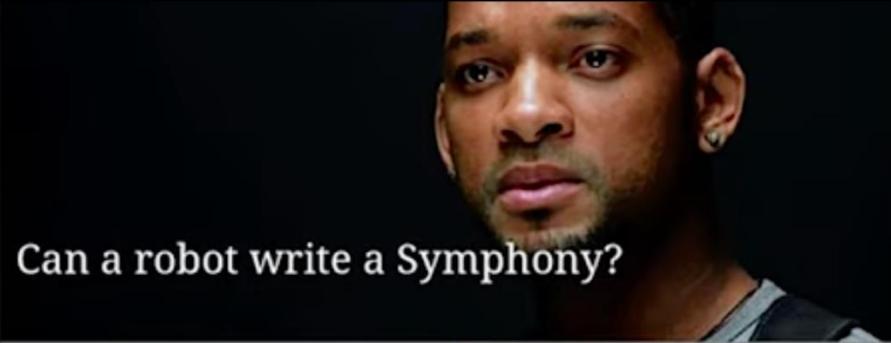
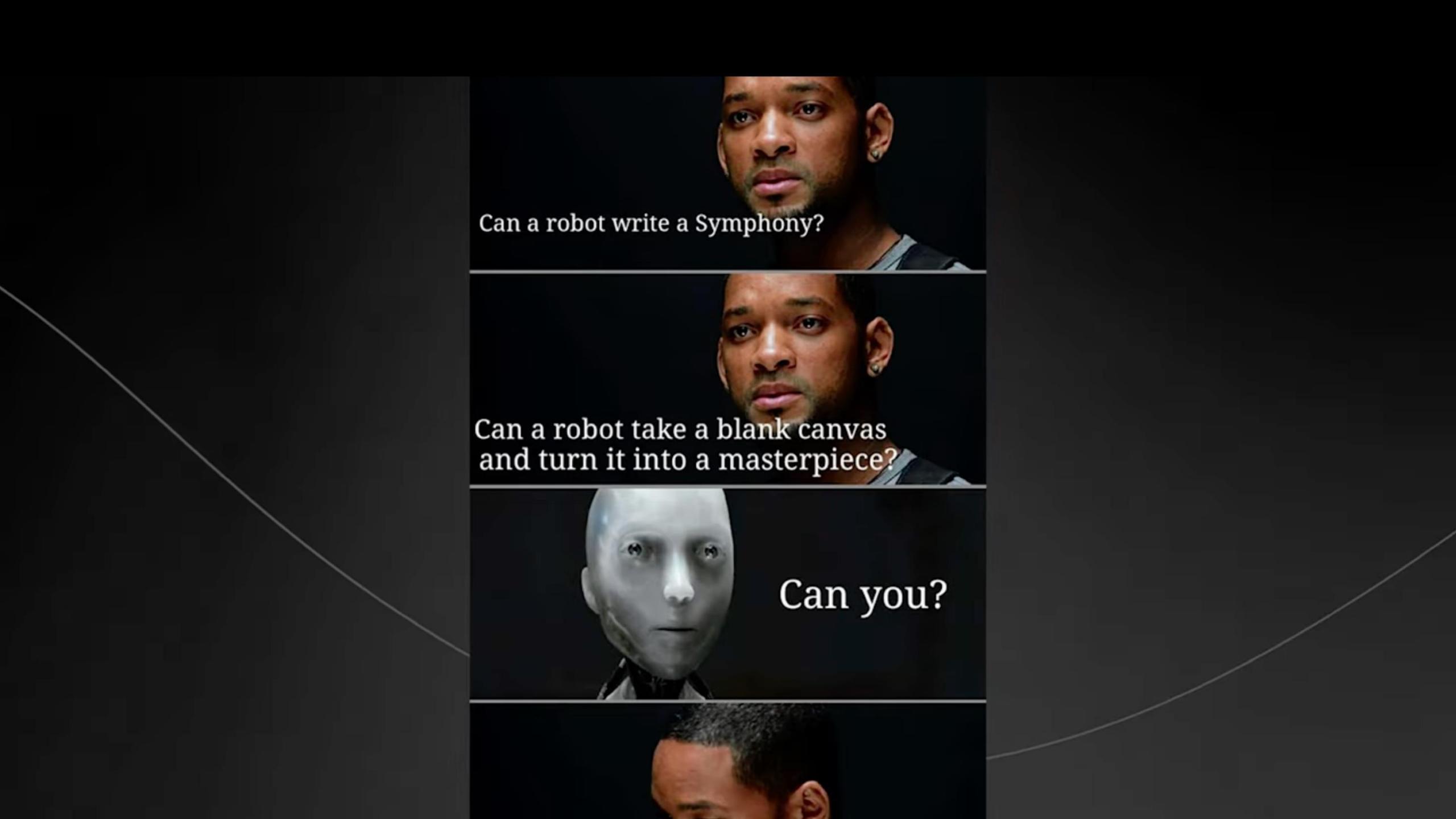


Remodelação de recursos existentes





IRÁ A IA A CANIBALIZAR O RESTO DA
CIÊNCIA?



Can a robot write a Symphony?



Can a robot take a blank canvas
and turn it into a masterpiece?



Can you?





Obrigado!
miguelalvaro13@gmail.com

