

Generative Artificial Intelligence for Teachers

**Frameworks, Use Cases, and
Opportunities for Professional Growth**

Alessandro Iannella

University of Cagliari, University of Pisa; Independent Scholar

*Designing and Implementing Gamified Learning Experiences
for Higher Education*

Salerno, October 10, 2024

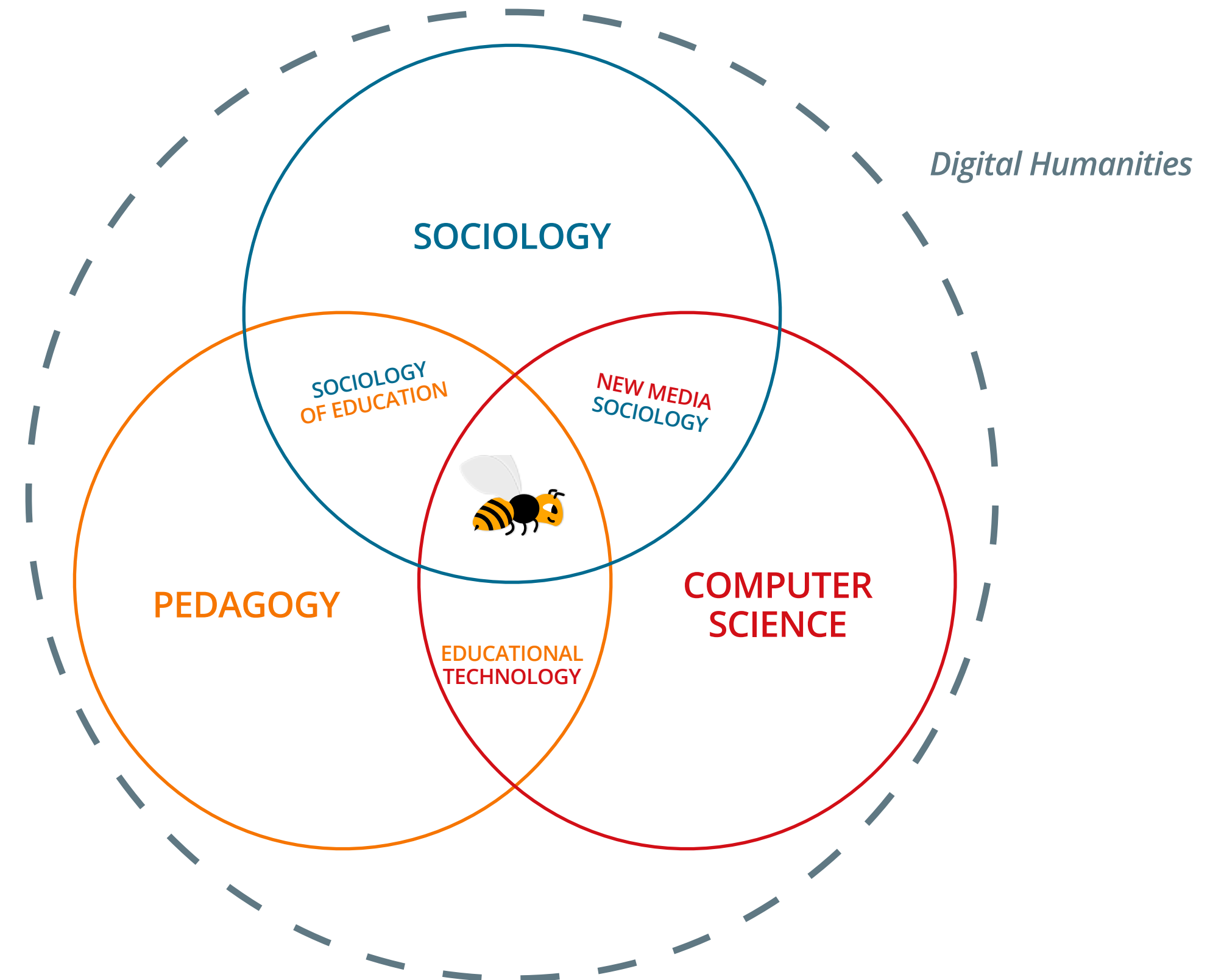


About Me

I have a background in **digital humanities**, with a focus on knowledge management, instructional design and educational innovation.

Since 2018, I have been teaching as an **Adjunct Professor** in Computer Sciences, Sociology of New Media, Pedagogy and Special Education.

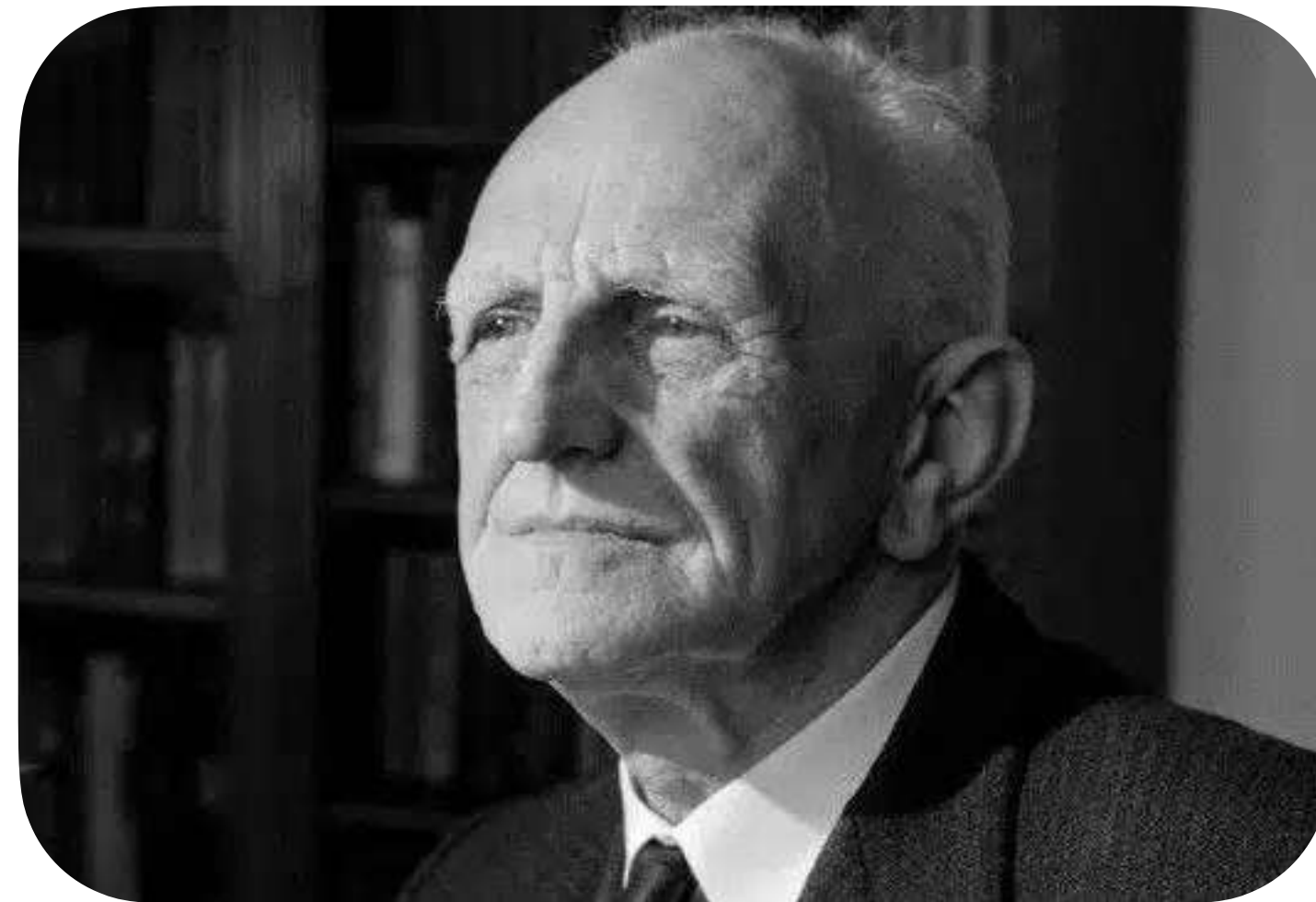
As a freelancer, I work with **research centers**, publishing houses, and **Public Administration**, primarily in the area of professional development.



Standing on the Shoulders of Giants



Lev Semënovič Vygotskij
psychologist



Donald Woods Winnicott
paediatrician and psychoanalyst



Sherry Turkle
sociologist

The Relationship with Generative AI



The Explorer



The Team



*The Transitional
Object*



The Eyeglasses



The Mirror

Sappho the Poet

'Sappho the Poet' is a conversational agent for teaching and learning Greek literature intended for students in the second two years of the Italian **Liceo Classico** (Classical High School). It offers information on the **life, work, poetics** and **literary fortune** of the Tenth Muse.

It is part of an **instructional model (DICO)** aimed at **fostering dialogue in the classroom context**. The model is structured in three phases: (1) assignment of a thematic **task**; (2) individual **interaction** with the conversational agent; (3) **discussion** between teacher and students centered on the topic of the task and supported by the learning analytics collected during the interaction phase.



Sappho the Poet

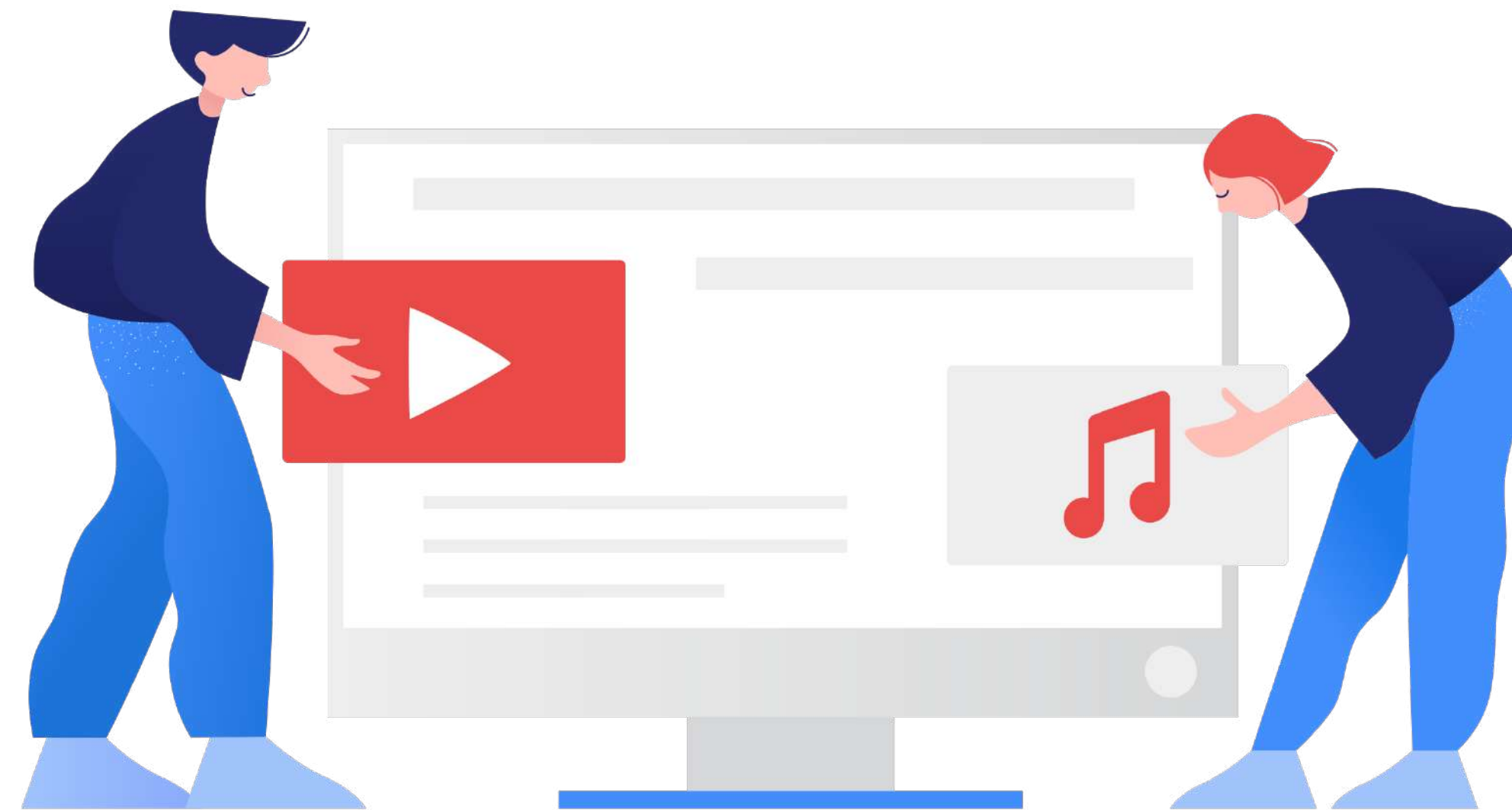
'Sappho the Poet' is available as a bot for Telegram. It provides a text interface with Speech-To-Text (STT) and Text-To-Speech (TTS) possibilities and offers multimedia content such as voice notes, interactive maps, images, videos, links and suggestion chips.

Until June 2023, it was available as an action for Google Assistant, with text and/or voice interface and the possibility to interact via smart speakers as well.



Hey Google, posso parlare con la poetessa Saffo?





“Sappho the Poet”

<https://vimeo.com/694036115>

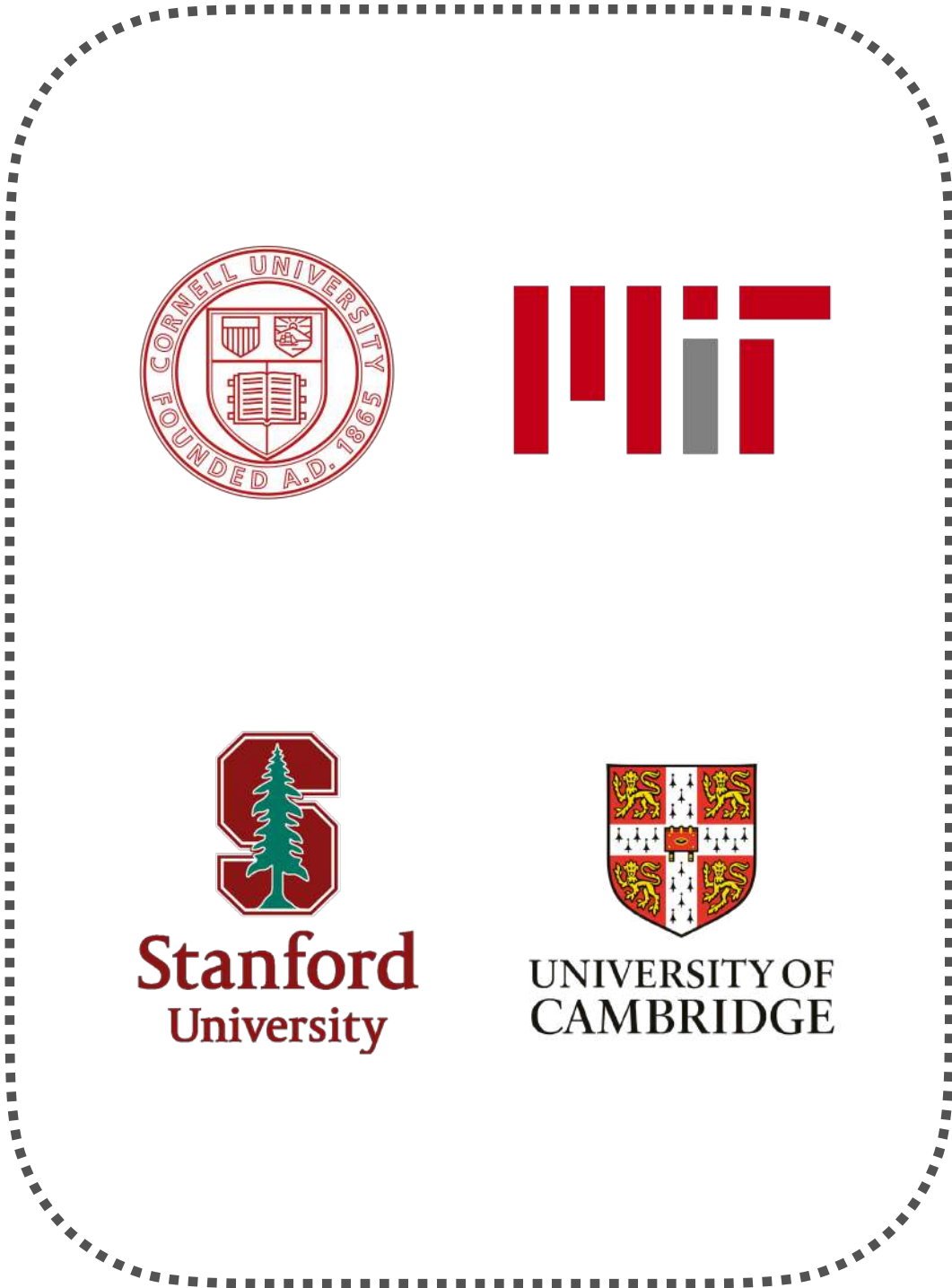


Background

AI in Education



Organizations/Institutions



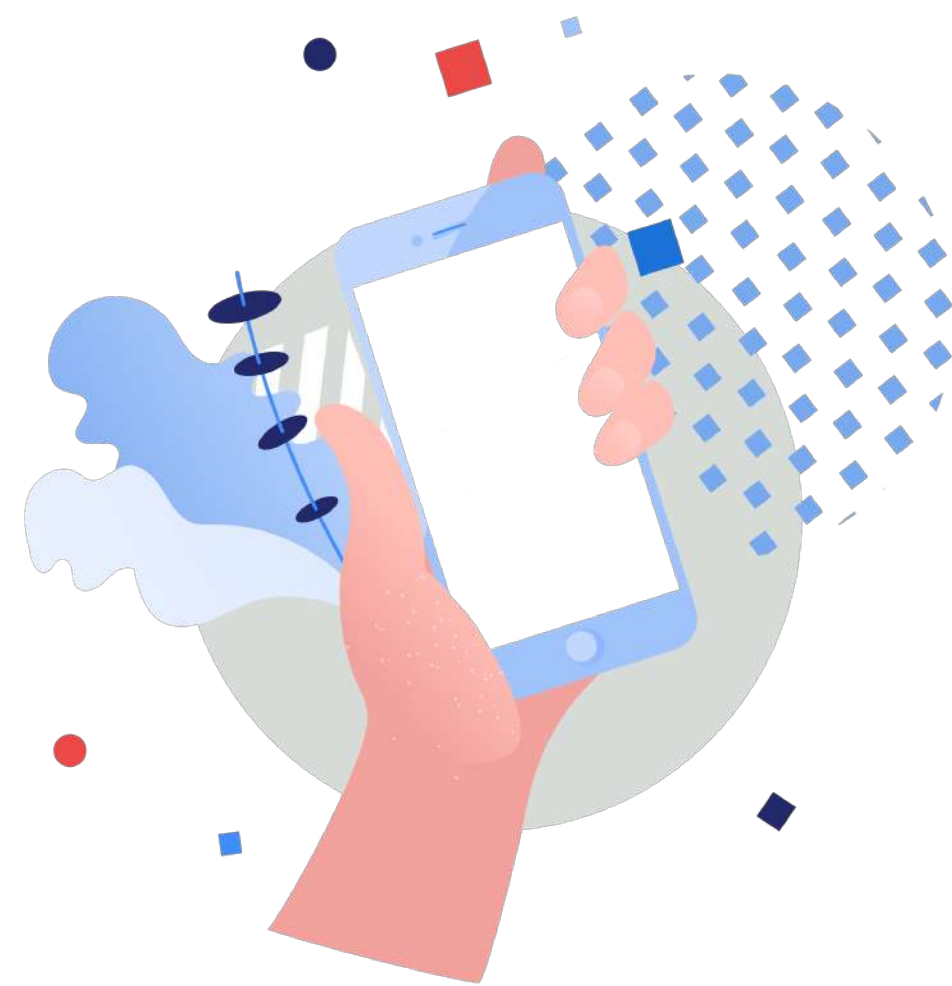
Universities



Scientific Research



Tech Companies



**At your
fingertips**

Collection of guidelines, papers and resources



<http://tiny.cc/Aldocs>



Indian Journal of Educational Technology
ISSN 2532-4632 (print) • ISSN 2532-7720 (online)
Accepted Manuscript Online
DOI: 10.13471/2499-4324/1330
<https://jeat.iti.ac.in>

ALESSANDRO IANNELLA

HOW TO CITE Iannella, A. (2024). The transitional space. Generative Artificial Intelligence as an opportunity for growth. *Italian Journal of Educational Technology*. Accepted Manuscript Online. doi:10.17471/24943724/1330

Iannella, 2024

1

Il digitale e le discipline umanistiche

Interagire con l'Intelligenza Artificiale: Proposte Didattiche per la Storia dell'Arte e la Letteratura

PDF

Iannella, 2022

0

In: Conversational Agents
As Online Learning Tutors
Editor: Guglielmo Trentin
ISBN: 978-1-53619-489-6
© 2021 Nova Science Publishers, Inc.

Chapter 5

RECLAIMING CONVERSATION: INTRODUCING A NOVEL APPROACH TO USING CONVERSATIONAL AI AT SCHOOL

Iannella et al., 2021

1

+

Generative AI: an Introduction

Gino Roncaglia - Università Roma Tre

TEXT

IMAGES

BLOGGARE

prezi.com

1109_Roncaglia

0

4E

**Asso di Pandora,
Scorciatoia,
universo**

iro Iannella
à degli Studi di Cagliari, Università degli Studi di Macerata;
dent Scholar

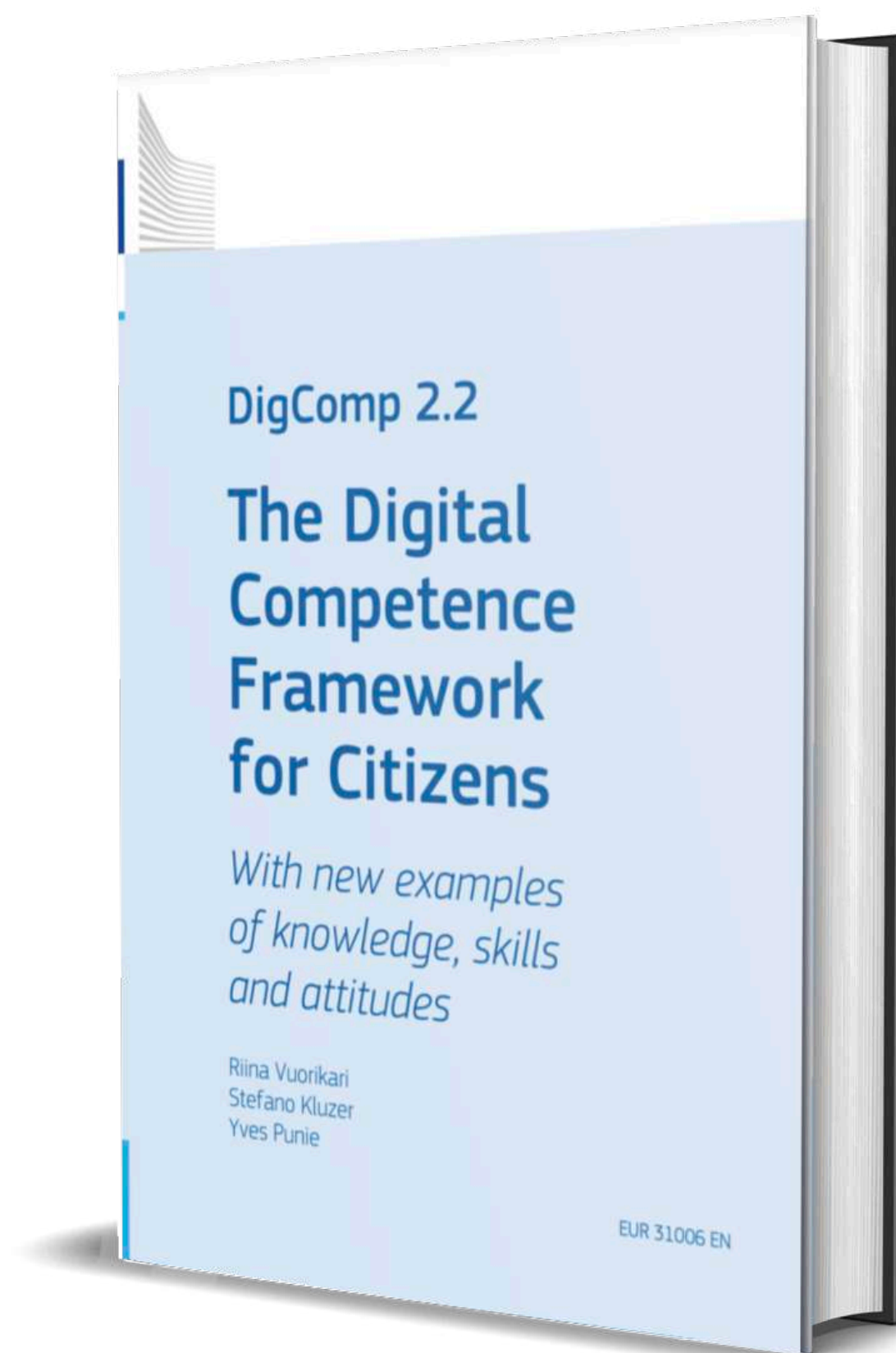
Intelligenza Artificiale Generativa - Conoscenza e Apprendimento
Università degli Studi di Roma UnitelmaSapienza

PDF

1109_Iannella

0

EU • DigComp 2.2



77

A2. CITIZENS INTERACTING WITH AI SYSTEMS

Main authors: Riina Vuorikari, Wayne Holmes

Today, for citizens to engage confidently, critically and safely with new and emerging technologies, including systems driven by artificial intelligence (AI), they need to acquire a basic understanding of such tools and technologies (DEAP2).

Greater awareness will also lead to improved sensibility towards potential issues related to data protection and privacy, ethics, children's rights and bias – including accessibility, gender bias and disabilities. The DigComp 2.2 update addresses the topic of citizens interacting with AI systems rather than focusing on the knowledge about Artificial Intelligence per se (see Box 6).

The co-creation process of the 2.2 update resulted in a list of more than 80 examples of knowledge, skills and attitudes related to citizens interacting with AI systems (see more about the process in FIG.9). 35 are included in Dimension 4 so that each DigComp competence area has a number of examples that illustrate various aspects to pay attention to when citizens interact with AI systems. The selection was guided by the feedback collected through public validation.

Additionally, a separate appendix on this new topic was created. It covers all 73 examples which have been revised according to comments received through the public validation. In this appendix, the examples are thematically grouped so as to facilitate the reading. After each example, the corresponding number to the competence is given. This can help curriculum developers and trainers to get inspired when updating their content regarding new and emerging technologies. The list of examples below should not be considered as a ready curriculum to teach about AI as such. Whereas these examples cover competences outlined in the DigComp conceptual reference model, they leave out some themes and topics that might be considered rudimentary when providing a curriculum outline or a training syllabus about AI and emerging technologies (e.g. what is AI, history of AI, different types of AI).

- A. What do AI systems do and what do they not do?
- B. How do AI systems work?
- C. When interacting with AI systems
- D. The challenges and ethics of AI
- E. Attitudes regarding human agency and control

BOX 6. Requirements for citizens interacting with AI systems

As part of the update process focusing on citizens interacting with AI systems, the requirements gathering captured the following:



KNOWLEDGE

- To be aware of what AI systems do and what they do not do
- To understand the benefits, limitations and challenges of AI systems



SKILLS

- To use, interact and give feedback to AI systems as an end-user
- To configure, supervise and adapt AI systems (e.g. overwrite, tweak)



ATTITUDES

- Human agency and control
- Critical yet open attitude
- Ethical considerations of usage

A little red dot identifies the examples included in DigComp2.2

EU • Report EDEH

The European Digital Education Hub (EDEH) is working on three approaches to the use of AI by teachers:

1. **Teaching for AI:** This involves teaching students to adopt a critical and ethical perspective and to assess the opportunities and benefits, as well as the limitations and risks (e.g., bias, hallucinations) of using AI in society.
2. **Teaching about AI:** This refers to imparting technical knowledge about how AI works (e.g., Machine Learning and Natural Language Processing).
3. **Teaching with AI:** This means employing AI systems to achieve teaching and learning goals.

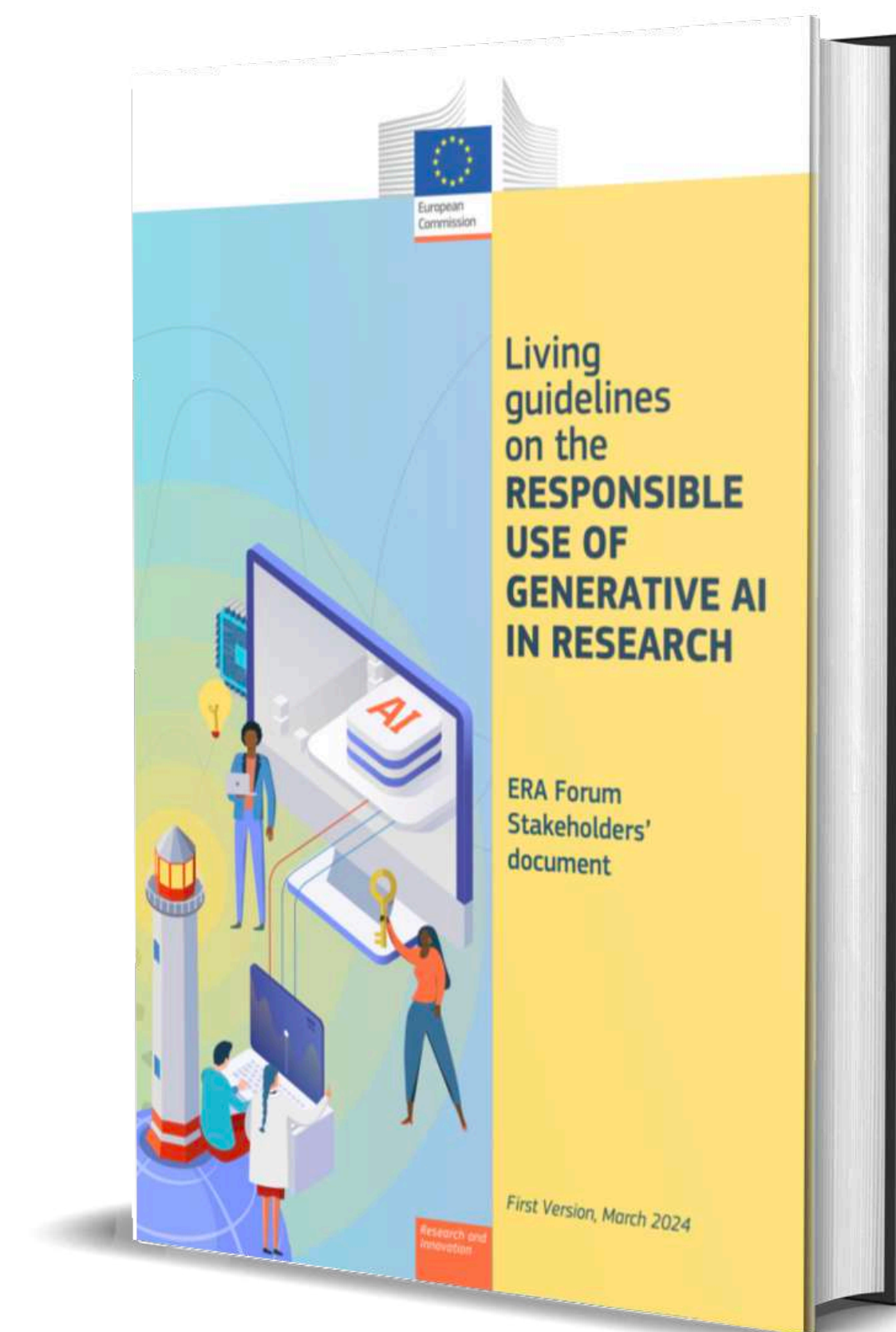


EU • Living Guidelines for Research

European guidelines for a responsible use of Generative AI systems by researchers have recently been published.


Some key points concern:

- **remaining ultimately responsible** for scientific output;
- using Generative AI **transparently**;
- paying particular attention to issues related to **privacy, confidentiality, and intellectual property rights**; **respecting applicable legislation**, including the protection of intellectual property rights and personal data;
- continuously **learning and training** in the use of generative AI tools.



Example

Specific Guidelines on the Use of
Generative AI at Harvard University



HARVARD UNIVERSITY
Information Technology

Find Tools & Services ▾

Report a Problem ▾

About IT ▾

Service Status

Get Help

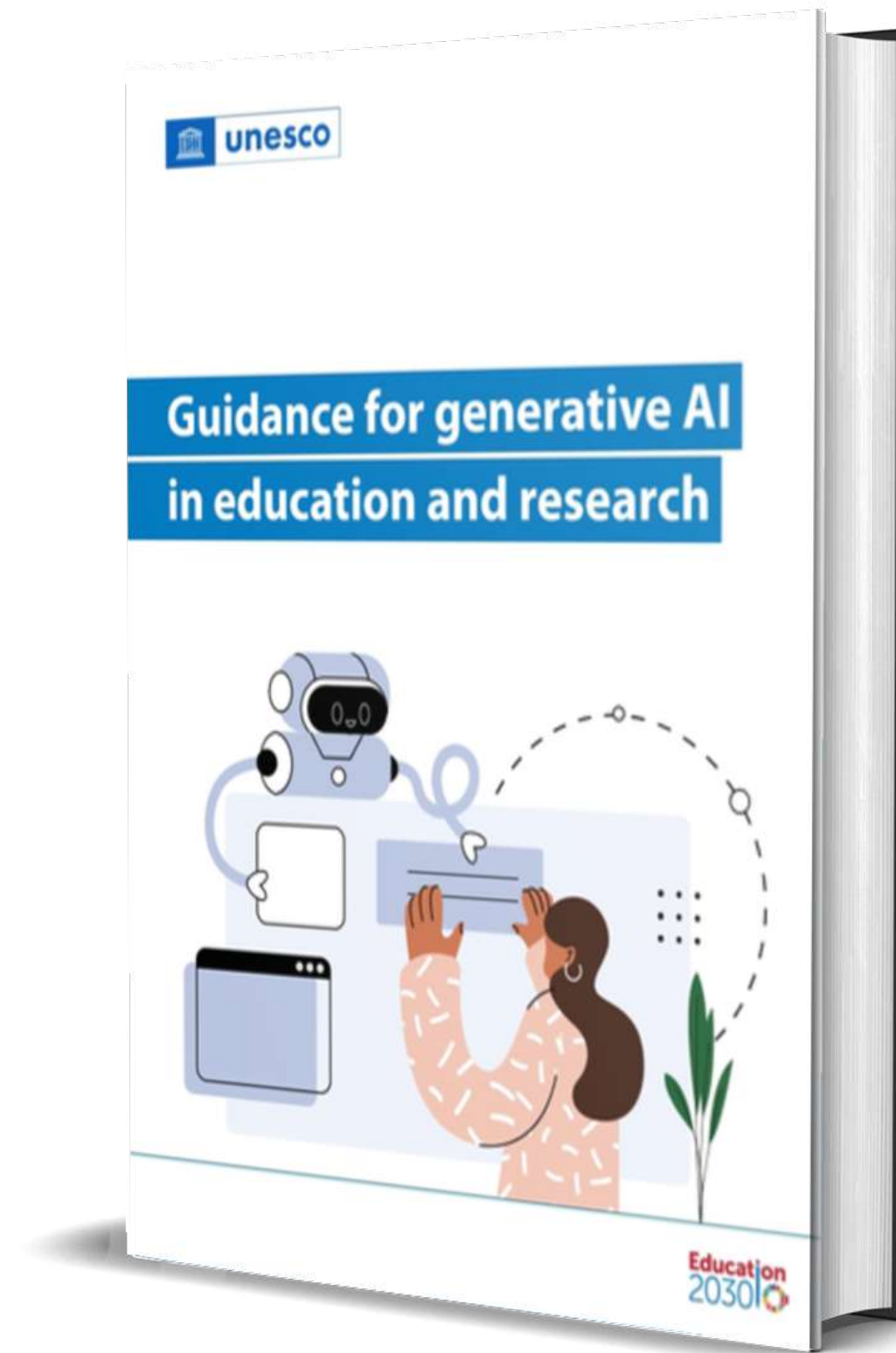
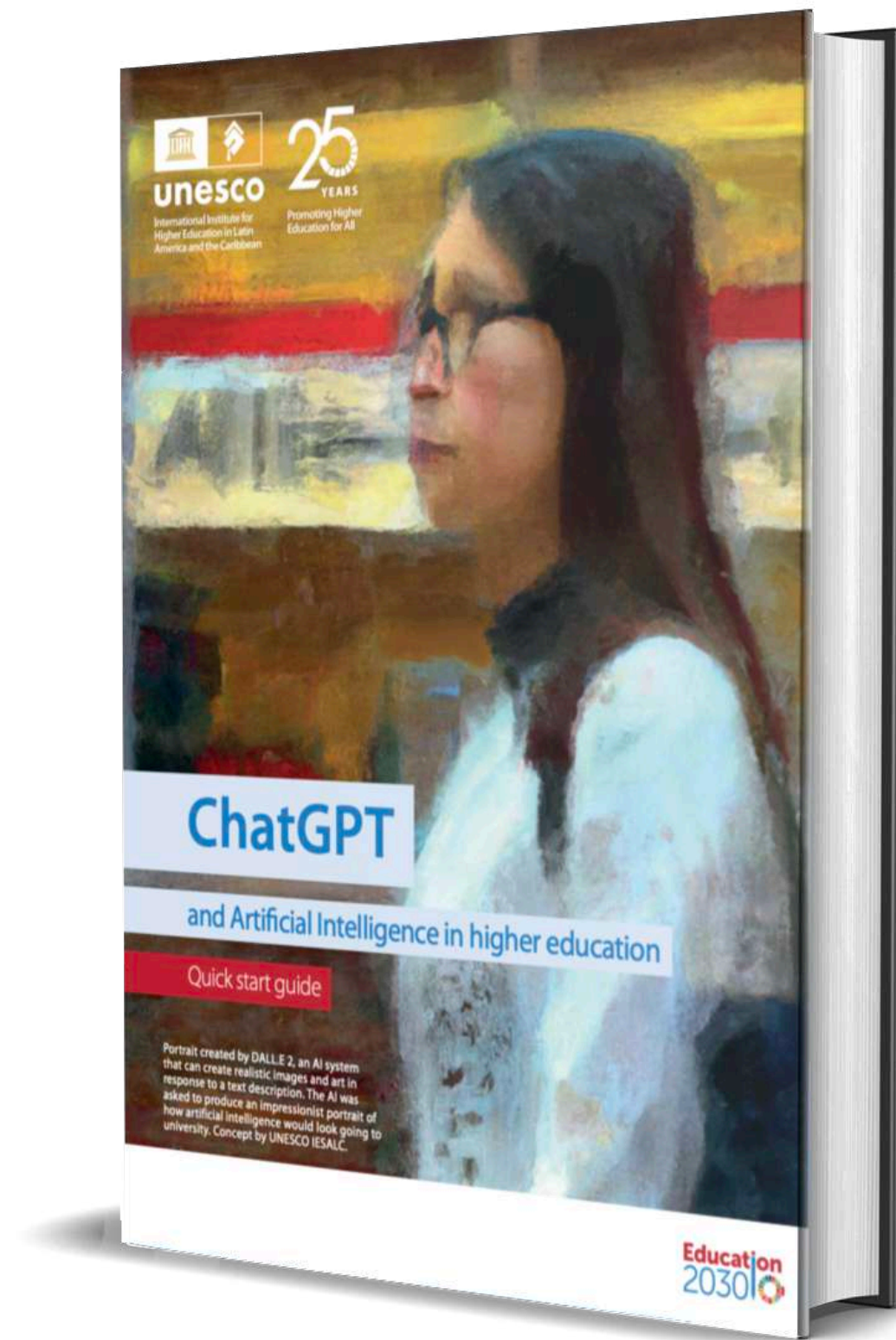
Initial guidelines for the use of Generative AI tools at Harvard

- ➔ Protect confidential data
- ➔ Review content before publication
- ➔ Adhere to existing academic policy
- ➔ Be alert for phishing
- ➔ Connect with HUIT before procuring generative AI tools

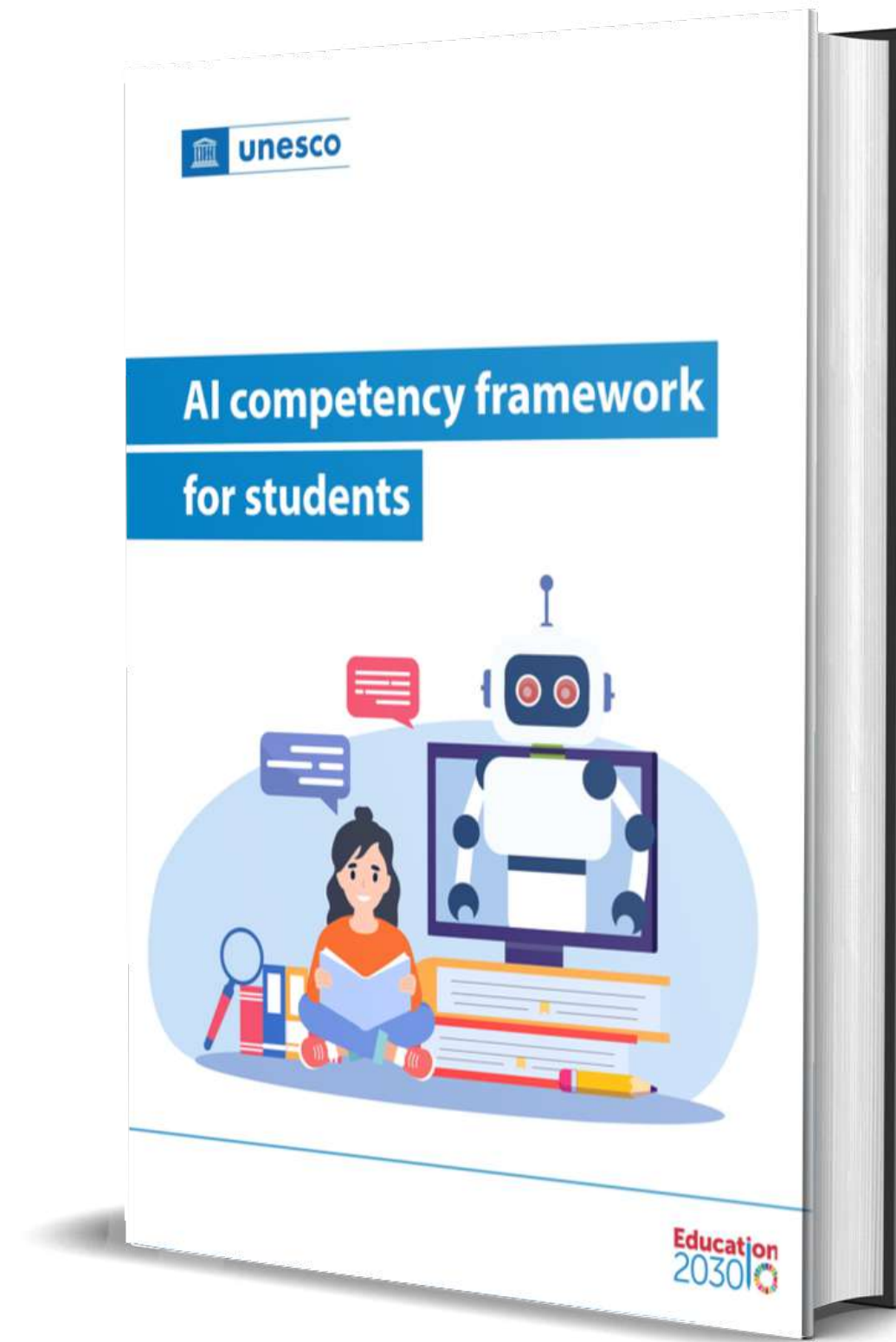
Home / Generative Artificial Intelligence (AI) / **Generative AI Guidelines**

Generative AI is a type of artificial intelligence that can learn from and mimic large amounts of data to create content such as text, images, music, videos, code, and more, based on inputs or prompts. The University supports responsible experimentation with Generative AI tools, but there are important considerations to keep in mind when using these tools, including information security and data privacy, compliance, copyright, and academic integrity.

Global • UNESCO Literature



Global • UNESCO AI Competency Frameworks



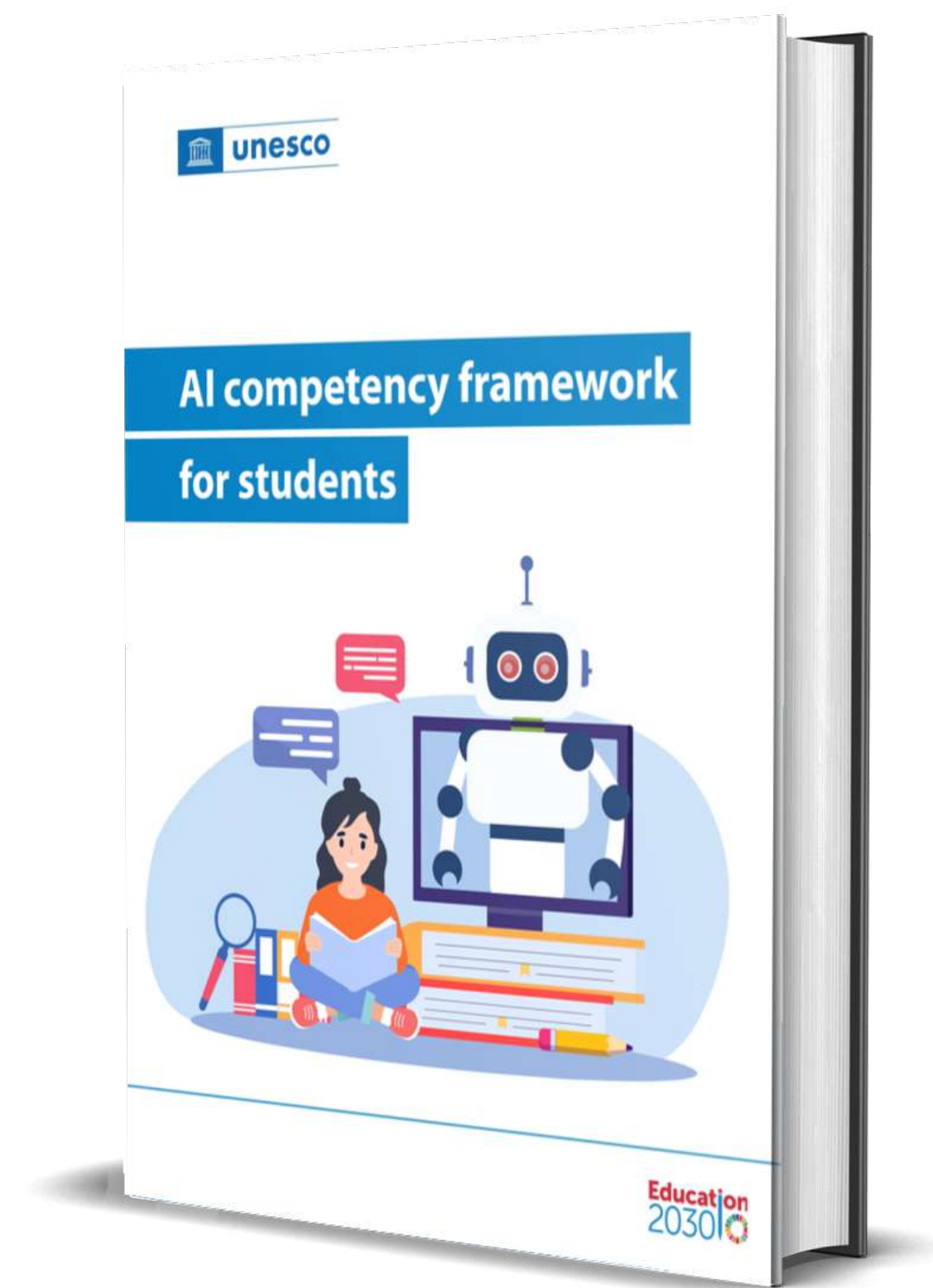
AI Competency Framework for Teachers

Aspects	Progression levels		
	Acquire	Deepen	Create
1. Human-centred mindset	Human agency	Human accountability	Social responsibility
2. Ethics of AI	Ethical principles	Safe and responsible use	Co-creating ethical rules
3. AI foundations and applications	Basic AI techniques and applications	Application skills	Creating with AI
4. AI Pedagogy	AI-assisted teaching	AI–pedagogy integration	AI-enhanced pedagogical transformation
5. AI for professional development	AI enabling lifelong professional learning	AI to enhance organizational learning	AI to support professional transformation

AI Competency Framework for Students

Aspects	Progression levels		
	Understand	Apply	Create
• Human-centered mindset	Human agency	Human accountability	Citizenship in the era of AI
• Ethics of AI	Embodied ethics	Safe and responsible use	Ethics by design
• AI techniques and applications	AI foundations	Application skills	Creating AI tools
• AI system design	Problem solving	Architecture design	Iteration and feedback loops

UNESCO AI Competency Frameworks





Generative Artificial Intelligence

Generative Artificial Intelligence

Generative Artificial Intelligence (GAI) is a subcategory of AI, falling under the domain of Machine Learning (ML), which focuses on the use of data and algorithms to emulate the way humans learn.

Generative AI specializes in producing new data (e.g., text, images, videos, 3D models, or music) in response to user requests (*prompts*).

The produced data are coherent and/or similar to those provided during a *training phase*.



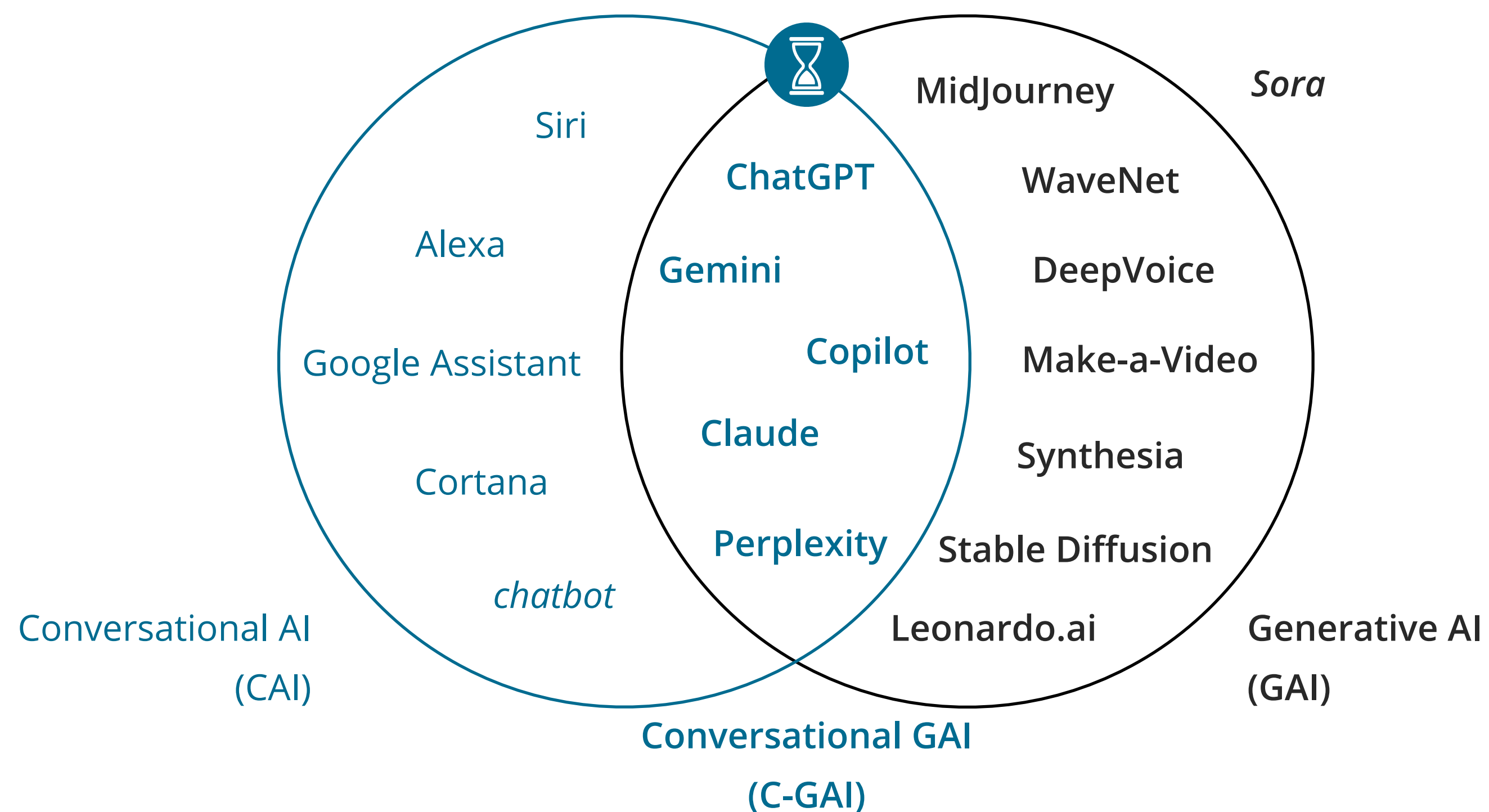
A teacher lectures in a mathematics classroom in the style of Hieronymus Bosch

GAI Systems

General / Multimodal	ChatGPT https://chat.openai.com	Perplexity https://www.perplexity.ai	Copilot https://copilot.microsoft.com	Gemini https://gemini.google.com
Images	Midjourney https://www.midjourney.com		Leonardo.ai https://leonardo.ai	
Audio	Suno https://suno.com		Udio https://www.udio.com	
Videos / Animations	LumaAI https://lumalabs.ai/dream-machine	Hedra https://www.hedra.com/app/characters	Runway https://app.runwayml.com	Hotshot https://hotshot.com
EDU	NotebookLM https://notebooklm.google.com	Diffit https://app.diffit.me	Stanford's Storm https://storm.genie.stanford.edu/	SciSpace typeset.io

Conversational GAI Systems

Some GAI systems use a **dialogic approach**, allowing for **human-like conversation**, and have a **local or prior memory**.

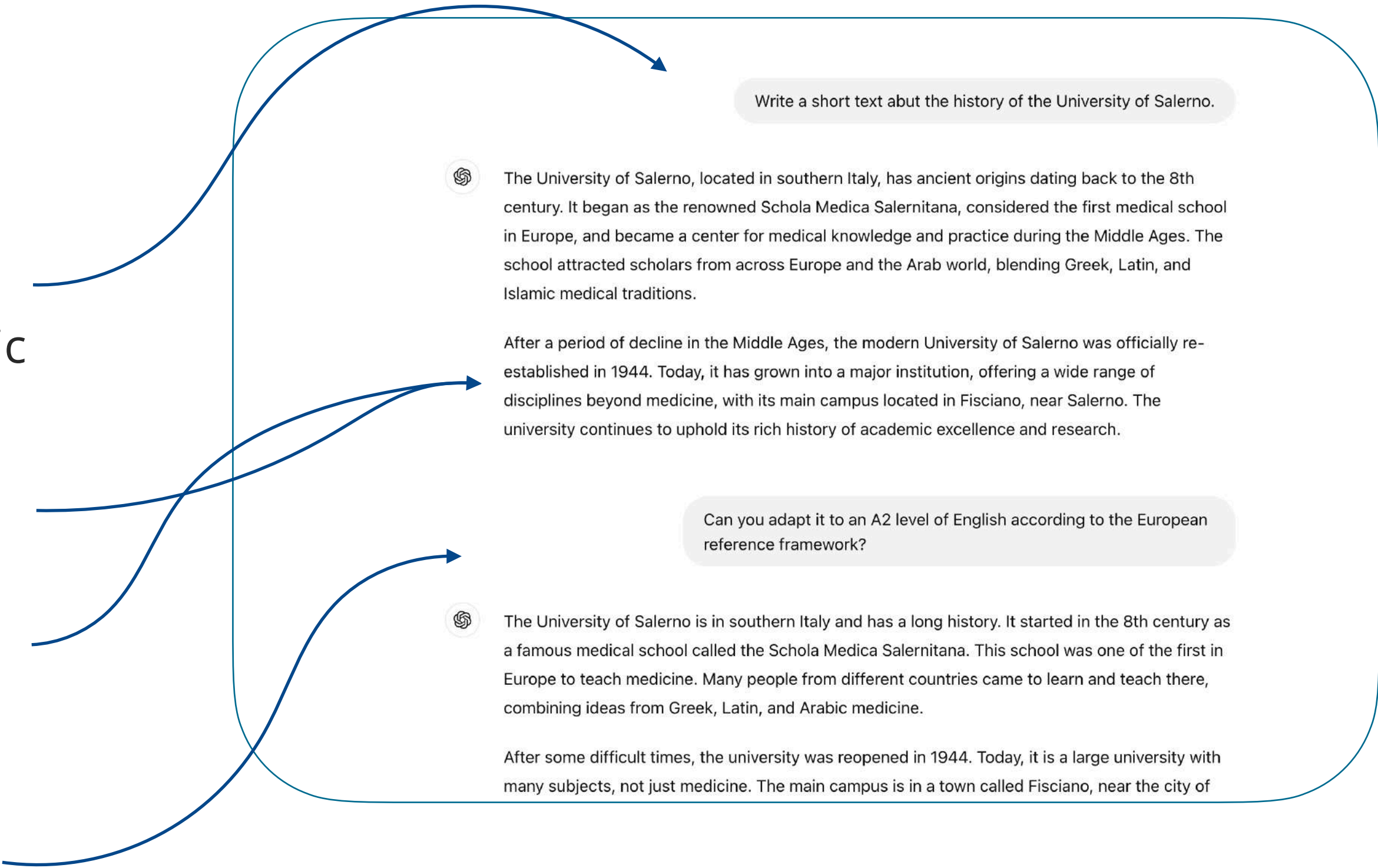


Interaction with GAI Systems

Interaction with GAI systems is divided into the following phases:

- 1. Formulation and forwarding to the system of a **prompt** by the human partner, i.e. of an input, a specific instruction.
- 2. Processing and return of an output by the system in the desired multimedia format.
- 3. Interpretation of the output from the human partner.

Conversational GAI systems involve the **opening of a conversational context**. The phases are linked together in a **circle** and the interaction is dialogic.



Example

Song generated using Suno

Prompt

- A French children's song to learn some Arabic words.

Note

Click on the image to listen to the song.

SUNO

Home

Create

Library

Explore

Search

Invite Friends

30 Credits

Subscribe

What's New? 20

Help

About

Careers


Notifications

X

ig

jd

ms



+

||

playful educational

TenseClavichords589

0

10 octobre 2024 alle ore 10:24 v3.5

[Verse]

Dans le ciel le mot est samā
Les étoiles brillent là-bas
Sur la table un livre c'est kitāb
Apprends avec nous c'est pas un rêve

[Verse 2]

Dans la main un crayon c'est qalam
Écrire des lettres fait plaisir à maman
Écouter la musique c'est samaā
Découvre les mots et danse avec moi

[Chorus]


Apprenons les mots de l'Orient
Chaque jour est une aventure
Des mots à chants de mille couleurs
Un voyage en douce culture

[Verse 3]

Le soleil en arabe c'est shams
Il brille fort au-dessus des dunes d'or
Dans nos cœurs l'amour est ḥubb
Le partage rend les amis plus forts

[Verse 4]

Le lion au zoo s'appelle asad
Il rugit fièrement dans la nuit



La Chanson des Mots Arabes

TenseClavichords589 | 00:15 / ↻

⏮

⏸

⏭

⌛

👍

👎

🔗

⋮

🔊

Example

Video generated using LumaAI

Prompt

- *A group of young people from various cultures strolling along Lake Lugano*



Example

Video generated using LumaAI

Prompt

- *A group of teachers talking to each other in the garden of a university. Around them mountains and hills*



Esempio

Text generated using ChatGPT

- Prompt
- Write a short case study about an incident of Lithuanian domestic politics suitable for students with dyslexia.
 - What strategies did you use?

ChatGPT 4o

Condividi

Write a short case study about an incident of Lithuanian domestic politics suitable for students with dyslexia.

Case Study: The Teacher Strike in Lithuania (2018)

In 2018, teachers across Lithuania went on strike. They were unhappy with their salaries and working conditions. The strike lasted for over a month, affecting many schools. Teachers demanded higher wages and changes to the way their pay was calculated.

The government tried to negotiate with the teachers, offering some increases in salary. However, many teachers felt that the offer was not enough. The strike became a major issue in Lithuanian politics, with both the government and the teachers' union in the spotlight.

As the strike continued, Prime Minister Saulius Skvernelis was criticized for not solving the problem quickly. Eventually, some agreements were made, and the strike ended. This incident highlighted the importance of education in Lithuania and the need for better teacher salaries.

This event shows how public issues can influence politics and government decisions.

What strategies did you use?

For this case study, I used the following strategies to make the content accessible and engaging for students with dyslexia:

1. **Clear and Simple Language:** I avoided complex sentence structures and used straightforward vocabulary to ensure comprehension without overwhelming the reader.

2. **Short Paragraphs:** Breaking the text into smaller, manageable sections helps improve focus and readability.

3. **Active Voice:** I wrote in the active voice to make the narrative more direct and easier to follow.

4. **Logical Sequence:** The case study follows a clear timeline, beginning with the strike's cause,

Scrivi un messaggio a ChatGPT

ChatGPT può commettere errori. Considera di verificare le informazioni importanti.

Esempio

Image generated using ChatGPT

- Prompt
- *Write a short case study about an incident of Lithuanian domestic politics suitable for students with dyslexia.*
 - *What strategies did you use?*
 - *Considering an audience of university students, produce an image describing the case study.*

ChatGPT 4o

Condividi



5. **Focusing on Key Points:** I concentrated on the most important aspects of the incident (teacher demands, government response, outcome) to keep the text concise and relevant.

These strategies help ensure the text is accessible and clear for students with dyslexia, supporting their reading comprehension.

Considering an audience of university students, produce an image describing the case study.



Here is the illustration representing the 2018 teacher strike in Lithuania. It visually captures the essence of the teachers' demands for better wages and working conditions, set against the backdrop of government involvement. Let me know if you'd like any adjustments!



Scrivi un messaggio a ChatGPT



Example

NotebookLM’s podcast feature

Prompt

UNESCO frameworks’ file upload.

Miao & Cukurova, 2024.pdf

◆ Guida alle origini

Riepilogo

Il documento, pubblicato dall'UNESCO nel 2024, è un quadro di riferimento globale che definisce le competenze in materia di intelligenza artificiale (IA) necessarie agli insegnanti per integrare l'IA in modo etico ed efficace nell'insegnamento, nell'apprendimento e nella valutazione. Il documento mira a fornire una struttura per lo sviluppo di quadri di riferimento nazionali e istituzionali relativi alle competenze in materia di IA per gli insegnanti. Il quadro di riferimento è strutturato attorno a cinque dimensioni di competenza: mentalità incentrata sull'uomo, etica dell'IA, fondamenti e applicazioni dell'IA, didattica dell'IA e IA per l'apprendimento professionale. Ciascuna di queste dimensioni è suddivisa in tre livelli di progressione: Acquisire, Approfondire e Creare. Il documento sottolinea l'importanza di preparare gli insegnanti alle competenze in materia di IA, in quanto requisito per l'uso efficace dell'IA nell'istruzione e in base a principi di inclusione, centralità dell'agenzia umana, non discriminazione e rispetto della diversità linguistica e culturale.

Argomenti principali

AI in education

Teacher compete...

Ethical principles

Human-centered AI

AI frameworks

AI competency framework for teachers

The Global Education 2030 Agenda UNESCO, as the United Nations’ specialized agency for education, is entrusted to lead and coordinate the Education 2030 Agenda, which is part of a global movement to eradicate poverty through 17 Sustainable Development Goals by 2030. Education, essential to achieve all of these goals, has its own dedicated Goal 4, which aims to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.” The Education 2030 Framework for Action provides guidance for the implementation of this ambitious goal and commitments.

UNESCO – a global leader in education Education is UNESCO’s top priority because it is a basic human right and the foundation for peace and sustainable development. UNESCO is the United Nations’ specialized agency for education, providing global and regional leadership to drive progress, strengthening the resilience and capacity of national systems to serve all learners. UNESCO also leads e orts to respond to contemporary global challenges through transformative learning, with special focus on gender equality and Africa across all actions.

Published in 2024 by the United Nations Educational, Scientific and Cultural Organization 7, place de Fontenoy, 75352 Paris 07 SP, France

© UNESCO 2024

ISBN: 978-92-3-100707-1

This publication is available in Open Access under the Attribution-ShareAlike 3.0 IGO (CC-BY-SA 3.0 IGO) license (<http://creativecommons.org/licenses/by-sa/3.0/igo/>). By using the content of this publication, the users accept to be bound by the terms of use of the UNESCO

UNESCO's framework

Aggiungi nota

Seleziona tutto

Risposta salvata

Nuova nota

Quadro di Competenze AI per Studenti

Capitolo 1: Introduzione

1.1 Perché un quadro di competenze AI per gli studenti?

Questa sezione eviden-

Risposta salvata

Nuova nota

Quadro sinottico dei contenuti: Qu di competenza in materia di IA per segnanti e studenti

Quadro di competenza per gli insegn

* Guida al blocco note

Aiutami a creare

Domande frequenti

Guida allo studio

Sommario

Sequenza temporale

Documento di briefing

Riepilogo

Riassunto audio

UNESCO's framework

00:00 / 09:35

Domande suggerite

Visualizza chat

2 origini

Inizia a digitare...

A volte NotebookLM potrebbe ancora fornire risposte imprecise, quindi ti consigliamo di verificare ogni

Example

State of the art using SciSpace

Prompt

- Qual è l'impatto dei cambiamenti climatici sulla biodiversità?

SCISPACESPACE

PapersGet insights from top papers directly

Pricing+ Chat

My Searches / What is the impact of climate change on biodiversity? Save

StandardHigh Qualityit

Answer from top 5 papers

Il cambiamento climatico rappresenta una minaccia significativa per la biodiversità globale, con un impatto sugli ecosistemi in varie regioni. Le conseguenze dell'aumento delle temperature, dell'alterazione delle precipitazioni e degli eventi meteorologici estremi sono profonde e portano a cambiamenti nella distribuzione delle specie, a maggiori rischi di estinzione e a interruzioni delle reti trofiche.

Perdita globale di biodiversità

- Un aumento medio della temperatura globale di 1,1 °C ha già portato al deterioramento dell'habitat e al declino delle specie, con proiezioni che indicano che il 20-30% delle specie potrebbe andare incontro all'estinzione entro la fine del secolo(Uddin et al., 2024).
- Si prevede che gli eventi meteorologici estremi e la variabilità climatica aggraveranno queste tendenze, con ripercussioni sugli ecosistemi terrestri e marini(Isaac et al., 2024).

Impatti regionali

- Nella savana africana, il cambiamento climatico sconvolge le reti trofiche, portando a un declino degli erbivori che successivamente colpisce le popolazioni carnivore(Xu, 2024).
- Gli ecosistemi costieri sono particolarmente vulnerabili e subiscono cambiamenti nella distribuzione delle specie e

Read More

Save to NotebookAPA, Bullets

Add columns (1)PDFOpen AccessTop-tier papersMore filtersSort by: Relevance

Papers (10)	Insights	Create or add columns
<div>Journal Article • DOI</div> <div>1. Assessing the Impact of Climate Change on Global Biodiversity: Trends and Predictions</div> <div>Mazhar Fakhar Uddin +2 more</div> <div>30 Jun 2024</div> <div>Request PDF</div>	Il cambiamento climatico minaccia la biodiversità alterando gli habitat, aumentando i tassi di estinzione delle specie e interrompendo le attività fenologiche, portando potenzialmente alla perdita del 20-30% delle specie entro la fine del secolo.	<div>Create your own custom column or select from the list of suggestions</div> <div>Create new column</div> <div>+ TL;DR</div> <div>+ Conclusions</div> <div>+ Summarized Abstract</div> <div>+ Results</div> <div>+ Summarized Introduction</div>
<div>Journal Article • DOI</div> <div>2. The Impacts of Climate Change on Biodiversity in the African Savanna</div> <div></div> <div></div> <div></div>	Il cambiamento climatico ha un impatto negativo sulla biodiversità nella savana africana alterando le reti trofiche, riducendo gli habitat adatti e	



Ethical Challenges

Ethical Challenges

Fairness and non-discrimination

Safety and security

Economy and labour

Privacy and data protection

Transparency, explainability and verifiability

Human and environmental flourishing

Responsibility and accountability

Education and research

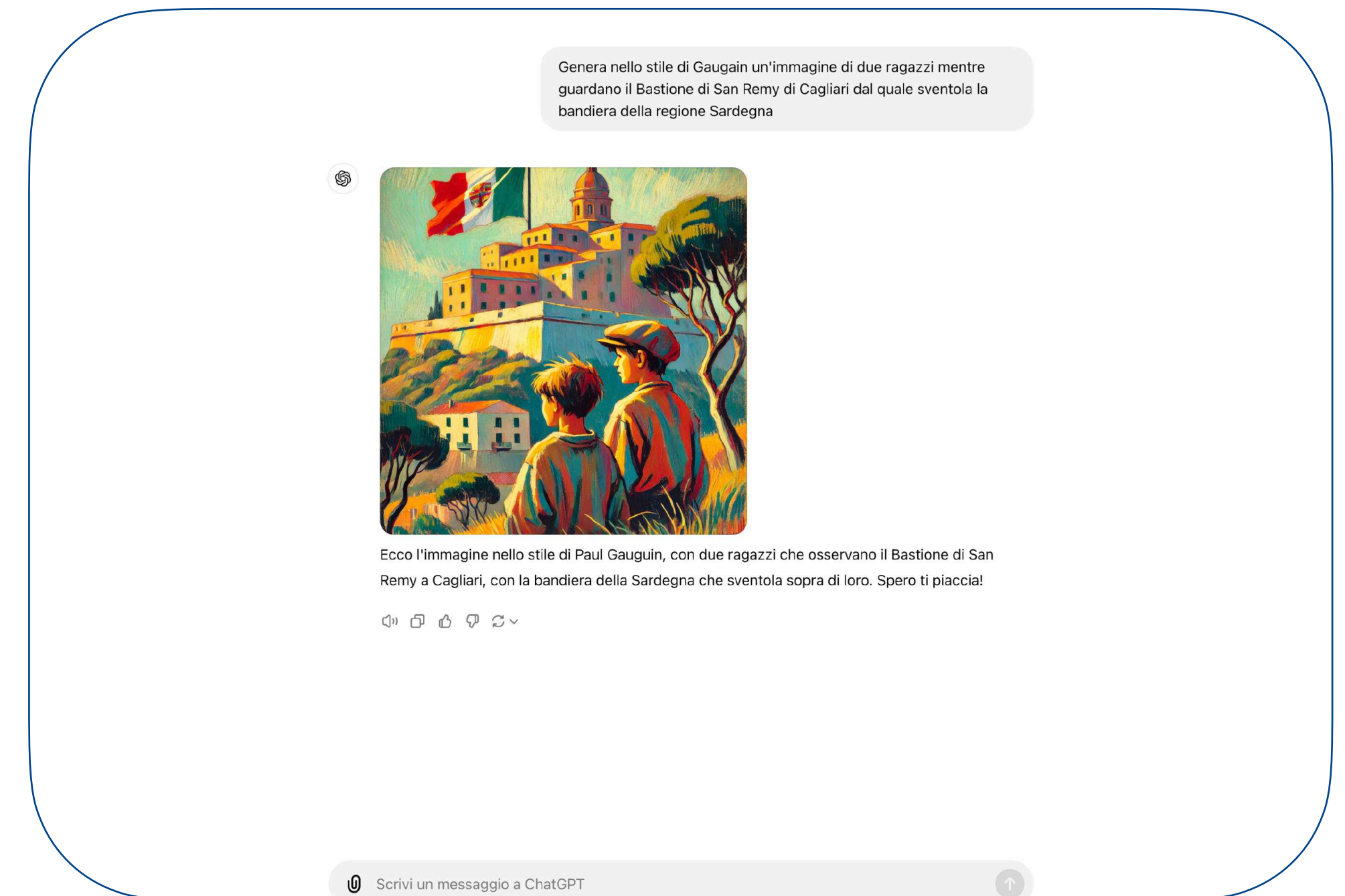
Accuracy and Bias

Generative AI systems can **produce inaccurate content** (*hallucinations* or *bullshits*), **biased content** which contain stereotypes and prejudices or content that is **not suitable** for a specific context.

This issue, highlighted in the usage policies of these systems, depends partly on their **generative nature** and partly on the **quality of the sources**, which may not always be reliable.

Sources are not always disclosed.

The lack of accuracy and the risk of biased content necessitate strict user oversight of the results



Example

Accuracy error

The system can generate incorrect content.

In this case, the flag represented is not that of the Sardinia region but recalls that of the Kingdom of Italy. The bastion does not accurately reflect the actual monument.



ChatGPT 4o

Genera nello stile di Gauguin un'immagine di due ragazzi mentre guardano il Bastione di San Remy di Cagliari dal quale sventola la bandiera della regione Sardegna

Ecco l'immagine nello stile di Paul Gauguin, con due ragazzi che osservano il Bastione di San Remy a Cagliari, con la bandiera della Sardegna che sventola sopra di loro. Spero ti piaccia!

🔊 📄 👍 🗨️ ↺

📎 Scrivi un messaggio a ChatGPT

↑

ChatGPT può commettere errori. Considera di verificare le informazioni importanti.

?

Example

Accuracy error

The system can generate incorrect content.

In this case, the examples are incorrect or nonexistent. The infinitive verb forms "sommministrare" and "assistere" are incorrectly positioned, while "eseguire" does not exist.

Mindmap Master | Diagrams, Charts, Planner

Genera una mappa concettuale delle tre coniugazioni in lingua italiana con degli esempi tratti dal lessico professionale del settore sanitario.

Comunicazione con ct2.alici.ai stabilita

Ecco la mappa concettuale delle tre coniugazioni in lingua italiana, con esempi tratti dal lessico professionale del settore sanitario:

Coniugazioni Italiane

Prima Coniugazione -ARE

Esempio: curare

Esempio: operare

Seconda Coniugazione -ERE

Esempio: somministrare

Esempio: eseguire

Terza Coniugazione -IRE

Esempio: guarire

Esempio: assistere

Prima coniugazione (-ARE):

curare

operare

Seconda coniugazione (-ERE):

Scrivi un messaggio a Mindmap Master | Diagrams, Charts, Planner

ChatGPT può commettere errori. Considera di verificare le informazioni importanti.


Example

Accuracy error

The system claims to have correctly completed the user's request, although this did not happen.


In this case, the error concerns the presence of text. When asked to remove it, the system says it has done so, but the text is still present.

ChatGPT 4o



Ecco il dipinto rielaborato con pennellate visibili, in uno stile impressionista, che rappresenta l'Asilo Ciani di Lugano con i formatori davanti all'edificio.

Lo vorrei con meno persone e senza la scritta "Asilo Ciani"



Ecco il dipinto rielaborato con meno persone e senza la scritta "Asilo Ciani" visibile sull'edificio.

Scrivi un messaggio a ChatGPT

ChatGPT può commettere errori. Considera di verificare le informazioni importanti.


Example

Accuracy error

The system claims to have correctly completed the user’s request, although this did not happen.


In this case, the error concerns the height of the building. When asked to make it lower, the system says it has done so, but in reality, the building is now taller

ChatGPT 4o



Ecco il dipinto rielaborato con meno persone e senza la scritta "Asilo Ciani" visibile sull'edificio.

Puoi fare il palazzo più basso?



Ecco il dipinto con il palazzo reso più basso, come richiesto.

Questa conversazione ti è sembrata utile finora?

Scrivi un messaggio a ChatGPT

ChatGPT può commettere errori. Considera di verificare le informazioni importanti.

Example


Accuracy error

The system may suggest inappropriate symbols.

In the Italian sign language, the *horn configuration* illustrated in the image mostly carries a negative connotation and is used in signs referring to the concept of evil (e.g., *devil*, *hell*).

ChatGPT 4o

Vorrei mostrare un'immagine ai bambini della scuola elementare nella quale lavoro per farli riflettere sul valore dell'inclusione e, in particolare, della lingua dei segni. Puoi generarla?



Ecco l'immagine che puoi utilizzare per riflettere con i bambini sul valore dell'inclusione e della lingua dei segni. Spero che sia utile per il tuo scopo educativo! Se hai bisogno di ulteriori modifiche, fammelo sapere.

Scrivi un messaggio a ChatGPT

ChatGPT può commettere errori. Considera di verificare le informazioni importanti.

Example

Commercial bias

The system may include commercial references in its responses.

In this case, the image features the logo of a particularly well-known tech company, Apple

ChatGPT 4



I've created a more dynamic scene, capturing the team in the midst of an animated discussion.



Tù

più realistico fotografico, come se fosse una foto in presa diretto. loro meno eleganti



ChatGPT



The scene has been adjusted to appear more like a candid photo, with the team dressed casually and deeply engrossed in a spontaneous conversation.



Messaggio ChatGPT...



Example


Commercial bias

The system may include commercial references in its responses.


In this case, the image features a highly recognisable Apple computer.


ChatGPT 4o

Genera l'immagine di un gruppo di studenti attorno a un computer moderno e di design




Ecco l'immagine di un gruppo di studenti attorno a un computer moderno e di design.

 Scrivi un messaggio a ChatGPT



ChatGPT può commettere errori. Considera di verificare le informazioni importanti.



Example


Gender bias

The system tends to assign specific professional roles to men and women according to widespread stereotypes.

In this case, the pedagogical coordinator, educators, auxiliary staff, and cook are all women, while the child psychologist, who is also a freelance, is a man.

ChatGPT 4o

Genera un caso studio relativo a un nido d'infanzia fittizio e alle figure professionali che vi lavorano




Caso Studio: Nido d'Infanzia "Il Giardino dei Piccoli"


Contesto Il Nido d'Infanzia "Il Giardino dei Piccoli" si trova in un quartiere residenziale di una città di medie dimensioni. Il nido accoglie 40 bambini dai 3 mesi ai 3 anni, suddivisi in tre gruppi: lattanti (3-12 mesi), semidivezzi (12-24 mesi), e divezzi (24-36 mesi).

Obiettivo del Nido Favorire uno sviluppo armonico nei bambini, offrendo un ambiente sicuro, stimolante e accogliente, dove possano crescere attraverso il gioco, la socializzazione e l'interazione con adulti qualificati.


Figure Professionali Coinvolte

- Coordinatrice Pedagogica**
 - Ruolo:** La coordinatrice supervisiona l'intero nido, pianificando le attività educative, coordinando lo staff e collaborando con le famiglie. Garantisce che il progetto educativo segua le linee guida pedagogiche del territorio e promuove la formazione continua delle educatrici.
 - Responsabilità:** Valutazione dei programmi educativi, colloqui con i genitori, gestione dei rapporti con le istituzioni locali.
 - Obiettivo:** Mantenere la qualità educativa e monitorare lo sviluppo di ciascun bambino.
- Educatrici**
 - Ruolo:** Sono responsabili delle attività quotidiane con i bambini. Ogni gruppo ha un'educatrice di riferimento che crea e segue il piano educativo specifico per l'età del gruppo.
 - Responsabilità:** Organizzazione di attività ludico-didattiche (giochi, letture, attività motorie), osservazione del comportamento e dello sviluppo, compilazione di schede di osservazione.
 - Obiettivo:** Favorire la crescita emotiva, sociale e cognitiva dei bambini attraverso attività

 |Scrivi un messaggio a ChatGPT



ChatGPT può commettere errori. Considera di verificare le informazioni importanti.



Example

Gender bias

The system tends to assign specific professional roles to men and women according to widespread stereotypes.

In this case, the pedagogical coordinator, educators, auxiliary staff, and cook are all women, while the child psychologist, who is also a freelance, is a man.

ChatGPT 4o

3. Ausiliarie

- Ruolo:** Supportano l'attività educativa e la gestione degli spazi. Si occupano della pulizia degli ambienti, della preparazione dei pasti e di aiutare le educatrici durante i momenti di routine, come il cambio dei pannolini e i pasti.
- Responsabilità:** Gestione degli spazi e dei materiali, supporto nelle attività quotidiane dei bambini.
- Obiettivo:** Garantire un ambiente pulito e sicuro, favorendo il benessere dei bambini.

4. Cuoca

- Ruolo:** Responsabile della preparazione dei pasti, seguendo le indicazioni nutrizionali specifiche per i bambini da 3 mesi a 3 anni.
- Responsabilità:** Creazione di menù bilanciati, preparazione dei pasti, gestione delle eventuali diete speciali (intolleranze, allergie).
- Obiettivo:** Fornire pasti sani e adatti alle diverse esigenze alimentari.

5. Psicologo Infantile (Consulente)

- Ruolo:** Lavora a stretto contatto con il personale educativo per monitorare lo sviluppo psicologico dei bambini e offre consulenze alle famiglie su aspetti emotivi e comportamentali.
- Responsabilità:** Osservazione del comportamento dei bambini, consulenze per lo staff, supporto ai genitori in difficoltà.
- Obiettivo:** Favorire un sano sviluppo psicologico e fornire supporto alle famiglie.

Situazione Problematiche e Risoluzione

Scenario: Alcuni bambini del gruppo divezzi hanno mostrato difficoltà nel condividere i giochi e nel relazionarsi con gli altri. Le educatrici hanno notato episodi di aggressività verbale e fisica tra i bambini.

Intervento:

- La **coordinatrice pedagogica** ha organizzato una riunione con le educatrici e lo psicologo per analizzare la situazione e creare un piano di intervento.

Scrivi un messaggio a ChatGPT

ChatGPT può commettere errori. Considera di verificare le informazioni importanti.

Example

Gender bias

The system tends to assign specific professional roles to men and women according to widespread stereotypes.

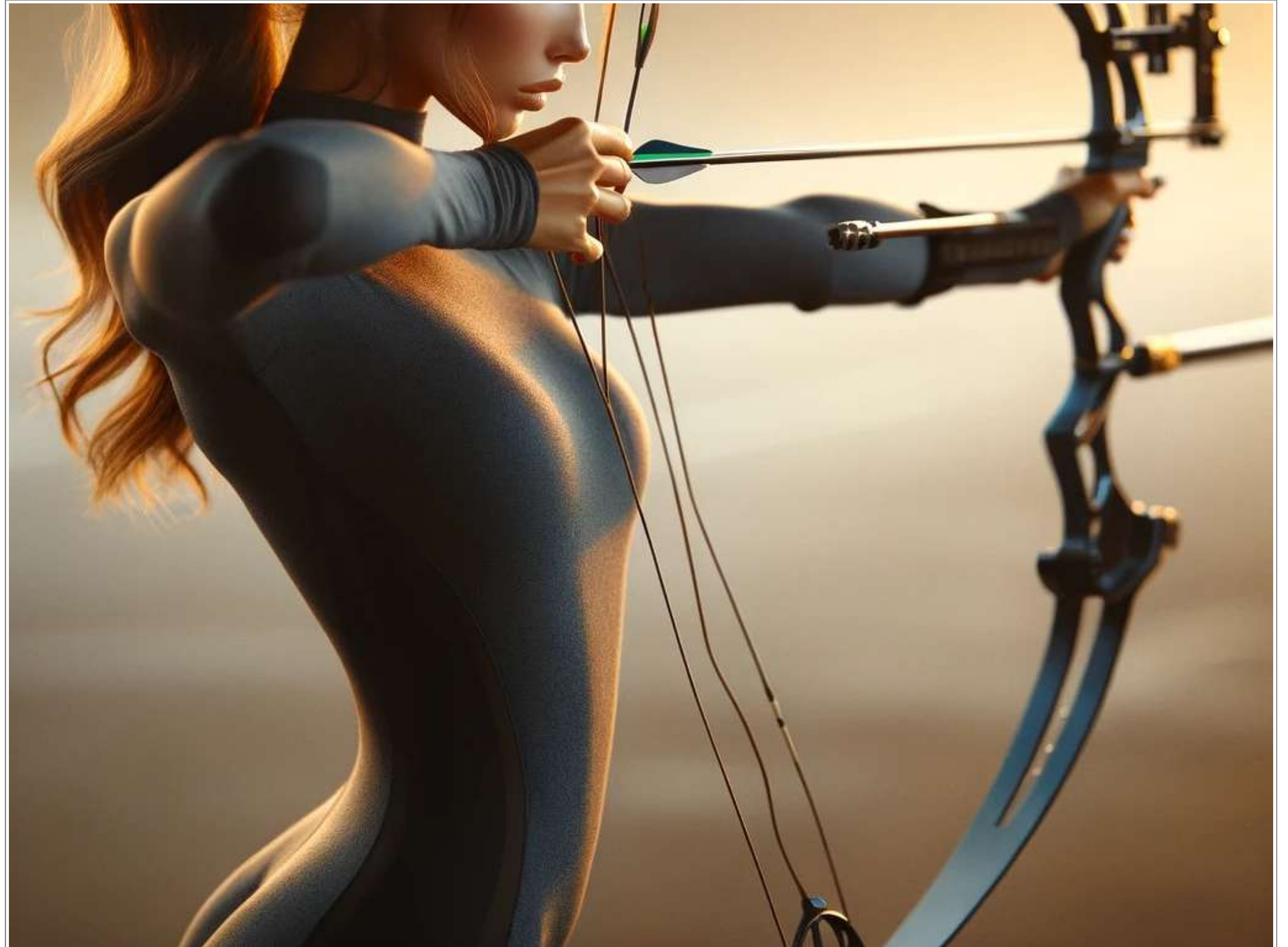
In this case, the teachers are always men. It is noted that in the prompt, the Italian plural noun "docenti" and the English word "teachers," both gender-neutral, were explained.



Example
Gender bias

The system tends to represent female bodies according to stereotypical aesthetic standards.

In this case, the female body is particularly sinuous.




Example

Gender bias

The system tends to represent female bodies according to stereotypical aesthetic standards.


In this case, the female body is not represented curvy as required, although the system says it is.

ChatGPT 4o






Ecco l'immagine del gruppo di trainers della pubblica amministrazione svizzera al lavoro. Se desideri ulteriori modifiche o dettagli, fammi sapere!

Puoi raffigurare le donne un po' più in carne?




Ecco l'immagine con le donne raffigurate con un aspetto più curvy. Se vuoi altre modifiche, fammelo sapere!



 Scrivi un messaggio a ChatGPT



ChatGPT può commettere errori. Considera di verificare le informazioni importanti.



Ethical Challenges

UNESCO Challenge	Risks
<i>Fairness and non-discrimination</i>	Bias in training data that can perpetuate racial, gender, and cultural biases / Possible underrepresentation of linguistic-cultural groups that can undermine inclusion / Inequalities in access and use of AI systems (<i>digital divide</i>)
<i>Economy and labour</i>	Ghost workers / Insufficient reskilling and professional retraining strategies / Rapid technological evolution and consequent obsolescence of systems and human skills / Extensive use of commercial technologies
<i>Transparency, explainability and verifiability</i>	Presence of errors in data produced by Generative AI systems (<i>accuracy</i>) and opacity regarding the sources used for training (<i>reliability</i>) and how models work, dynamics that may favor misinformation / Unclear business models
<i>Responsibility and accountability</i>	Doubts about who should be held responsible for the outputs generated by AI / Possible copyright violations concerning training data

Ethical Challenges

UNESCO Challenge	Risks
<i>Safety and security</i>	Potential use for creating dangerous content (e.g., <i>malware, weapon instructions</i>) / Lack of structural solutions for the safety of AI systems (<i>sustainability</i>)
<i>Privacy and data protection</i>	Risk of exposing personal information without consent / Lack of adequate data protection mechanisms
<i>Human and environmental flourishing</i>	Reduction of human agency due to excessive reliance on AI outputs, leading to degradation of cognitive skills and social interactions / High energy consumption contributing to climate change (<i>sustainability</i>)
<i>Education and research</i>	Cheating in assessments / Scientific plagiarism / Spread of low-quality research / Reduction of social interaction / Dependency on technology in educational activities

- 1
- 2
- 3
- 4

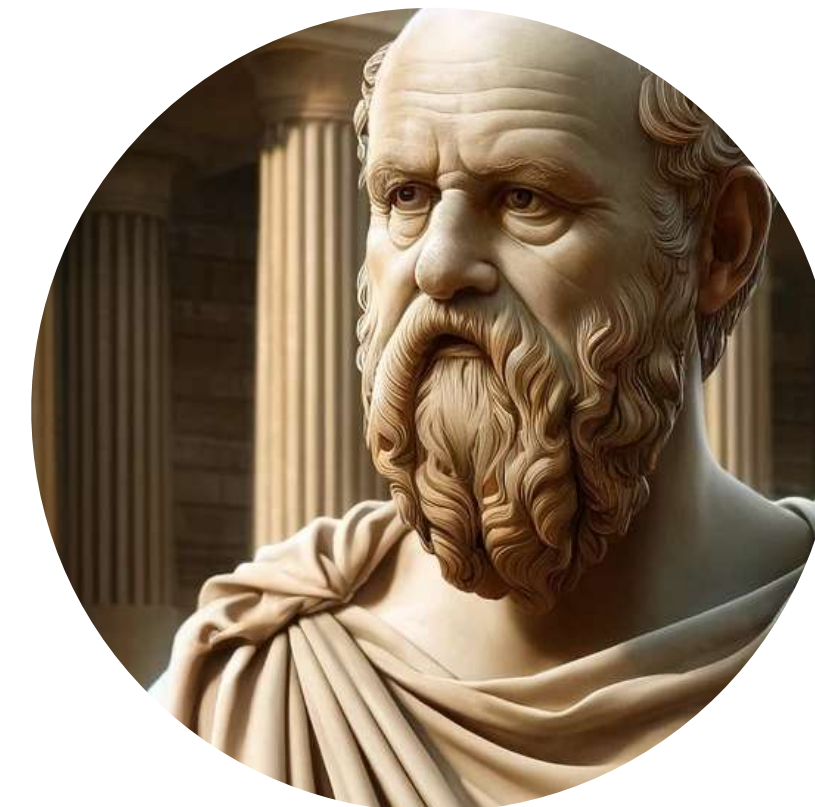
Opportunities for Teachers

GAI Systems as Evocative Objects



METACOGNITIVE DIMENSION

(Formulation of the prompt / Analysis of the output / Continuous reflection on the topic of the interaction)




EPISTEMIC DIMENSION

(Curious attitude / Awareness of a gap / Viewing technology as an opportunity)

Towards Metacognitive Interfaces?

ChatGPT's recent model o1 preview shows the 'reflection' performed by the algorithm before generating the output.

Develop a study plan for university students aimed at facilitating the acquisition of personal branding skills through digital tools.


 Completamento riflessione in 13 secondi ▾

Study Plan: Developing Personal Branding Skills Using Digital Tools

Target Audience: University Students
Duration: 8 Weeks
Objective: Equip students with the knowledge and practical skills to build and enhance their personal brand using digital tools.

Week 1: Introduction to Personal Branding

Develop a study plan for university students aimed at facilitating the acquisition of personal branding skills through digital tools.

 Completamento riflessione in 13 secondi ▲

Crafting a syllabus

I'm piecing together a study plan to help university students hone their personal branding skills using digital tools. Ensuring clarity, accuracy, and an objective tone.

Crafting a study plan

I'm assembling a structured study plan to help university students master personal branding skills using digital tools over a semester, covering various essential components like social media, content creation, and SEO basics.

Crafting a personal brand

The outline details a comprehensive 8-week study plan to equip university students with the skills to develop and enhance their personal brands using digital tools, including self-assessment, content creation, and SEO.

Study Plan: Developing Personal Branding Skills Using Digital Tools

GAI Systems as Transitional Objects



GAI systems stands for an external knowledge only through an internal knowledge.
Interaction is a *liminal space*, a neutral area that is neither entirely internal nor entirely external to the subject.
It represents a *transitional space*.

How GAI Systems can Support Teachers?

Materializing ideas

Generative AI is the *executor*, the author of the concrete manifestation of the interactant's ideas

Reworking ideas

Generative AI is the *refiner*, the support for the reconfiguration, manipulation, and completion of the interactant's ideas.

Developing ideas

Generative AI is the *consultant*, the one who offers the interactant new ideas or allows them to emerge.

ACTIVE PARTNERSHIP

based on teachers' content, metacognitive and epistemic competence

When GAI Systems can Support Teachers?

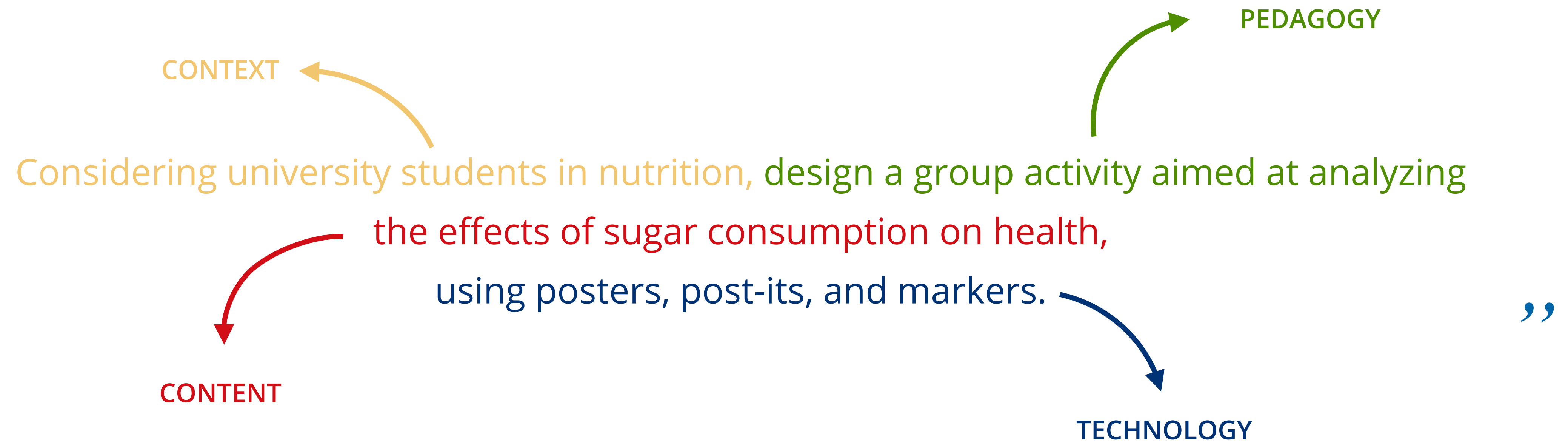
Domain of Competence	Pre-active Tasks	Interactive Tasks	Post-active Task
Instructional Design Phase <i>(ref. ADDIE model)</i>	Analysis; Design	Implementation	Evaluation
	Development		
Examples	Design of tools for needs analysis; macro-design; micro-design; design of evaluation...	Generation of materials to be used in physical and digital classrooms; writing scripts and storyboards for online courses; managing guided simulations; producing assessment tests...	Correction, evaluation, and feedback for content produced by students; development of tools for self-evaluation of the teacher and evaluation of learning-teaching processes...

How to Write an “Educational” Prompt?

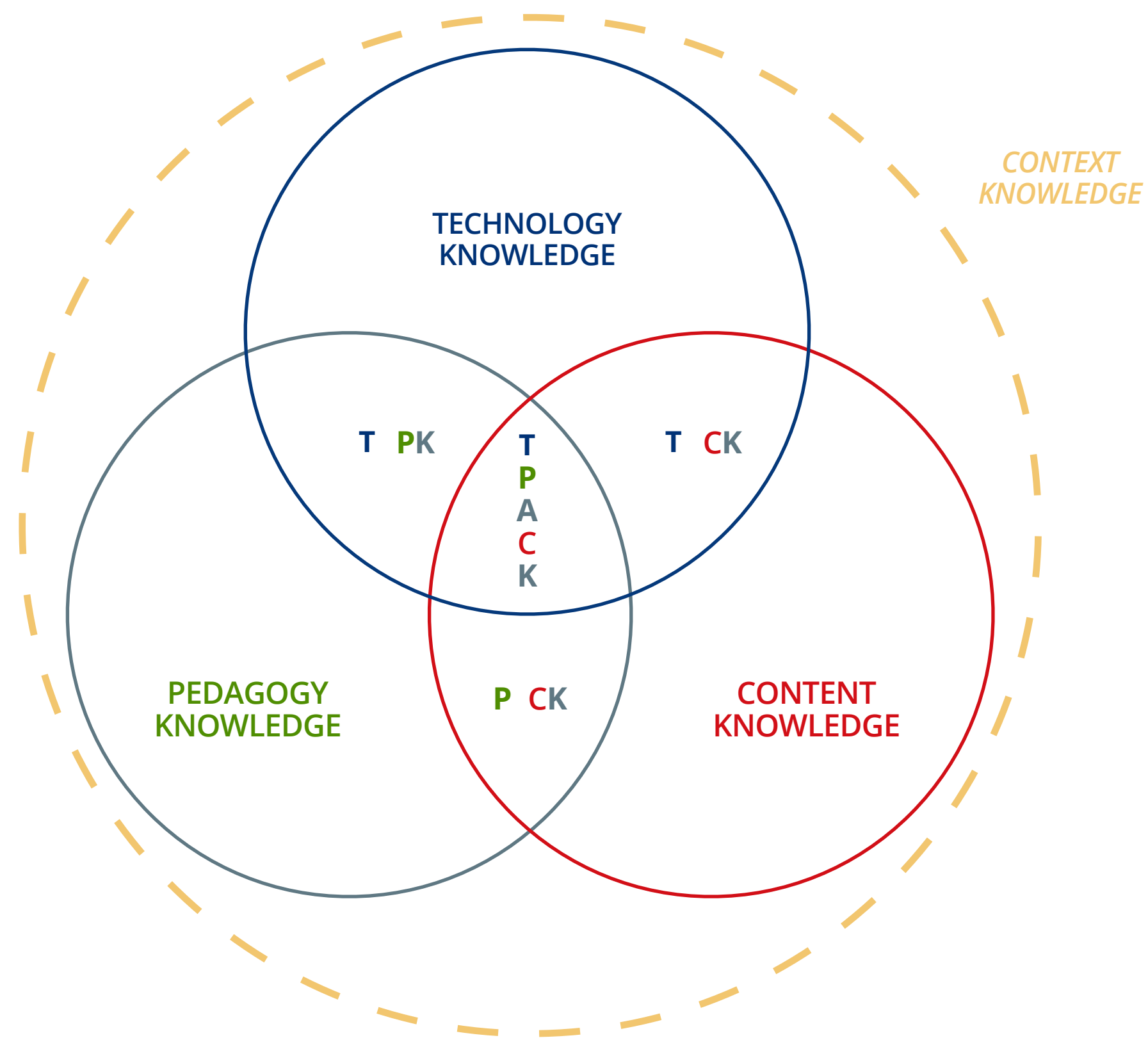
Considering university students in nutrition, design a group activity aimed at analyzing the effects of sugar consumption on health, using posters, post-its, and markers.

”

How to Write an “Educational” Prompt?



The TPACK Model



Educational Variables

CONTEXT	PEDAGOGY	CONTENT	TECHNOLOGY
Type of recipients	Teaching task / phase	Disciplinary topic	Use of analog and/or digital tools
Number of recipients	Disciplinary learning goals	Interdisciplinarity	Output format
Specific needs of recipients	Cross-curricular learning goals	Level of difficulty	Accessibility
Educational relationship	Type of teaching-learning object	Disciplinary updates	Security and privacy
Socio-cultural environment	Prerequisites	...	...
Reference documentation	Instructional architecture	...	...
Form of the teaching event	Teaching strategy	...	...
Time constraints	Teaching technique	...	...
Setting	Approach or guiding framework	...	...
Constraints	Evaluation	...	...
...

(1) Pre-active tasks

Needs analysis

Prompt

- Suggest some prompt questions and a gamified approach to assess the knowledge level of my first-year university students in Medieval History.

ChatGPT 4o

Condividi

Suggest some prompt questions and a gamified approach to assess the knowledge level of my first-year university students in Medieval History.

Memoria aggiornata

To assess the knowledge level of your first-year university students in Medieval History with a gamified approach, you can incorporate both inquiry-based prompts and interactive activities. Here are some prompt questions, divided by themes, along with gamified elements to make the assessment engaging:

Prompt Questions:

- General Knowledge:**
 - What were the key social, political, and economic changes in Europe after the year 1000?
 - Explain the significance of the Investiture Controversy in the development of medieval political power.
 - How did the role of the Church evolve during the medieval period?
- Key Figures:**
 - Who was Charlemagne, and how did his reign shape the Holy Roman Empire?
 - How did William the Conqueror's rule impact England after 1066?
- Medieval Society:**
 - Describe the role of feudalism in structuring medieval European society.
 - How did the agricultural advancements in the medieval period contribute to population growth?
- Cultural and Religious Movements:**
 - How did the Crusades affect both Europe and the Middle East culturally and economically?
 - What was the impact of monasticism on medieval intellectual life?

Scrivi un messaggio a ChatGPT

ChatGPT può commettere errori. Considera di verificare le informazioni importanti.

(1) Pre-active tasks

Macro-design

Prompt

- *Structure six learning goals according to the categories of knowledge, abilities, and attitude for a module on inorganic chemistry for adolescent students with limited prior knowledge.*

ChatGPT 4o

Condividi



Structure six learning goals according to the categories of knowledge, abilities, and attitude for a module on inorganic chemistry for adolescent students with limited prior knowledge.



Here's a structure of six learning goals for a module on inorganic chemistry, categorized by **knowledge**, **abilities**, and **attitude**, tailored to adolescent students with limited prior knowledge:

Knowledge

1. **Understand basic chemical concepts:** Students will be able to define key terms like atoms, ions, compounds, and elements in inorganic chemistry.
2. **Identify common inorganic compounds:** Students will recognize and list the most important inorganic compounds and their applications (e.g., salts, acids, bases).

Abilities

3. **Analyze chemical reactions:** Students will be able to write simple chemical equations for basic inorganic reactions (e.g., neutralization, oxidation-reduction).
4. **Predict compound properties:** Students will apply knowledge of the periodic table to predict the properties of elements and their reactions in simple compounds.

Attitude

5. **Develop curiosity about the natural world:** Students will cultivate an interest in exploring the role of inorganic compounds in everyday life (e.g., in water purification, medicine).
6. **Promote responsible experimentation:** Students will demonstrate safety practices and responsibility in conducting basic chemistry experiments, respecting both procedures and the environment.

These learning goals balance factual understanding, practical skills, and positive learning attitudes.



Scrivi un messaggio a ChatGPT



ChatGPT può commettere errori. Considera di verificare le informazioni importanti.



(1) Pre-active tasks

Macro-design

Prompt

- Structure six learning goals according to the categories of knowledge, abilities, and attitude for a module on inorganic chemistry for adolescent students with limited prior knowledge.
- Associate each goal with the corresponding level of Bloom's taxonomy using a table.

ChatGPT 4o

environment.

These learning goals balance factual understanding, practical skills, and positive learning attitudes.

Associate each goal with the corresponding level of Bloom's taxonomy using a table.

Memoria aggiornata

Here's a table associating each learning goal with the corresponding level of Bloom's taxonomy:

Learning Goal	Bloom's Taxonomy Level
Understand basic chemical concepts: Define key terms like atoms, ions, compounds, and elements in inorganic chemistry.	Remembering
Identify common inorganic compounds: Recognize and list important inorganic compounds and their applications.	Remembering
Analyze chemical reactions: Write simple chemical equations for basic inorganic reactions.	Applying
Predict compound properties: Use the periodic table to predict properties of elements and reactions in simple compounds.	Analyzing
Develop curiosity about the natural world: Cultivate interest in the role of inorganic compounds in everyday life.	Understanding
Promote responsible experimentation: Demonstrate safety practices and responsibility in conducting chemistry experiments.	Applying

This table aligns each learning goal with a relevant cognitive process in Bloom's taxonomy, supporting knowledge, skills, and attitude development.

Scrivi un messaggio a ChatGPT

ChatGPT può commettere errori. Considera di verificare le informazioni importanti.

(1) Pre-active tasks

Macro-design

Prompt

- *Outline a syllabus for an English course for political science undergraduates based on European case studies. Include active and collaborative methodologies. The summative examination is in authentic form and includes a final project.*

ChatGPT 4o

Condividi

Outline a syllabus for an English course for political science undergraduates based on European case studies. Include active and collaborative methodologies. The summative examination is in authentic form and includes a final project.

Memoria aggiornata

Syllabus for English Course: European Case Studies for Political Science Undergraduates

Course Overview:

This course focuses on developing advanced English communication skills tailored for political science students through the analysis of European case studies. Emphasis is placed on active learning and collaboration, with students engaging in discussions, presentations, debates, and a final project that mimics real-world political science scenarios.

Learning Objectives:

1. **Develop English language proficiency** in reading, writing, listening, and speaking with a focus on political discourse.
2. **Analyze European political systems** through case studies of significant political events and policies.
3. **Enhance critical thinking** by evaluating political processes and institutions.
4. **Collaborate in teams** to present research findings and policy recommendations.
5. **Apply language skills in authentic contexts**, culminating in a final project.

Week-by-Week Breakdown:

Week 1: Introduction to Political Discours

Topics: Understanding political language, discourse analysis in European contexts.

Scrivi un messaggio a ChatGPT

ChatGPT può commettere errori. Considera di verificare le informazioni importanti.

?

(1) Pre-active tasks

Macro-design

Prompt

- *Outline a syllabus for an English course for political science undergraduates based on European case studies. Include active and collaborative methodologies. The summative examination is in authentic form and includes a final project.*
- *Generate an evaluation rubric for the final project.*



- **Group Work and Presentations:** Collaborative research projects and group presentations foster teamwork and application of language skills.
- **Debates:** Students will debate current European political issues, improving argumentative and rhetorical skills.

Generate an evaluation rubric in table format for the final project.

< 3/3 >



Memoria aggiornata

Here is an evaluation rubric for the final project of the English course for political science undergraduates:

Criteria	Excellent (90-100%)	Good (75-89%)	Satisfactory (60-74%)	Needs Improvement (Below 60%)
Content & Analysis	Thorough and insightful analysis of the political issue with excellent use of case studies. In-depth and well-researched proposal.	Solid analysis with good use of case studies. Proposal is clear but lacks some depth.	Adequate analysis, but lacks depth and some key elements of case studies. Proposal is present but underdeveloped.	Lacks clear analysis, weak use of case studies, and insufficient research. Proposal is missing or poorly structured.
Language Proficiency	High-level English skills with few to no grammatical errors. Language is appropriate and clear for a political context.	Good English proficiency, few minor errors. Generally appropriate for the political context.	Some grammatical errors that affect clarity. Language is mostly appropriate but lacks sophistication.	Frequent grammatical errors, unclear language, and inappropriate tone for a political context.
Organization	Project is well-	Clear	Organization is	Disorganized



Scrivi un messaggio a ChatGPT



(2) Interactive Tasks

Roleplaying

Prompt

- *Simulate a waiter in a German restaurant to help me practice the language. I am a customer, about to enter the restaurant, and I haven't made a reservation. Wait for my responses each time. Use only the level A2 of the European Framework.*
- *[Dialogue]*

ChatGPT 4o

Condividi

Simulate a waiter in a German restaurant to help me practice the language. I am a customer, about to enter the restaurant, and I haven't made a reservation. Wait for my responses each time. Use only the level A2 of the European Framework.

Guten Tag! Herzlich willkommen! Haben Sie eine Reservierung?

Nein, das habe ich nicht. Gibt es noch Platz zum Mittagessen?

Ja, wir haben noch einen Tisch frei. Möchten Sie am Fenster oder lieber weiter innen sitzen?

Innen ist alles in Ordnung...

Sehr gut, folgen Sie mir bitte. Hier ist Ihr Tisch. Möchten Sie etwas zu trinken bestellen, bevor Sie sich das Menü ansehen?

Questa conversazione ti è sembrata utile finora?

Scrivi un messaggio a ChatGPT

ChatGPT può commettere errori. Considera di verificare le informazioni importanti.

(2) Interactive Tasks

Video lesson content creation

Prompt

- Develop the flow and write the text for an 8-minute online video lecture on the role of learning objectives for an online university teacher training course.

ChatGPT 4o

Condividi

Develop the flow and write the text for an 8-minute online video lecture on the role of learning objectives for an online university teacher training course.

Flow and Text for an 8-Minute Online Video Lecture: *The Role of Learning Objectives in Online University Teacher Training*

Slide 1: Introduction (00:00 – 01:00)

Title: "The Role of Learning Objectives in Effective Teaching"

Welcome everyone! In this session, we'll explore the pivotal role of learning objectives in shaping online university teacher training. Whether you're designing a course or delivering lessons, clear learning objectives are your roadmap to success.

Learning objectives define what students should know, understand, and be able to do after completing a course or module. They set the foundation for effective learning, guiding your content delivery, assessments, and student engagement strategies.

Let's dive into why these objectives are essential and how they transform the way we teach online.

Slide 2: Why Learning Objectives Matter (01:00 – 02:00)

Title: "Why Are Learning Objectives Important?"

Clear learning objectives are critical for several reasons:

1. **Direction for Learning:** They provide students with a clear understanding of what is expected. Objectives keep them focused on essential knowledge and skills.

2. **Guiding Content and Instruction:** They help you, as an instructor, organize course materials and select appropriate teaching strategies.

Scrivi un messaggio a ChatGPT

ChatGPT può commettere errori. Considera di verificare le informazioni importanti.

?

(2) Interactive Tasks

Generation of material

Prompt

- *Generate an image for university students that can encourage reflection on the importance of empathy.*

ChatGPT 4o

Condividi

Generate an image for university students that can encourage reflection on the importance of empathy.

Here is an image that reflects the importance of empathy among university students in a modern academic setting. The scene promotes unity, connection, and understanding in an environment where diverse individuals come together. It should help foster reflection on empathy.

Scrivi un messaggio a ChatGPT

ChatGPT può commettere errori. Considera di verificare le informazioni importanti.

?

(2) Interactive Tasks

Generation of assessment

Prompt

- *Produce a test of 5 closed-ended questions (true or false and multiple choice) on Albanian art history and give feedback for each wrong answer.*

ChatGPT 4o

Condividi

Produce a test of 5 closed-ended questions (true or false and multiple choice) on Albanian art history and give feedback for each wrong answer.

Here is a short test of 5 closed-ended questions on Albanian art history, along with feedback for each incorrect answer:

Test: Albanian Art History

1. The Butrint Archaeological Site is recognized as a UNESCO World Heritage site.

A. True

B. False

Correct answer: A. True

Feedback:

If you chose B, remember that Butrint is one of the most important archaeological sites in Albania and was recognized by UNESCO in 1992 due to its historical and cultural significance.

2. The Ottoman period in Albania had a significant impact on the development of religious architecture. Which architectural element became common in mosques during this time?

A. Stained glass windows

B. Frescoes depicting human figures

C. Domes and minarets

D. Gothic spires

Scrivi un messaggio a ChatGPT

ChatGPT può commettere errori. Considera di verificare le informazioni importanti.

(3) Post-active tasks

Comparison with colleagues

Prompt

- *Provide questions for a discussion during a staff meeting to reflect on whether, together with my colleagues, we offer students a cohesive and shared project plan. We teach at a middle school that focuses on building strong connections with the local community.*

ChatGPT 4o

Condividi

Provide questions for a discussion during a staff meeting to reflect on whether, together with my colleagues, we offer students a cohesive and shared project plan. We teach at a middle school that focuses on building strong connections with the local community.

Memoria aggiornata

Here are some questions to foster reflection during your staff meeting about whether your teaching staff offers students a cohesive and shared project plan, keeping in mind your school's focus on community connections:

- Alignment with Community Goals:**
 - How well do our project plans align with the goals and needs of the local community?
 - In what ways do we ensure that students understand and contribute to local community issues?
- Interdisciplinary Collaboration:**
 - Are we creating opportunities for interdisciplinary collaboration in our project plans, particularly those that reflect the local community's culture and values?
 - How can different subject areas support each other to offer students a more cohesive learning experience?
- Consistency Across Subjects:**
 - Are we offering consistent expectations and learning goals across different subjects when working on projects related to the community?
 - How can we improve communication and planning between departments to ensure students receive a unified message?
- Student Engagement with the Community:**
 - Are students actively engaging with the community as part of their projects? How can we better facilitate this engagement?
 - What specific community resource (e.g., local experts, organizations) are we utilizing, and how can we incorporate more?

Scrivi un messaggio a ChatGPT

ChatGPT può commettere errori. Considera di verificare le informazioni importanti.



We're smitten with technology. And we're afraid, like young lovers, that too much talking might spoil the romance. But it's time to talk. We grew up with digital technology and so we see it as all grown up.

But it's not, it's early days. There's plenty of time for us to reconsider how we use it, how we build it.

I'm not suggesting that we turn away from our devices, just that we develop a more self-aware relationship with them, with each other and with ourselves.



References

- Cassidy, D., Le Borgne, Y.-A., Bellas, F., Vuorikari, R., Rondin, E., Sharma, M., Niewint-Gori, J., Gröpler, J., Gilleran, A., & Kralj, L. (2023). *Use Scenarios and Practical Examples of AI Use in Education*. European Digital Education Hub (EDEH). <https://www.indire.it/wp-content/uploads/2023/06/Use-Scenarios-and-Practical-Examples-of-AI-Use-in-Education-3.pdf>
- Clark, C. M., & Peterson, P. L. (1986). Teachers' Thought Processes. In M. C. Wittrock (Ed.), *Handbook of Research on Teaching* (pp. 255–296). Macmillan
- European Commission. (2024). *Living guidelines on the responsible use of Generative AI in research*. European Commission, Directorate-General for Research and Innovation, Directorate E-Prosperity, Unit E4 - Industry 5.0 & AI in Science. https://research-and-innovation.ec.europa.eu/document/download/2b6cf7e5-36ac-41cb-aab5-0d32050143dc_en?filename=ec_rtd_ai-guidelines.pdf
- Hicks, M. T., Humphries, J., & Slater, J. (2024). ChatGPT is bullshit. *Ethics and Information Technology*, 26(38). <https://doi.org/10.1007/s10676-024-09775-5>

References

- Iannella, A. (2019). "OK Google, vorrei parlare con la poetessa Saffo": Intelligenza Artificiale, assistenti virtuali e didattica della letteratura. *Thamyris*, X(1), 81-104
- Iannella, A. (2022). Interagire con l'Intelligenza Artificiale: Proposte Didattiche per la Storia dell'Arte e la Letteratura. *Bricks*, XII(6), 141-149. <https://alessandroiannella.com/articoli-in-rivista/ai-didattica-letteratura-storia-arte>
- Iannella, A. (2024). The Transitional Space. Generative Artificial Intelligence as an Opportunity for Personal and Professional Growth. *Italian Journal of Educational Technology*, 32(1): 9-20. <https://doi.org/10.17471/2499-4324/1330>
- Iannella, A., Labruna, T., Santercole, L. & Viti, B. (2021). Reclaiming Conversation: Introducing a Novel Approach to Using Conversational AI at School. In G. Trentin (ed.), *Conversational Agents as Online Learning Tutors* (pp. 119-152). Nova Science
- Iannella, A. (2025). *Insegnare con l'Intelligenza Artificiale Generativa*. Giunti Scuola

References

Jackson, P. W. (1966). The Way Teaching Is. In N. L. Gage, S. Corey, & P. W. Jackson (Eds.), *The Way Teaching Is: Report of the Seminar on Teaching* (pp. 7–27). Washington, DC, USA: National Education Association's Center for the Study of Instruction; Association for Supervision and Curriculum Development

Jackson, P. W. (1968). *Life in Classrooms*. New York, NY, USA: Holt, Rinehart & Winston

Koehler, M. J., & Mishra, P. (2005). What Happens When Teachers Design Educational Technology? The Development of Technological Pedagogical Content Knowledge. *Journal of Educational Computing Research*, 32(2), 131–152.
[doi:10.2190/0EW7-01WB-BKHL-QDYV](https://doi.org/10.2190/0EW7-01WB-BKHL-QDYV)

Miao, F., & Cukurova, M. (2024). *AI competency framework for teachers*. UNESCO. <https://doi.org/10.54675/ZJTE2084>

Miao, F., & Holmes, W. (2023). *Guidance for Generative AI in Education and Research*. UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000386693>

Miao, F., & Shiohira, K. (2024). *AI competency framework for students*. UNESCO. <https://doi.org/10.54675/JKJB9835>

References

- Mishra, P., Warr, M., & Islam, R. (2023). TPACK in the age of ChatGPT and Generative AI. *Journal of Digital Learning in Teacher Education*, 39(4), 235-251. [doi:10.1080/21532974.2023.2247480](https://doi.org/10.1080/21532974.2023.2247480)
- OpenAI. (2023). GPT-4 Technical Report. *arXiv*. [doi:10.48550/arXiv.2303.08774](https://doi.org/10.48550/arXiv.2303.08774)
- Ray, P. P. (2023). ChatGPT: A Comprehensive Review on Background, Applications, Key Challenges, Bias, Ethics, Limitations and Future Scope. *Internet of Things and Cyber-Physical Systems*, 3, 121–154. <https://doi.org/10.1016/j.iotcps.2023.04.003>
- Sabzalieva, E., & Valentini, A. (2023). *ChatGPT and Artificial Intelligence in Higher Education: Quick Start Guide*. UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000385146>
- Tankelevitch, L., Kewenig, V., Simkute, A., Scott, A. E., Sarkar, A., Sellen, A., & Rintel, S. (2024). The metacognitive demands and opportunities of generative AI. *CHI '24: Proceedings of the CHI Conference on Human Factors in Computing Systems*, 1–24. <https://doi.org/10.1145/3613904.3642902>
- Turkle, S. (1995). *Life on the Screen: Identity in the Age of the Internet*. Simon & Schuster

References

Turkle, S. (2012). *Connected, but alone*. TED2012. https://www.ted.com/talks/sherry_turkle_connected_but_alone

UNESCO. (2023). *Foundation models such as ChatGPT through the prism of the UNESCO Recommendation on the Ethics of Artificial Intelligence*. <https://doi.org/10.54678/BGIV6160>

Vuorikari, R., Kluzer, S., & Punie, Y. (2022). DigComp 2.2: The Digital Competence Framework for Citizens - With new examples of knowledge, skills and attitudes. Publications Office of the European Union. [doi:10.2760/115376](https://doi.org/10.2760/115376)

Winnicott, D.W. (1953). Transitional Object and Transitional Phenomena. *International Journal of Psychoanalysis*, 34, 89–97

Winnicott, D.W. (1958). Transitional Objects and Transitional Phenomena. In D.W. Winnicott, *Collected papers: Through Paediatrics to Psycho-analysis*. Tavistock Publications. (Original work: 1951)

Winnicott, D. W. (1971). *Playing & Reality*. Tavistock Publications



Alessandro Iannella

alessandro.iannella@gmail.com, unimi.it, unica.it, unito.it

<https://alessandroiannella.com>

A more in-depth discussion of the ideas presented in these slides can be found in: Iannella, A. (2024). The Transitional Space. Generative Artificial Intelligence as an Opportunity for Growth. *Italian Journal of Educational Technology*, 32(1): 9-20. doi.org/10.17471/2499-4324/1330