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ChatGPT

and Artificial Intelligence in higher education

Quick start guide

Portrait created by DALL.E 2, an AI system that can create realistic images and art in response to a text description. The AI was asked to produce an impressionist portrait of how artificial intelligence would look going to university. Concept by UNESCO IESALC.

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Cover image: Portrait created by DALL.E 2, an AI system that can generate realistic images and art in response to a text description. The AI was asked to produce an impressionist portrait of how artificial intelligence would look going to university. Concept by UNESCO IESALC

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Some sections of this Quick Start Guide are adapted from *Harnessing the era of Artificial Intelligence in higher education: A Manual for Higher Education Stakeholders*, to be published by UNESCO IESALC in 2023.

This Quick Start Guide introduces ChatGPT, an Artificial Intelligence (AI) tool that has taken the world by storm, reaching 100 million users just two months after being launched. The Quick Start Guide provides an overview of how ChatGPT works and explains how it can be used in higher education. The Quick Start Guide raises some of the main challenges and ethical implications of AI in higher education and offers practical steps that higher education institutions can take.

This Quick Start Guide was published in April 2023. Artificial Intelligence (AI) is a rapidly developing field. This guide is based on GPT-3.5, the latest free version of ChatGPT available at the time of writing. As well as dynamic changes in technology, the ethical implications of ChatGPT and other forms of AI are also swiftly advancing. Readers are advised to constantly check reliable sources for the latest news and updates.

ChatGPT and Artificial Intelligence in higher education: Quick start guide

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What is ChatGPT?

ChatGPT is a language model that allows people to interact with a computer in a more natural and conversational way. GPT stands for "Generative Pre-trained Transformer" and is the name given to a family of natural language models developed by open Artificial Intelligence (AI). This is also known as a form of generative AI because of its ability to produce original results.

ChatGPT uses natural language processing to learn from Internet data, providing users with artificial intelligence-based written answers to questions or prompts.

These models are trained on large text datasets to learn to predict the next word in a sentence and, from that, generate coherent and compelling human-like output in response to a question or statement. In the case of ChatGPT, 570gb of data representing 300 billion words have been supplied to the system and it has around 175 billion parameters.[1]

We can think about ChatGPT as a "computer robot" with whom you can talk about anything.[2] This is helped by its user-friendly interface. ChatGPT can be asked for data, analysis and even an opinion. However, the algorithm by which it works does not take a definite position, as its interpretation is based on the statistical analysis of billions of texts on the Internet.

This Quick Start Guide is based on GPT-3.5, the latest free version of ChatGPT available at the time of writing. Subsequent versions are expected to have more functionality including the capacity to interpret different types of data and with more advanced writing abilities.[3]

We asked ChatGPT to explain ChatGPT in 50 words. Here is its answer:

ChatGPT is a large language model developed by OpenAI, based on the GPT-3.5 architecture. It can generate human-like text based on input prompts, answer questions, and perform a variety of natural language processing tasks. It was trained on a massive dataset of internet text to learn patterns and relationships in language.

Get started with ChatGPT

This step-by-step guide is also available as a video tutorial and a seminar in IESALC Campus. For more information, visit https://campus.iesalc.unesco.org.

Create an account

1. In any internet browser, go to: https://chat.openai.com/
2. Create an account:
   a. Enter your email address or connect a Google or Microsoft account.
   b. Create a password (at least 8 characters).
   c. Check the email address for an email from OpenAI and click to verify your email address.
   d. Enter your first and last name and date of birth.
   e. Enter your phone number.
   f. Enter the verification code that you receive by text message.

Note that ChatGPT is not currently available in all countries.

Use ChatGPT

1. Once you have created an account or logged in, enter your question or prompt into the field 'Send a message'.
2. The response will be generated immediately, with the words appearing quickly across your screen.
   a. Consider marking whether the response is acceptable or not by selecting the thumb up or thumb down icon. If you select an icon, a pop-up box will ask you provide additional comments (not required) before you submit your feedback.
3. Click 'Regenerate response' to have ChatGPT answer the same prompt again.
   a. Consider marking whether you found the revised response better, the same or worse.
   b. If you generate multiple responses, you can scroll between them.
4. The chat is saved in the left-hand menu. You can rename or delete the chat.
5. To start a new query, click on 'New chat' or type into 'Send a message' underneath any existing query.

1 https://www.sciencefocus.com/future-technology/gpt-3/

2 Almost anything: ChatGPT has been trained to refuse inappropriate requests e.g., questions that violate someone's rights, promote discrimination are offensive or deliberately seek to mislead. While robust, this training is not foolproof.

3 https://www.timeshighereducation.com/news/gpt-4s-launch-another-step-change-ai-and-higher-education

Important considerations when using ChatGPT

- To produce a more relevant result, provide ChatGPT with prompts about how you want it to respond.[4] For example:
  - Tell me how [add query] works **in 50 words**.
  - **Behave as/Act as** a higher education manager. [Add query]
  - Write a **four-paragraph essay** about [add query]

Frequently asked questions about accessing ChatGPT

How do I find it? *At https://chat.openai.com*

What information do I have to provide to use it? *To create an account, you need to use your email address, phone number, name, and date of birth.*

Is there an app? *No, ChatGPT is only available through a web browser using an internet enabled device.*

Is it free? *Yes, there is a free version. An option to upgrade to ChatGPT Plus for US$20/month is in the process of being rolled out.*

What is the difference between the free and the paid version? *According to OpenAI, ChatGPT Plus subscribers get priority access to the latest releases, more reliable availability, and faster response speeds.*

Can I ask it questions in any language? *ChatGPT works best in English because of the amount of information available to it but it also works in other languages including Spanish, Portuguese, and French. The reliability of responses may vary depending on the language.*

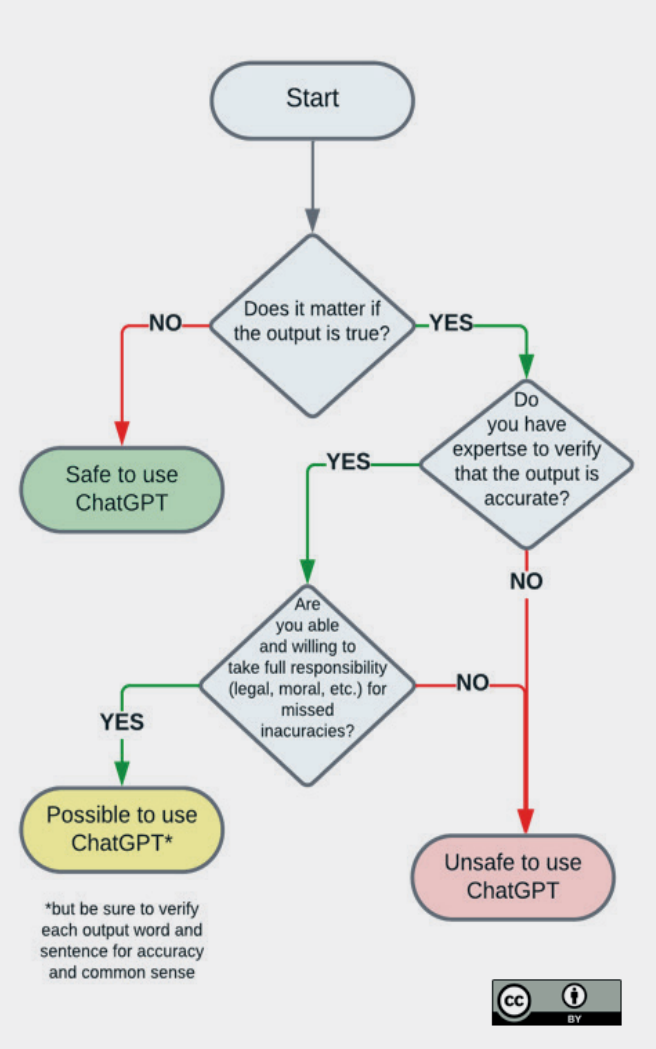
Does it work in all countries? *It works in most places but is blocked or unavailable in around 30 countries.*

Does it work offline? *No, you must have a live internet connection to use ChatGPT.*

- If your query does not produce the intended result, try changing the prompt(s) and run the query again.
- Due to high demand, the free version of ChatGPT may be unavailable or run very slowly.
- Data used to train ChatGPT's responses goes up to 2021. This means ChatGPT has no knowledge about anything that has happened or been created since 2021. However, some browsers that integrate ChatGPT do enable it to connect to more recent information.
- There is no way that ChatGPT can verify the information it provides or to assess its reliability.

To ascertain the circumstances in which ChatGPT may be safe to use, follow this flowchart:

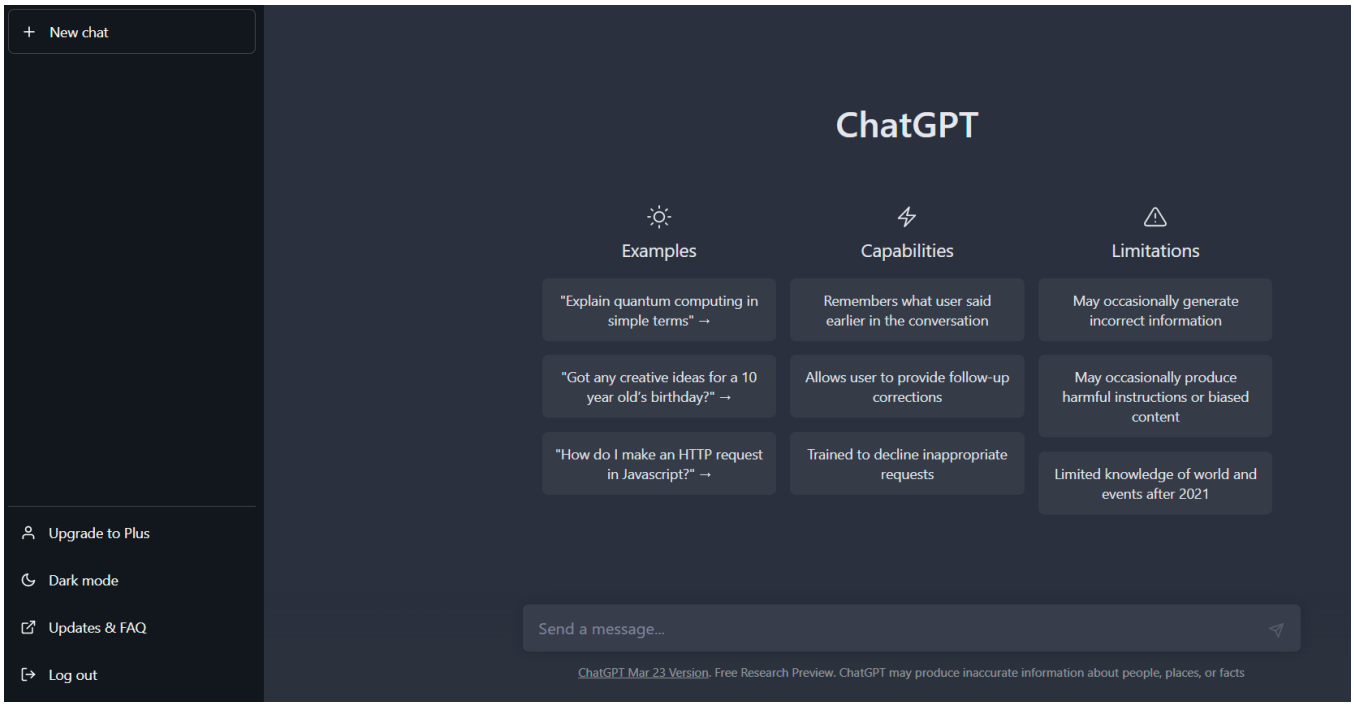
Figure 1: When is it safe to use ChatGPT?[5]



4 More examples of prompts can be found at Atlas, S. (2023) 'ChatGPT for Higher Education and Professional Development: A Guide to Conversational AI', College of Business Faculty Publications [Preprint]. Available at: https://digitalcommons.uri.edu/cba_facpubs/548.

5 Flowchart devised by Aleksandr Tiulkanov, AI and Data Policy Lawyer, January 2023

Figure 2: ChatGPT home screen



Artificial intelligence

ChatGPT is based on machine learning, which is currently the most popular technique in Artificial Intelligence (AI) technology. This section summarizes the different types of AI.

One way to understand AI is by classifying it by capabilities: **Artificial Narrow Intelligence** (ANI) and **Artificial General Intelligence** (AGI). ANI, or weak AI, is the type of AI that has been achieved so far. AGI, if ever reached, would be comparable to human intelligence.

ANI has two main functionalities: **reactive machines** and **limited memory**. Reactive machines are the primary type of AI that store memories or experiences. They solely react to a current scenario as they are taught one thing or task and are rarely applied to other scenarios. The most famous example of a reactive machine is IBM's Deep Blue computer, which was able to play chess and beat international grandmaster Garry Kasparov.

Limited memory stores information for a short time and reacts to it. For example, autonomous vehicles or self-driving cars use the information of their surroundings and automatically make decisions such as stop or turn.

Machine learning is the currently the most popular technique of ANI and has seen significant progress in recent years. Rather than being programmed with rules to produce answers, computers receive data and the answers expected from the data and, as a result, produce rules by identifying patterns between the two. ChatGPT is based on machine learning.

Other techniques of ANI include **symbolic logic** (also called inference engines or if-then models), expert systems, and **knowledge graphs**. Symbolic logic is most typically applied in chatbots, which determine the nature of a user's problem through a series of closed questions, from where the chatbot may refer users to a human agent. Knowledge graphs are ways to connect and explain different concepts/data that are not based on machine learning.

What is artificial intelligence (AI)?

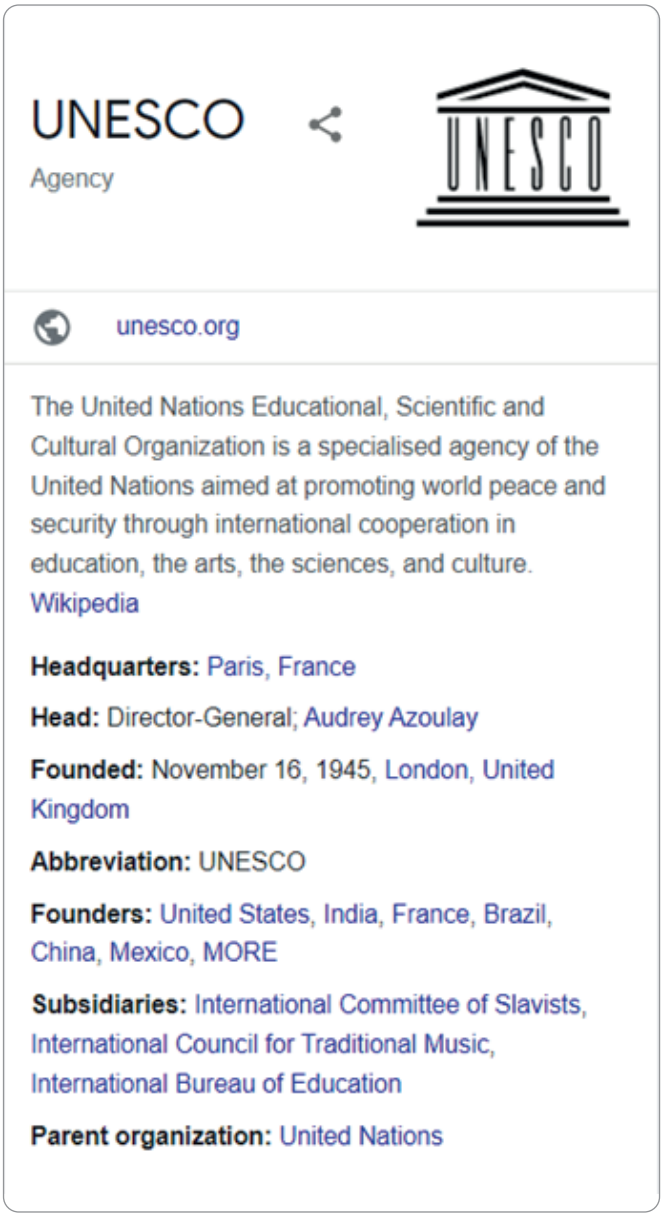
As technology develops, so too do the ways we define it. There is no single or fixed definition of AI, but there is common agreement that machines based on AI "are potentially capable of imitating or even exceeding human cognitive capacities, including sensing, language interaction, reasoning and analysis, problem solving, and even creativity."

UNESCO World Commission on the Ethics of Scientific Knowledge and Technology (2019). Preliminary Study on the Ethics of Artificial Intelligence. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000367823

Example of symbolic logic – the chatbot Boti, provided by the city of Buenos Aires, Argentina. Boti works online and in WhatsApp

Source: http://buenosaires.gob.ar/boti

Example of a knowledge graph – result of entering the query 'UNESCO' into a Google search.



Applications of ChatGPT in higher education

Although still a recent development, ChatGPT has already been applied widely in different functions of higher education. This section outlines some possible uses of ChatGPT in teaching and learning, research, administration, and community engagement.

Teaching and learning

Due to its ability to generate and assess information, ChatGPT can play a range of roles in teaching and learning processes. Together with other forms of AI, ChatGPT could improve the process and experience of learning for students. To do this, ChatGPT can be used as a standalone tool, or it can be integrated into other systems and platforms used by HEIs.

ChatGPT can perform many simple or technical tasks (e.g., basic research, calculations, proofing) and the examples outlined in the table show how ChatGPT could be incorporated and used to augment teaching and learning.

Role[6]	Description	Example of implementation
Possibility engine	AI generates alternative ways of expressing an idea	Students write queries in ChatGPT and use the Regenerate response function to examine alternative responses.
Socratic opponent	AI acts as an opponent to develop and argument	Students enter prompts into ChatGPT following the structure of a conversation or debate. Teachers can ask students to use ChatGPT to prepare for discussions.
Collaboration coach	AI helps groups to research and solve problems together	Working in groups, students use ChatGPT to find out information to complete tasks and assignments.
Guide on the side	AI acts as a guide to navigate physical and conceptual spaces	Teachers use ChatGPT to generate content for classes/courses (e.g., discussion questions) and advice on how to support students in learning specific concepts.
Personal tutor	AI tutors each student and gives immediate feedback on progress	ChatGPT provides personalized feedback to students based on information provided by students or teachers (e.g., test scores).
Co-designer	AI assists throughout the design process	Teachers ask ChatGPT for ideas about designing or updating a curriculum (e.g., rubrics for assessment) and/or focus on specific goals (e.g., how to make the curriculum more accessible).
Exploratorium	AI provides tools to play with, explore and interpret data	Teachers provide basic information to students who write different queries in ChatGPT to find out more. ChatGPT can be used to support language learning.
Study buddy	AI helps the student reflect on learning material	Students explain their current level of understanding to ChatGPT and ask for ways to help them study the material. ChatGPT could also be used to help students prepare for other tasks (e.g., job interviews).
Motivator	AI offers games and challenges to extend learning	Teachers or students ask ChatGPT for ideas about how to extend students' learning after providing a summary of the current level of knowledge (e.g., quizzes, exercises).
Dynamic assessor	AI provides educators with a profile of each student's current knowledge	Students interact with ChatGPT in a tutorial-type dialogue and then ask ChatGPT to produce a summary of their current state of knowledge to share with their teacher/for assessment.

Research

ChatGPT can be used by researchers at different stages of the research process. This is summarized in figure 3.

ChatGPT has also been trialled in other processes relating to research, such as completing the technical parts of research grant applications (e.g., communications plans). An experimental use of ChatGPT to assess its ability to provide peer review of academic papers found that it may be able to aid in predicting whether a paper will be accepted.[7]

ChatGPT has also been used to generate entire academic journal articles,[8] opening an ethical debate about whether a non-human author can be considered a contributor to the creation of knowledge. At the time of writing this Quick Start Guide, no consensus had been reached. Some publishers have argued that ChatGPT cannot take responsibility for the

6 The roles and descriptions were created by Mike Sharples (Professor Emeritus of Educational Technology, Open University, UK) and are reproduced with permission. The examples of implementation were devised by UNESCO IESALC and also draw from suggestions by Ronald Knust Graichen (Education Consultant, the Netherlands) published at https://eduteka.icesi.edu.co/articulos/KNUST-como-usar-chatGPT-en-el-aula.

7 Srivastava, M. (2023) 'A day in the life of ChatGPT as an academic reviewer: Investigating the potential of large language model for scientific literature review'. OSF Preprints. Available at: https://doi.org/10.31219/osf.io/wydct.

8 For example, https://www.scientificamerican.com/article/we-asked-gpt-3-to-write-an-academic-paper-about-itself-mdash-then-we-tried-to-get-it-published/.

Figure 3: Possible uses of ChatGPT in the research process

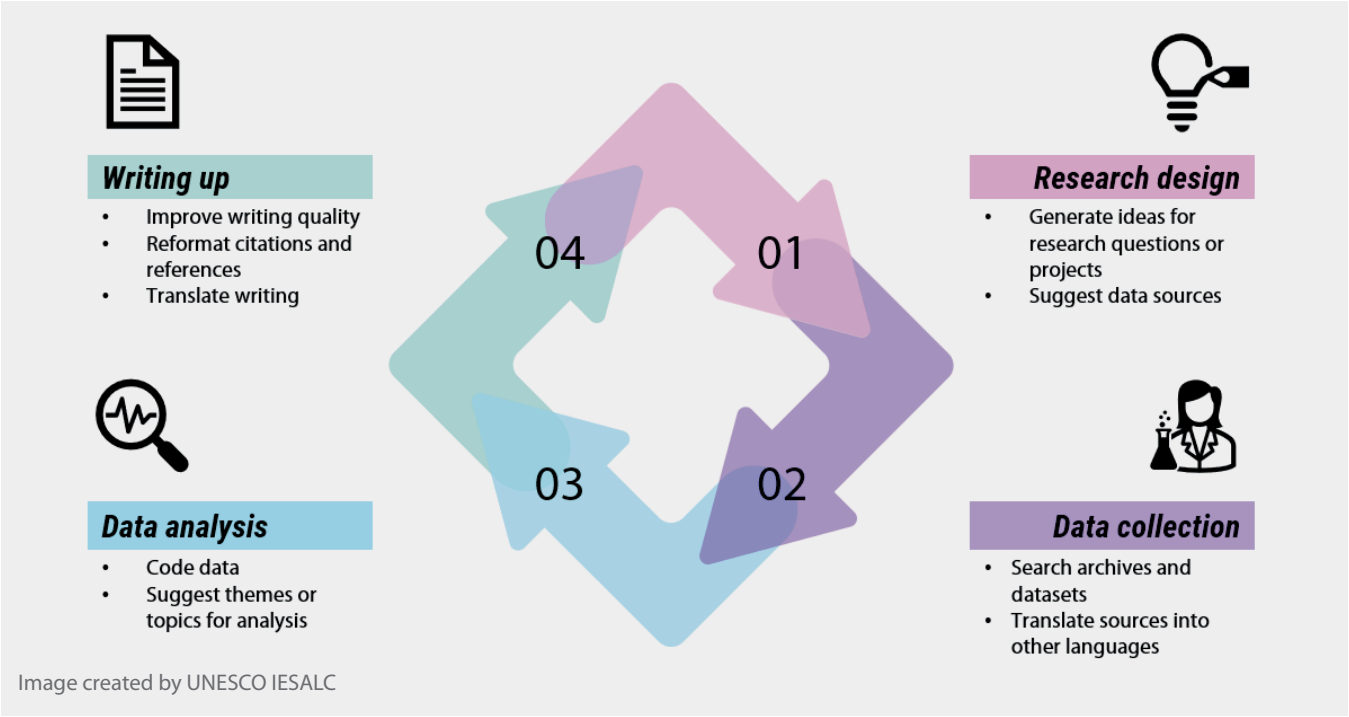


Image created by UNESCO IESALC

content or integrity of articles and therefore cannot be an author, whereas others accept its role as co-creator.[9]

Administration

ChatGPT's main role in supporting higher education institutions' (HEI) administration has been in improving the efficiency of processes. In this way, ChatGPT can reduce human administrative time spent on tasks such as:

- Responding to queries from applicants (potential students)
- Helping students to sign up for courses, complete course requirements, check administrative information (e.g., exam timetables, location of classes)
- Finding news, resources, and other information
- Sending reminders or notifications
- Translation of information for international students/staff

With the use of ChatGPT, administrative services can be available 24/7 and can be supported across different platforms. As well as integration into websites, it can also be used with social media, messaging services and learning management systems/virtual campuses. When interacting with ChatGPT, the style is more conversational, creating a more personalized experience.

Community engagement

HEIs can also use ChatGPT to develop sound strategies for community engagement. Considering their own specific characteristics (geography, location, community needs, local demographics), ChatGPT could be asked to develop targeted strategies to improve the wellbeing of the overall community. Based on those strategies, they could develop communication campaigns geared to the community and with a specific call to action.

Challenges and ethical implications

The impact of ChatGPT on higher education has been immediate and divisive. Although its applications in higher education are extensive, many universities have already banned it over fears of student plagiarism, and several countries have blocked ChatGPT.[10] This section distils the main challenges and ethical implications of ChatGPT in higher education.

9 Stokel-Walker, C. (2023) 'ChatGPT listed as author on research papers: many scientists disapprove', Nature, 613(7945), pp. 620–621. Available at: https://doi.org/10.1038/d41586-023-00107-z.

10 At the time of writing, ChatGPT is blocked in China, Iran, Italy, North Korea, and Russia. It is unavailable in 32 other countries. See also: https://www.bbc.com/news/technology-65139406 and https://www.wepc.com/tips/what-countries-is-chat-gpt-unavailable/.

Academic integrity

The main concern that has been expressed about ChatGPT in higher education relates to academic integrity.[11] HEIs and educators have sounded alarm bells about the increased risk of plagiarism and cheating if students use ChatGPT to prepare or write essays and exams. This may have deeper implications for subjects that rely more on written inputs or information recall, areas that ChatGPT can better support.

There are also concerns that existing tools to detect plagiarism may not be effective in the face of writing done by ChatGPT. This has already led to the development of other applications that can detect whether AI has been used in writing. In the meantime, multiple HEIs around the world have banned ChatGPT due to concerns around academic integrity and others have updated or changed the way they do assessments, basing them instead on in-class or non-written assignments.

Lack of regulation

ChatGPT is not currently regulated, a concern addressed by the UNESCO Recommendation on the Ethics of AI (see next section). The extremely rapid development of ChatGPT has caused apprehension for many, leading a group of over 1,000 academics and private sector leaders to publish an open letter calling for a pause on the development of training powerful AI systems.[12] This cessation would allow time for potential risks to be investigated and better understood and for shared protocols to be developed.

Privacy concerns

In April 2023, Italy became the first country to block ChatGPT due to privacy related concerns.[13] The country's data protection authority said that there was no legal basis for the collection and storage of personal data used to train ChatGPT. The authority also raised ethical concerns around the tool's inability to determine a user's age, meaning minors may be exposed to age-inappropriate responses. This example highlights wider issues relating to what data is being collected, by whom, and how it is applied in AI.

Cognitive bias

It is important to note that ChatGPT is not governed by ethical principles and cannot distinguish between right and wrong, true and false. This tool only collects information from the databases and texts it processes on the internet, so it also learns any cognitive bias found in that information. It is therefore essential to critically analyse the results it provides and compare them with other sources of information.

Gender and diversity

Concerns about gender and other forms of discrimination are not unique to ChatGPT but to all forms of AI.[14] On the one hand, this reflects the lack of female participation in subjects related to AI and in research/development on AI and on the other hand, the power of generative AI to produce and disseminate content that discriminates or reinforces gendered and other stereotypes.[15]

Accessibility

There are two main concerns around the accessibility of ChatGPT. The first is the lack of availability of the tool in some countries due to government regulations, censorship, or other restrictions on the internet. The second concern relates to broader issues of access and equity in terms of the uneven distribution of internet availability, cost and speed. In connection, teaching and research/development on AI has also not been evenly spread around the world, with some regions far less likely to have been able to develop knowledge or resources on this topic.

Commercialization

ChatGPT was created by a private company, OpenAI. Whilst the company has pledged to maintain a free version of ChatGPT, it has launched a subscription option (currently US$20/month) that offers greater reliability and faster access to new versions of the tool. The involvement of private entities in higher education is not new and calls for care and regulation if selecting AI and other tools that are run by companies dependent on making profit, may not be open source (and therefore more equitable and available), and which may be extracting data for commercial purposes.

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11 See also: Sullivan, M., Kelly, A. and McLaughlan, P. (2023) 'ChatGPT in higher education: Considerations for academic integrity and student learning', Journal of Applied Learning and Teaching, 6(1). Available at: https://doi.org/10.37074/jalt.2023.6.1.17.

12 https://futureoflife.org/open-letter/pause-giant-ai-experiments/

13 https://www.bbc.com/news/technology-65139406

14 See also: https://code.intef.es/noticias/chatgpt-un-riesgo-o-una-oportunidad-para-el-sector-educativo/; https://www.cbsnews.com/news/chatgpt-large-language-model-bias-60-minutes-2023-03-05/

15 UNESCO IESALC (2021) Women in higher education: has the female advantage put an end to gender inequalities? Available at: https://unesdoc.unesco.org/ark:/48223/pf0000377182; https://oecd.ai/en/wonk/closing-the-gender-gap

UNESCO Recommendation on the Ethics of AI

The UNESCO Recommendation on the Ethics of AI aims to provide a foundation so that AI systems work for the betterment not only of individuals and societies but also for the good of the environment and ecosystems. The Recommendation is also designed to prevent harm from or by AI.

Recognizing that AI has both positive and negative effects, the Recommendation was adopted in late 2021 with the expectation that governments would adopt it at national level and that other public and private sector actors would benefit from the ethical guidance provided by the Recommendation.

UNESCO has also published guidance for policymakers on AI and education. It outlines emerging practices in education and discusses the challenges of using AI to achieve Sustainable Development Goal 4 (Quality Education).

This will be accompanied later in 2023 by a Manual on AI in Higher Education to be published by UNESCO IESALC. This is believed to be the first globally comprehensive guide for higher education stakeholders on AI, targeting particularly those contexts where AI has been less widespread.

UNESCO Recommendation on the Ethics of AI, adopted in 2021

Actioning the UNESCO Recommendation

Harnessing the rapid spread of AI to ensure it supports the greater good should go hand in hand with the implementation of the UNESCO Recommendation on the Ethics of AI.

The UNESCO guidance for policymakers on AI and education sets out policy recommendations in seven areas:

1. A system-wide vision and strategic priorities
2. Overarching principle for AI and education policies
3. Interdisciplinary planning and inter-sectoral governance
4. Policies and regulations for equitable, inclusive, and ethical use of AI
5. Master plans for using AI in education management, teaching, learning, and assessment
6. Pilot testing, monitoring and evaluation, and building an evidence base
7. Fostering local AI innovations for education

The forthcoming UNESCO IESALC Manual on AI in Higher Education will include recommendations on implementing AI in line with the ethical principles set out in the UNESCO Recommendation and tailored guidance for higher education stakeholders on adapting the UNESCO guidance on AI and education.

Statement by UNESCO Director-General Audrey Azoulay, 30 March 2023

> "The world needs stronger ethical rules for artificial intelligence: this is the challenge of our time. UNESCO's Recommendation on the ethics of AI sets the appropriate normative framework. Our Member States all endorsed this Recommendation in November 2021. It is high time to implement the strategies and regulations at national level. We have to walk the talk and ensure we deliver on the Recommendation's objectives."
>
> **Audrey Azoulay**
> UNESCO's Director-General

Adapting to ChatGPT in your higher education institution

Used ethically and with due consideration of the need to build individual and institutional capacity, ChatGPT could support HEIs to provide students with a more personalized and relevant learning experience, make administrative processes more efficient, and advance research and community engagement.

Use ChatGPT with care and creativity

While some states and HEIs have blocked ChatGPT, most governments and HEIs are seeking ways to adjust to a world in which AI has become more widespread, accessible, and easy to use. In that sense, ChatGPT can be used but requires both care and creativity to ensure it is handled ethically and appropriately.

Suggested ways forward include:[16]

- Create opportunities for faculty, staff, students, and other stakeholders to **discuss the impact of ChatGPT** on the HEI and co-construct strategies to adapt and adopt to AI. The section below on conducting an AI audit offers one route for this type of engagement.
- Introduce **clear guidance** for students and instructors about how and when ChatGPT can be used (and when it cannot). Such guidance should be negotiated with students and teachers, not imposed on them.
- Connect the use of ChatGPT to course **learning outcomes**. This helps students understand how ChatGPT can support their learning and what expectations there are for them.
- **Review all forms of assessment and evaluation** to ensure that each element is fit for purpose. This review may lead to replacing exams or other assessments with in-person assessments or altering the types of questions or exam formats that are used.
- Review and **update policies relating to academic integrity/honesty** in relation to ChatGPT and other AI tools.[17]
- Train teachers, researchers, and students to **improve the queries they pose to ChatGPT**. As researchers have noted, ChatGPT is most useful when the inputs provided to it are carefully created.[18]

Build capacity to understand and manage ChatGPT

Adjusting to higher education in the era of ChatGPT also demands that HEIs pay attention to their role in building capacity to understand and to manage ChatGPT and AI. This must be balanced by the understanding that, at least for now, ChatGPT cannot replace human creativity and critical thinking and it is on these strengths that higher education has flourished.

New programmes/courses that focus on ChatGPT/AI will increase research and development capacity and provide students with cutting edge knowledge.

Existing programmes/courses can be updated to incorporate teaching of:

- AI literacy – as part of an expanded understanding of digital literacy and skills
- AI ethics
- Core AI competencies and skills

Training for staff can ensure that the support they provide to students and other stakeholders builds on rather than replicating what chatbots/AI tools offer and increase confidence in the deployment of technology.

Peer support and mentoring for faculty members to increase skill level and share good practices for teaching and ways of using ChatGPT in research can be done within faculties, at institutional level, or among supra-institutional communities of knowledge.

UNESCO IESALC will be offering an interactive version of this Quick Start Guide through **Campus IESALC**, a social and collaborative learning community. A longer course on AI and higher education is also envisaged. These courses are designed to strengthen competencies in the use of ChatGPT and other forms of AI in higher education.

16 Some of these suggestions are adapted from existing guidance already issued by HEIs. For example: http://www.rochester.edu/college/honesty/assets/pdf/chatgpt-ai-guidance-for-instructors.pdf

17 See for example: https://conecta.tec.mx/es/noticias/nacional/institucion/tec-de-monterrey-recomienda-su-comunidad-uso-inteligente-de-chatgpt

18 https://www.timeshighereducation.com/depth/chatgpt-revolution-academic-research-has-begun

Conduct an AI audit

Stages of an AI audit in higher education

1. Understand

2. Decide

3. Monitor

Regardless of whether ChatGPT and other forms of AI are already being used in your HEI, conducting an AI audit[19] is an important step that will help assess the current situation and support institutional planning.

It is suggested that this audit is undertaken by the HEI's governing body following extensive consultation with all academic, administrative and IT departments as well as with students. HEIs may consider additionally consulting with their key stakeholders such as members of the local community, research partners, and students' families.

1. Understand the current situation

- What is data-driven AI?
- How can digital technology support this HEI's functions?
- If the technology is based on AI:
  - What data does it collect?
  - How does its data processing work?
- At institutional level, what relevant policies or regulations currently exist?
  - On the use of AI
  - On privacy and data protection
  - On related areas (e.g., plagiarism, safeguarding)
- What external policies or regulations does the HEI need to account for (e.g., from government or research funders)?
- Which types of AI are currently being used in this HEI?
  - In which functions or units?
  - Do all stakeholders (faculty, staff, students) have access to these tools?
  - How is training and support provided?

2. Decide which AI to use

- Which areas could benefit from using AI? (e.g., student services, assessment, research)
- Which AI technology could be chosen?
  - What would be the criteria for choosing?
  - What value does the technology add?
  - How would data be protected?
- What is the HEI's position on open source/access vs commercial AI tools?
- How can the HEI ensure accessibility factors are considered?

3. Monitor performance and equity

- How effective is the AI technology in meeting the need that was identified?
  - What criteria are used to measure effectiveness?
- Can the data collected be used by the HEI?
  - How can it be used?
  - How often is data collected?
- To what extent is the AI technology overcoming or addressing equity concerns?
  - How is this measured?

Resources and further information

Campus IESALC: https://campus.iesalc.unesco.org/

UNESCO (2021) *Recommendation on the Ethics of Artificial Intelligence*. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000381137

UNESCO (2021) *AI and education: Guidance for policy-makers*. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000376709

UNESCO World Commission on the Ethics of Scientific Knowledge and Technology (2019). Preliminary Study on the Ethics of Artificial Intelligence. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000367823

19 This audit has been adapted with permission from the AI Audit in Education developed by Priscila Gonsales (Co-founder and Director of Educadigital and Researcher at the UNESCO Chair in Open and Distance Education, University of Brasília, Brazil).

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This Quick Start Guide introduces ChatGPT, an Artificial Intelligence (AI) tool that has taken the world by storm, reaching 100 million users just two months after being launched. The Quick Start Guide provides an overview of how ChatGPT works and explains how it can be used in higher education. The Quick Start Guide raises some of the main challenges and ethical implications of AI in higher education and offers practical steps that higher education institutions can take.

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4 QUALITY EDUCATION

Sustainable Development Goals