# the learning ideas conference

# Reimagining Education with Custom Bots: A Student-Centered Approach

Wednesday, June 11<sup>th</sup>, 2025



Casandra Silva Sibilin csilvasibilin@york.cuny.edu https://linktr.ee/csilvasibilin



# **Entrance Ticket**

## **THINK-PAIR-SHARE!**

- How often do you use LLM chatbots (e.g. ChatGPT)?
- Do you think of the chatbot / prompt it with certain roles or jobs (e.g. "you are a coach")?
- Which roles does it do best and worst at?

### **Top 10 Gen AI Use Cases**

The top 10 gen AI use cases in 2025 indicate a shift from technical to emotional applications, and in particular, growth in areas such as therapy, personal productivity, and personal development.

#### **Themes**



Jse cases	2024	2025	
Generating ideas	1	Therapy/ companionshi	р
Therapy/ companionship	2	Organizing my (new use case)	
Specific search	3	Finding purpo (new use case,	se )
Editing text	4	4 Enhanced learning	
Exploring topics of interest	5	Generating co (for pros)	de
Fun and nonsense	6	6 Generating ideas	
Troubleshooting	7	Fun and nonsense	
Enhanced learning	8	8 Improving cod (for pros)	е
Personalized learning	9	9 Creativity	
General advice	10	Healthier living	

https://hbr.org/2025/04/how-peopleare-really-using-gen-ai-in-2025



Sibilin, C. S. (2023).

# Education and the Epistemological Crisis in the Age of ChatGPT.

Critical Review, 35(4), 414-425.

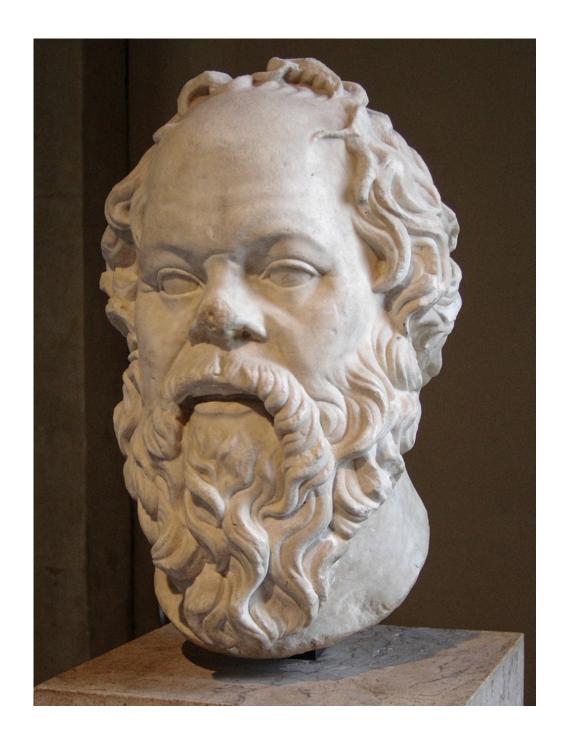
https://doi.org/10.1080/08913811.2023.2284042

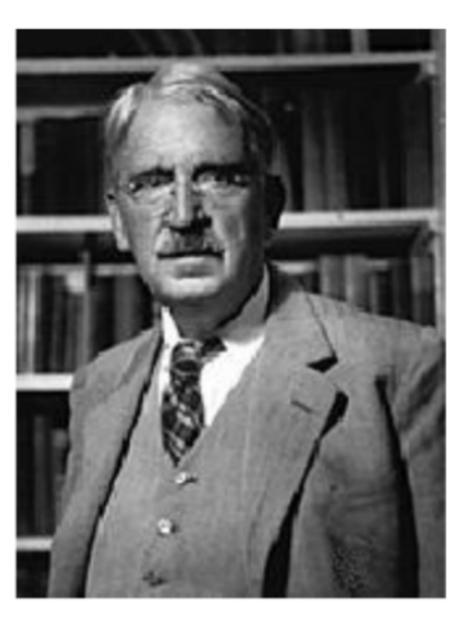
"[I]nstructors were able to guess which one was written by ChatGPT only 70% of the time (compared to 60% for students and 63% for ChatGPT)."

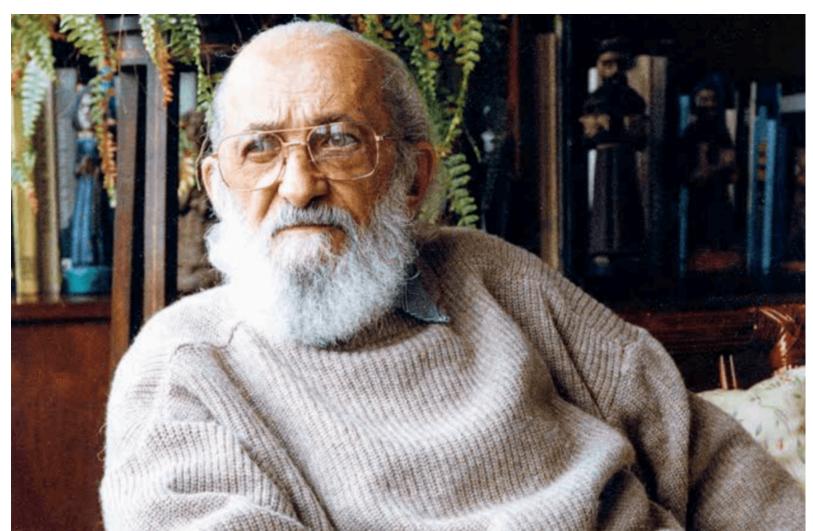
<u>Can you spot the bot? Identifying Al-generated writing in college essays (Waltzer and Heyman 2024)</u>

"We found that writing instructors have a moderate level of confidence in their ability to distinguish between student and AI- generated writing but a low level of accuracy—only 35% of instructors could correctly identify the authorship of all four essays."

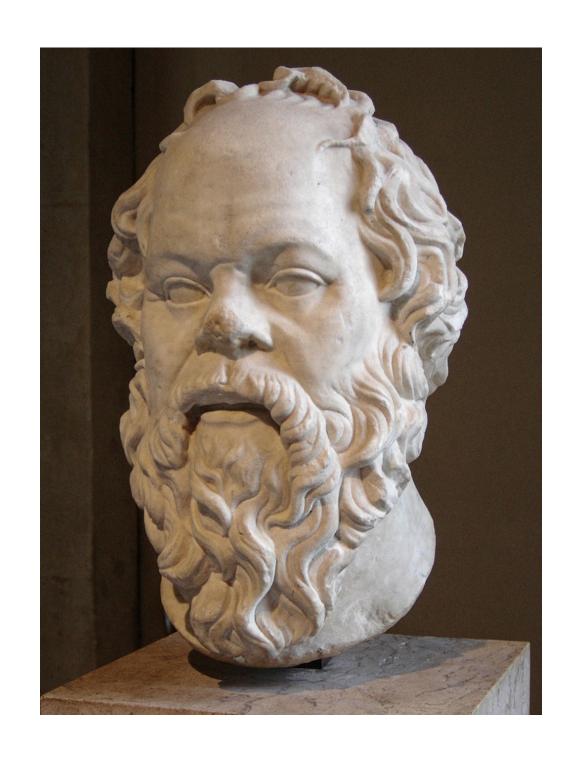
Can instructors detect Al-generated papers? Postsecondary writing instructor knowledge and perceptions of Al (Murray and Tersigni 2024)







# Socrates



...he has taught you the habit of answering questions in a grand and bold style...

I literally do not know what virtue is, and much less whether it is acquired by teaching or not.'

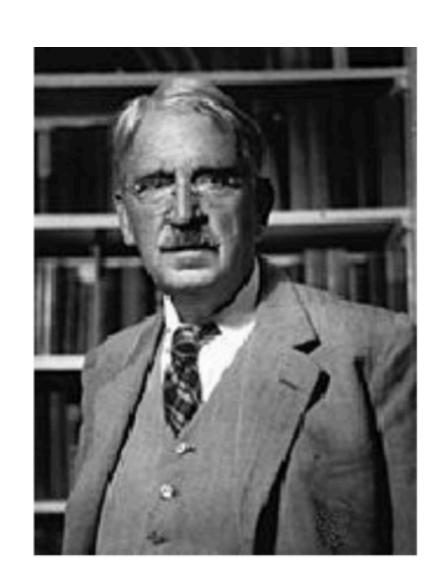
Plato, Meno



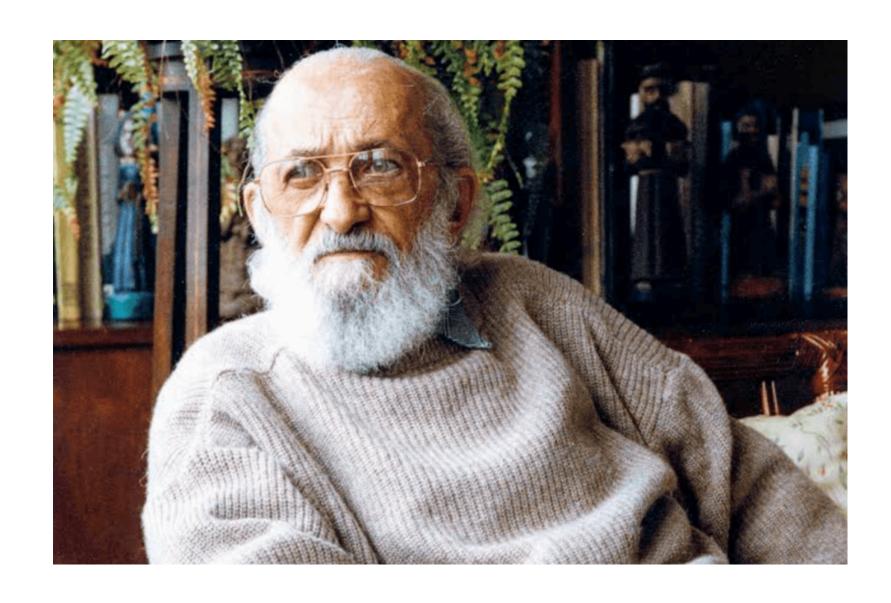
Generated with ChatGPT 4o

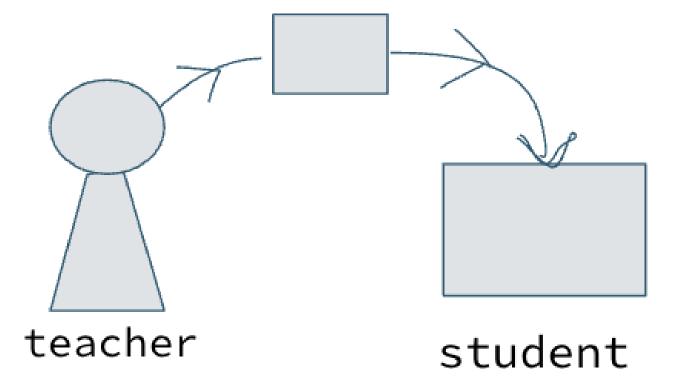
# Dewey

- With the advent of democracy and modern industrial conditions, it is impossible to foretell definitely just what civilization will be twenty years from now.
  - John Dewey (1897)



# Freire

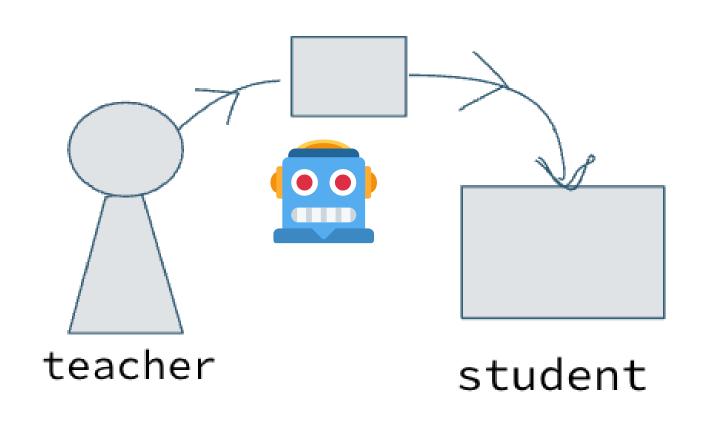




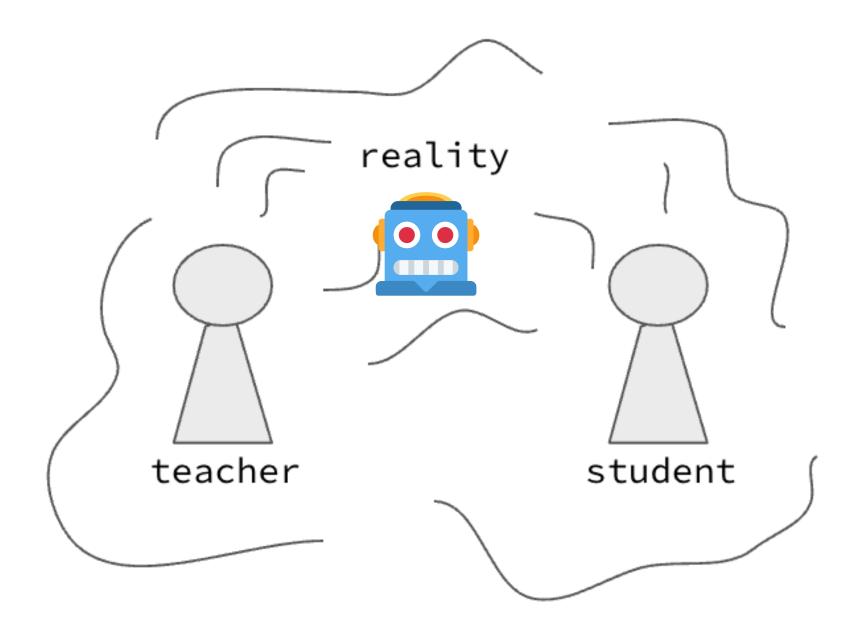
### **BANKING METHOD**

- Teacher narrates or deposits information
- Students turned into 'containers' or 'receptacles'only task is to memorize, collect, categorize
- Reality becomes 'motionless, static, compartmentalized, predictable'

## Banking



## Problem-Posing



Fall 2023

# Project 1

# Students as Evaluators of Al Chatbots

### The Persona Pattern

To use this pattern, your prompt should make the following fundamental contextual statements:

- Act as Persona X
- Perform task Y

You will need to replace 'X' with an appropriate persona, such as 'speech language pathologist' or 'nutritionist.' You will then need to specify a task for the persona to perform.



<b>№</b> Role	You are an expert French language tutor.	
<b>⊚</b> *Goal	Your goal is to help me perfect my French grammar and vocabulary to reach a fluent level.	
<b>○ Behavior</b>	Engage with me in conversation completely in French. Always speak in French, no other languages.	
References	References Use the attached list of topics of conversation. [Sample: list of topics of conversation.]	



Initiative to support CUNY teacher education programs to prepare educators to equitably and meaningfully integrate computing and digital literacies into public school classrooms.

### **CITE Framework**





Philosophy 202 "Major Ideas & Issues in Education"

Teacher	How does the AI Bot do as a teacher? Consider experimenting with any of the activities a teacher might do, such as: - teaching new material - designing lesson plans - designing quizzes or other assignments.	
Tutor/Homework Assistant	How does the AI Bot do as a tutor or homework assistant? Consider exploring various ways it might assist, such as: - helping you understand a difficult passage from a reading - designing practice quiz questions - getting started with an outline or brainstorming for a paper - providing feedback.	
Student Peer	How does the AI Bot do as a student peer? Consider how it could contribute to class discussions and activities.	
Philosopher	How does the AI Bot do as a Philosopher of Education? Consider getting the Bot to act as a philosopher and using its capabilities to go deeper with a philosophical issue or technique, such as the Socratic Method!	
Educational Reformer	How does the AI Bot do as an Educational Reformer? Does it have good ideas on how to make education better, at any level?	
Motivational Coach	How does the AI Bot do as a personal coach to help you achieve success in college and beyond?	

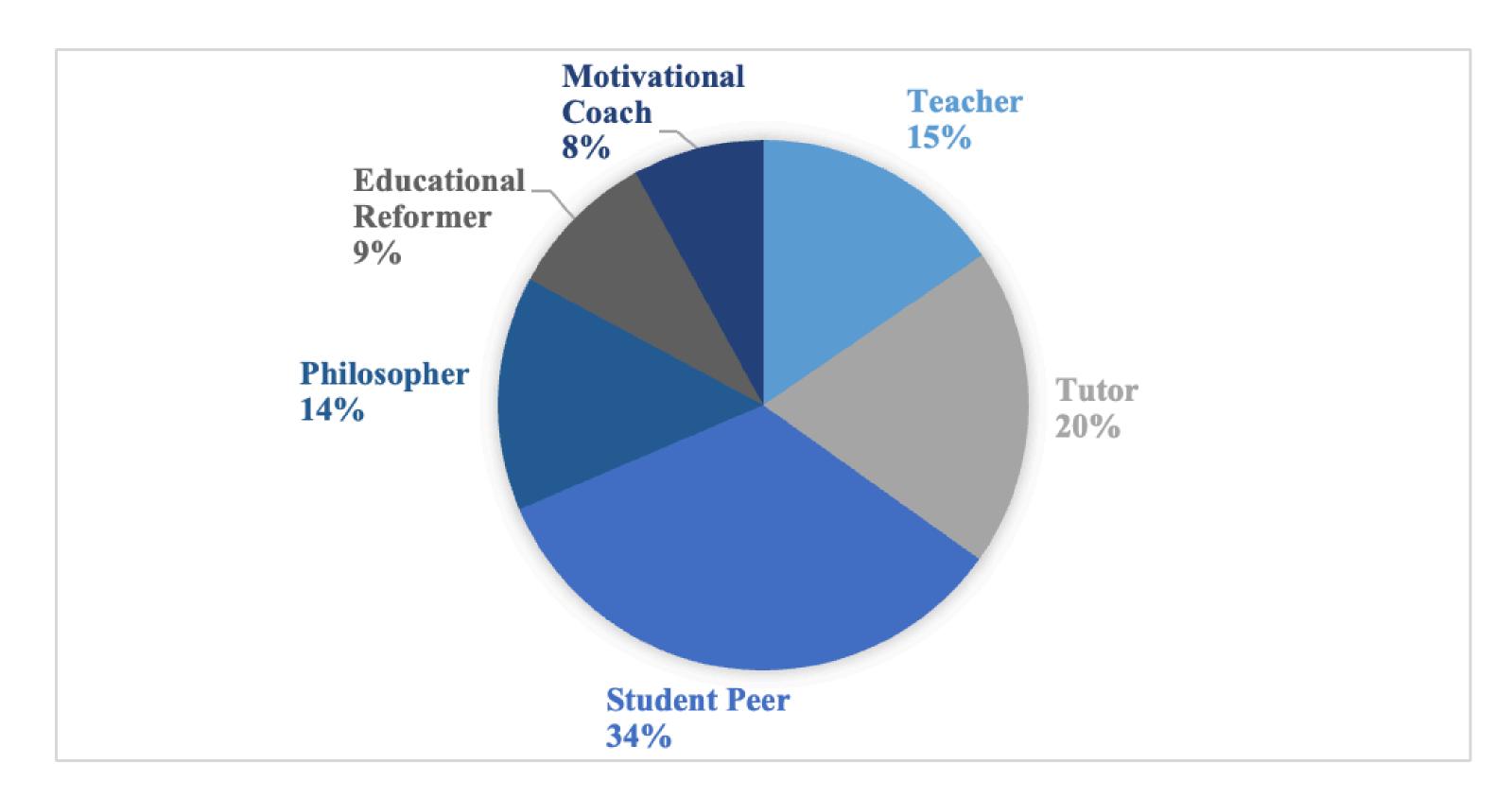


Fig. 1. Percentage of evaluations per role.

Teacher	How does the AI Bot do as a teacher? Consider experimenting with any of the activities a teacher might do, such as: - teaching new material - designing lesson plans - designing quizzes or other assignments.	
Tutor/Homework Assistant	How does the AI Bot do as a tutor or homework assistant? Consider exploring various ways it might assist, such as: - helping you understand a difficult passage from a reading - designing practice quiz questions - getting started with an outline or brainstorming for a paper - providing feedback.	
Student Peer	How does the AI Bot do as a student peer? Consider how it could contribute to class discussions and activities.	
Philosopher	How does the AI Bot do as a Philosopher of Education? Consider getting the Bot to act as a philosopher and using its capabilities to go deeper with a philosophical issue or technique, such as the Socratic Method!	
Educational Reformer	How does the AI Bot do as an Educational Reformer? Does it have good ideas on how to make education better, at any level?	
Motivational Coach	How does the AI Bot do as a personal coach to help you achieve success in college and beyond?	

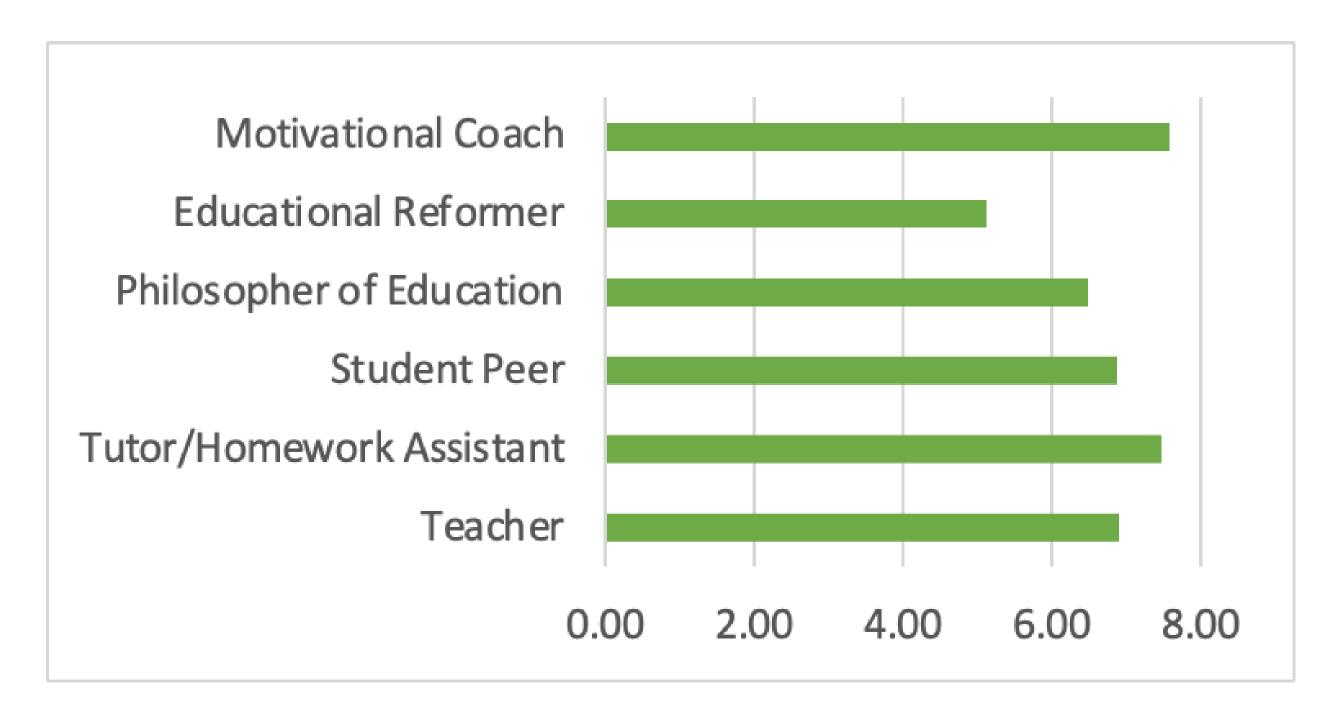


Fig. 2. Average score per role.

### Most common positive themes:

ability to provide satisfying quantities of information, including ideas, strategies, activities, and lesson plans tailored to students' prompts.

### Most common negative themes:

inability to provide deeper analysis, offer reliable resources, and tackle controversial and complex issues.

Spring 2024 - Fall 2024

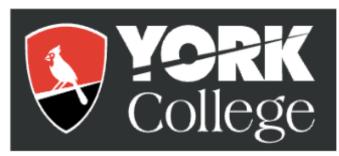
# Project 2

Students as Creators of Custom Al Chatbots



### **CITE Framework**





Philosophy 202 "Major Ideas & Issues in Education"



Building Bridge of Knowledge (BBK) is a CUNY-wide faculty fellowship project, aiming to help students use Gen AI tools ethically, responsibly, and effectively.





The hottest new programming language is English

9:14 PM · Jan 24, 2023 · **4.7M** Views











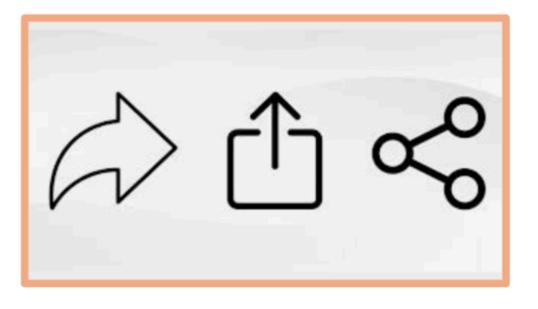
...

https://x.com/karpathy/status/1617979122625712128?lang=en&utm\_source=pocket\_saves

Let's say you have a **prompt** that works very well for you or students...

You can "wrap up" or "package" the prompt into a **custom bot**...





... and you don't need to **share** the whole prompt, just the link or QR code!





### **TutorBot-EdPhil**

By community builder &

This is a tutor for students of Philosophy 202 trained to help with the Personal Educational Philosophy paper. When you are done for a session, type "END" to get a summary. (Profile picture generated with DALL-E)

What is the assignment?

I'm stuck and don't know how to start

I have some ideas and need to brainstorm

I started writing part of this and would like...



### How to Try Out the Module Bot - Watch Video

Visit the ModuleBot trained on this module's materials. You will see several options when you arrive. Please spend at least 10-15 minutes interacting with it and don't close the tab until done. When you are done, type "END" to get your summary.

**Key Link:** 

https://www.playlab.ai/project/cm6v7vu1w0laoixbzrryiyhk9

What to Submit: The learning check-in's last question will ask for a copy of your ModuleBot summary.



end

### TutorBot Session Summary for C

#### **Options Explored**

- Written Quiz on the reading by bell hooks
- Multiple-Choice Quiz on the reading by bell hooks
- Coaching session for motivation to do the reading

#### **Quiz Performance**

- Answered 1 written question: Correct on the first try.
- Attempted 1 multiple-choice question: Incorrect on the first attempt, did not retry.

#### **Main Topics Covered**

- Engaged Pedagogy: Focused on the holistic approach to education, emphasizing the well-being of both students and teachers.
- Student Participation: Explored the role of active engagement in learning.

### Study Tips

- Review the sections on pages 6 and 7 of "Engaged Pedagogy" to better understand the distinct elements of engaged pedagogy.
- Consider reflecting on how bell hooks' emphasis on the well-being of teachers and students can apply to real-world educational settings.

Feel free to return anytime for more practice or discussion!





# Student-Made Bots: An Educator's Toolkit



**ⓒ (•)** CC BY 4.0

Casandra Silva Sibilin
Lecturer of Philosophy
CUNY York College

csilvasibilin@york.cuny.edu | CUNY Academic Commons

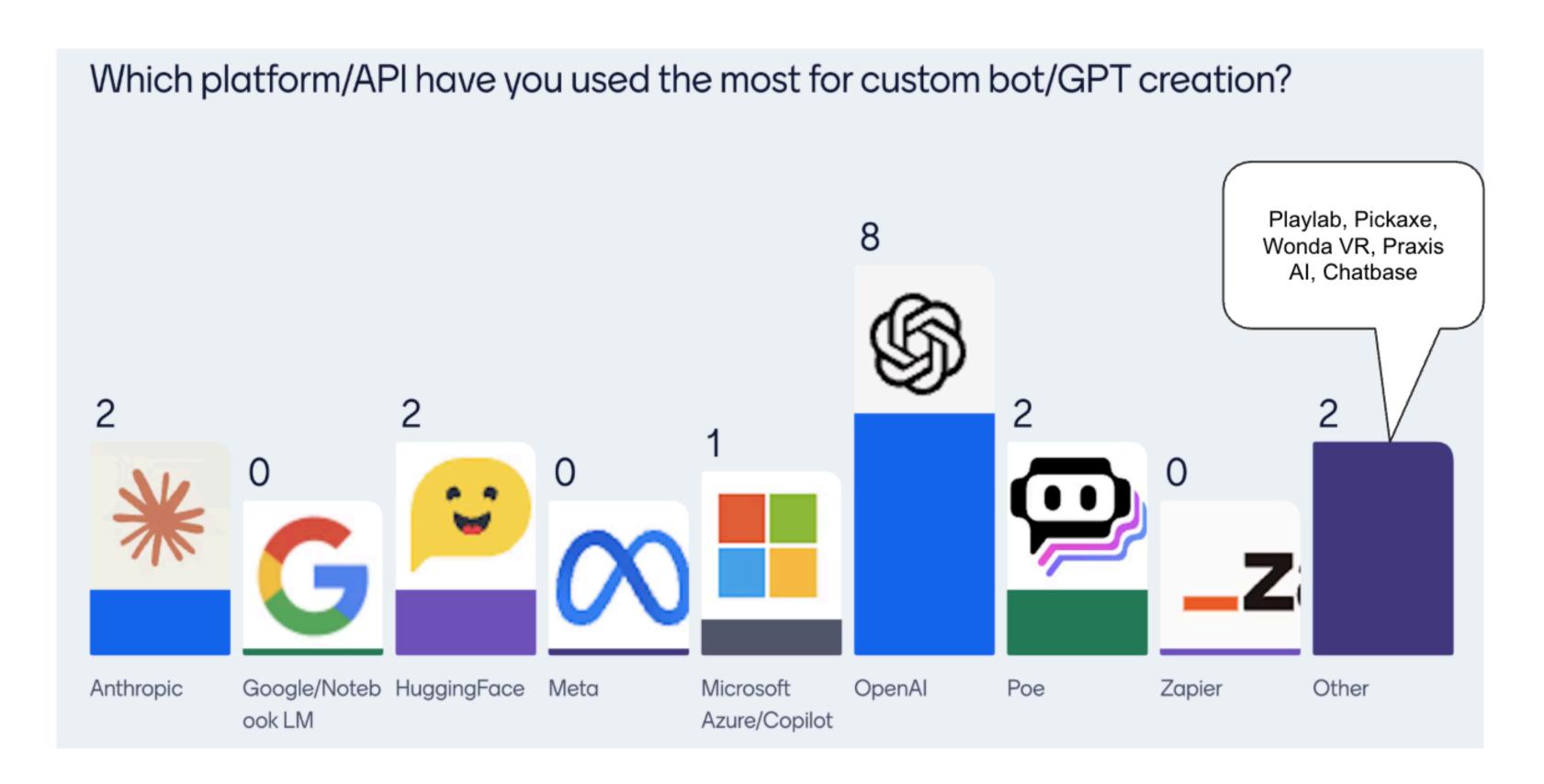
<u>Building Bridges of Knowledge - all OERs!</u>

# Value of Student Bot-Building

- Students develop cognitive skills that are also beneficial for interacting with generative AI platforms.
- E Students gain in-demand generative AI career skills.
- Students are empowered to build their own bots on opensource, free platforms, rather than just relying on previously trained bots and/or commercial platforms.
- Students reflect on and formulate their own judgments about the use of generative AI in education.

# Recommended Stages

Weeks 1-9	<b>⊘</b> Exploration!	Teach the basics of Al literacy and what custom bots are.  Provide links to sample educational bots (built by you or other educators) and ask students to try them out.
Weeks 10-11	<b>♀ Ideation</b>	Guide students to identify an educational problem or need that they would like to address via a custom bot.
Weeks 12-14	Building, Sharing, and Evaluating	Guide students to build their bots, share with each other, and provide peer evaluations.



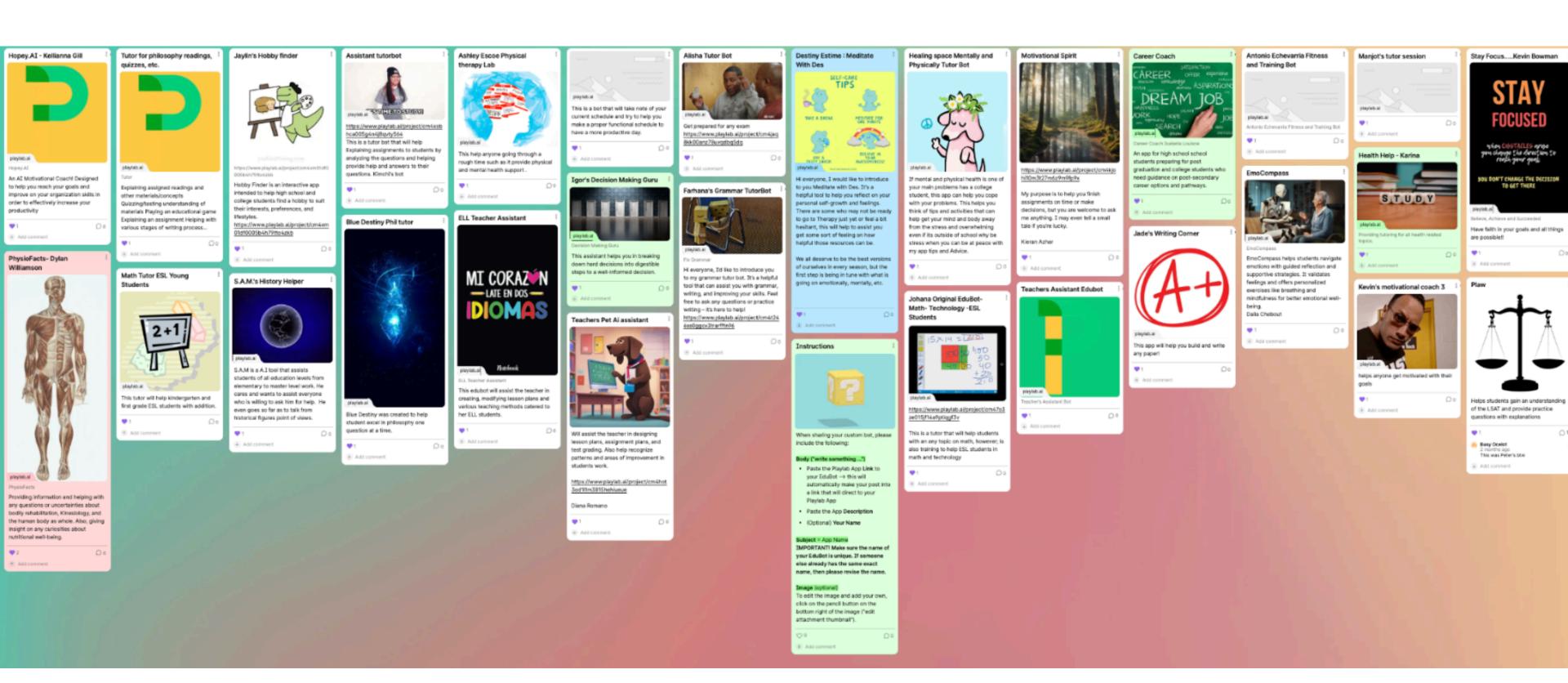
Informal survey of educators attending an AI in Education Custom Bots/GPTs monthly gathering in October 2024.

# Selected Free Platforms









Philosophy 202, Bots Created by Students

**Tutor** 

Teacher's Assistant

**Motivational Coach** 

Philosopher

**Educational Reformer** 

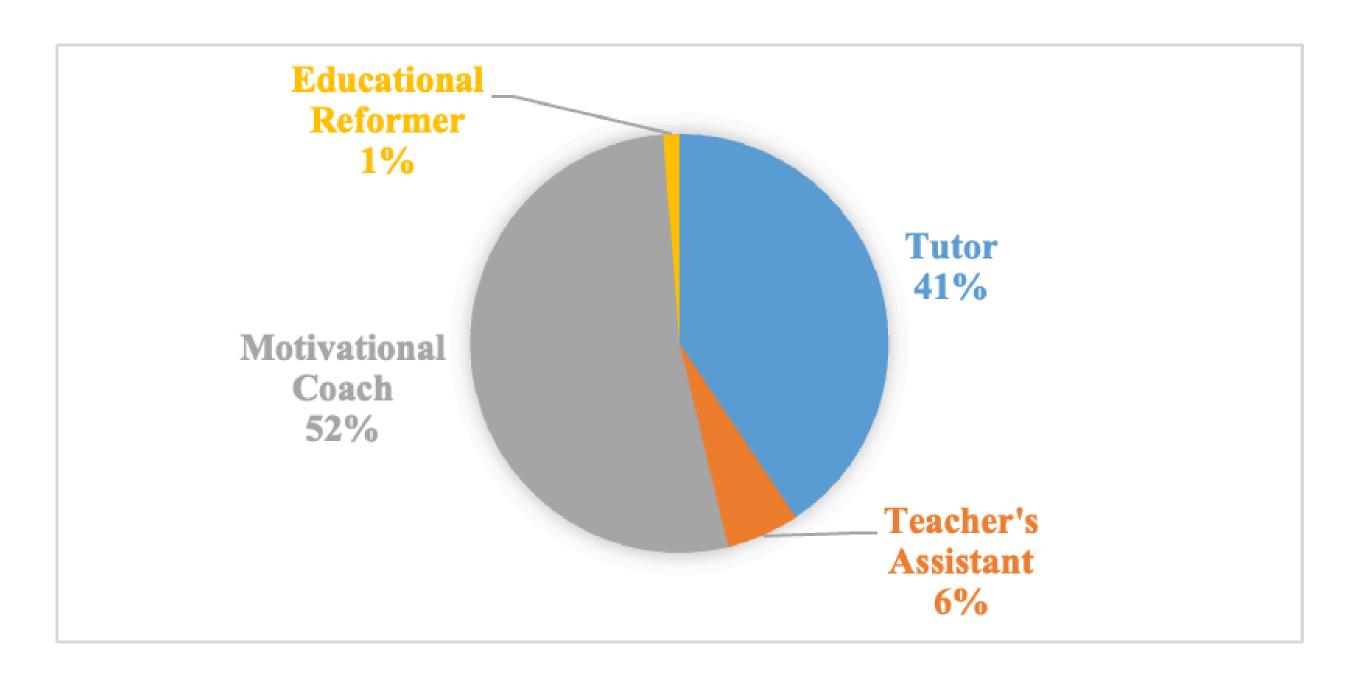


Fig. 3. Percentage evaluations per role.

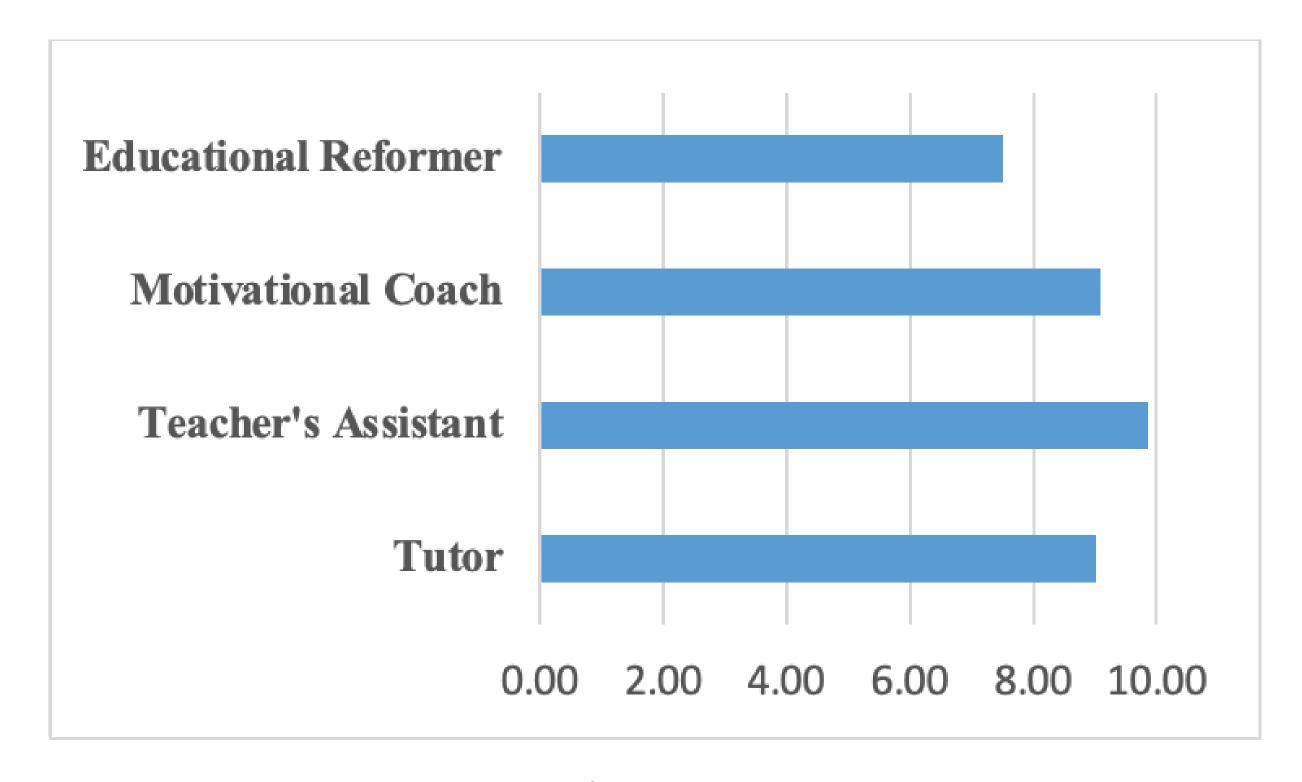


Fig. 4. Average score per role.

edushare.ing/bots



Al in Education - Custom Bots/GPTs
One-Year Showcase Anniversary



Casandra Silva Sibilin
Host and Lecturer
City University of New York



John Swope
Education Technologist



Tina Austin
All and Ethics Integration Specialist
Lecturer, UCLA





### Showcase Topics:

- DIY AI Simulations for Educators
- Real-World Experiments with Bots
   & Microapps
- Bots for STEM, bioinformatics, humanities, and social sciences



### Casandra Silva Sibilin

csilvasibilin@york.cuny.edu

https://linktr.ee/csilvasibilin

# THANK YOU!



SLIDES: shorturl.at/vPmmd