

# Artificial Intelligence (AI) meets Information Literacy (IL): Strategies at ETH Library

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ETH Library

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# With a little help of ChatGPT... or Microsoft Copilot



23.05.2024 with Chatgpt 4o



23.05.2024 with MS Copilot

# ETH Zurich in Numbers

500  
Professors

~3'000  
Scientific  
Staff

8'300  
publications

11'000  
bachelor

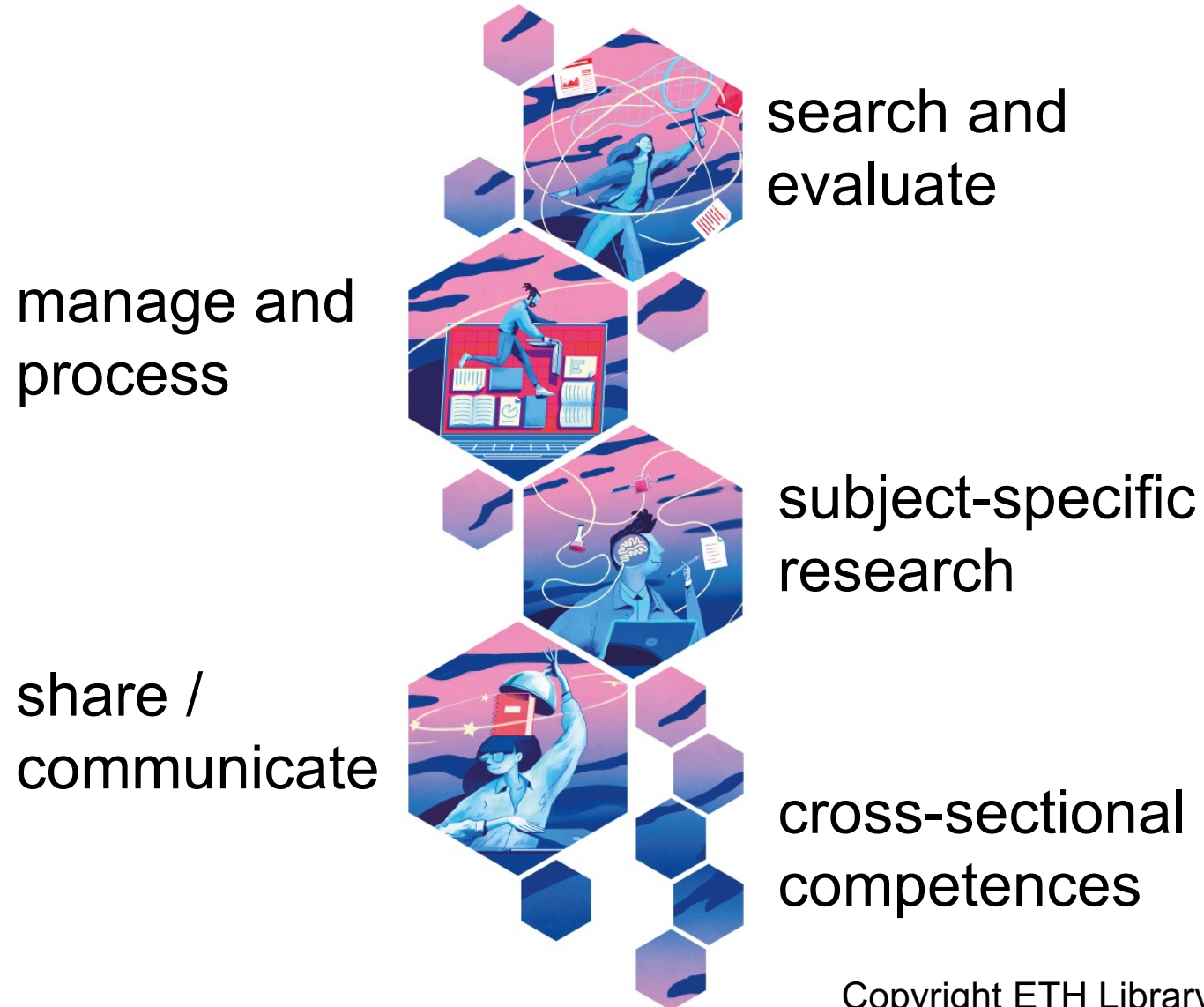
9'000  
master

4'400  
doctoral

6'000  
graduates

Numbers from ethz.ch

# Information Literacy (IL) at ETH Library



# AI Literacy is integral to Information Literacy

genAI-tool competency

manage and process

data protection/-privacy

share / communicate

responsible use (integrity)



search and evaluate

knowledge on use cases

subject-specific research

critical thinking

cross-sectional competences

“Academic libraries have the expertise and mindset of being early adopters of new technologies [..].”

Sandhu (2018):  
*The Role of Academic Libraries in the Digital Transformation of the Universities.*  
P. 293 ff.



# Strategies at ETH Library

IK trifft genKI | IL meets genAI



Organisation  
development



Networking &  
collaboration



Services for  
ETH members

# Strategies at ETH Library

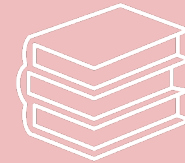
IK trifft genKI | IL meets genAI



Organisation  
development



Networking &  
collaboration



Services for  
ETH members



# Organisational development

- Basic measures: trend monitoring
- Structural development
- Personnel development



03.06.2024 with ChatGPT 4o

# Personnel development at ETH Library

## WHAT?

- Basic knowledge on AI and LLMs
- User skills: «how to click»
- Legal aspects



## HOW?

- Low-threshold further training opportunities
- Course preparation workshops
- Promotion of inner-organisational exchange

# Strategies at ETH Library

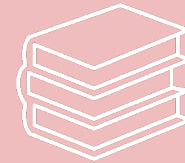
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# Networking and collaboration

- Hosting of and joining networking events
- Participating and initiating collaborative projects



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# Innovative collaborative teaching project 1

## “Assessing the Potential of AI for Scientific Writing Techniques”

July 2023 – June 2024

Department - USYS

*Dr. M. Paschke (Lead)*



ETH Library

*Project Partner*

AI and the writing process.

AI and plagiarism.

AI and scientific integrity.

GOAL: Create best practices and knowledge on potential and challenges of genAI.



# Innovative collaborative teaching project 2

“Scaled-up learning opportunities on generative AI at ETH Zurich”

Start: August 2024

ETH Library



ETH students  
and scientific  
staff

Self-learning course on genAI.

Flipped-classroom courses.

Pop-up info stands on genAI.

Unit for Teaching  
and Learning (ETH)

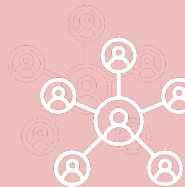
Upcoming project 3: ETH Library as  
a partner in curriculum development.

# Strategies at ETH Library

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Services for  
ETH members

# Information Literacy Services at ETH Library

- Courses, workshops, webinars
- Self-learning courses (Moodle)
- Websites
- Summer school
- «Book a librarian»
- Tool licenses
- ...



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# AI Literacy Services at ETH Library







- **Courses, workshops**, webinars
- **Self-learning courses** (Moodle)
- **Topic specific Websites**
- **Pop-up info stands on genAI**
- **Tools** (“Cite Them Right”)
- ...



# Plagiarism and Artificial Intelligence

## Declaration of the use of AI-based tools

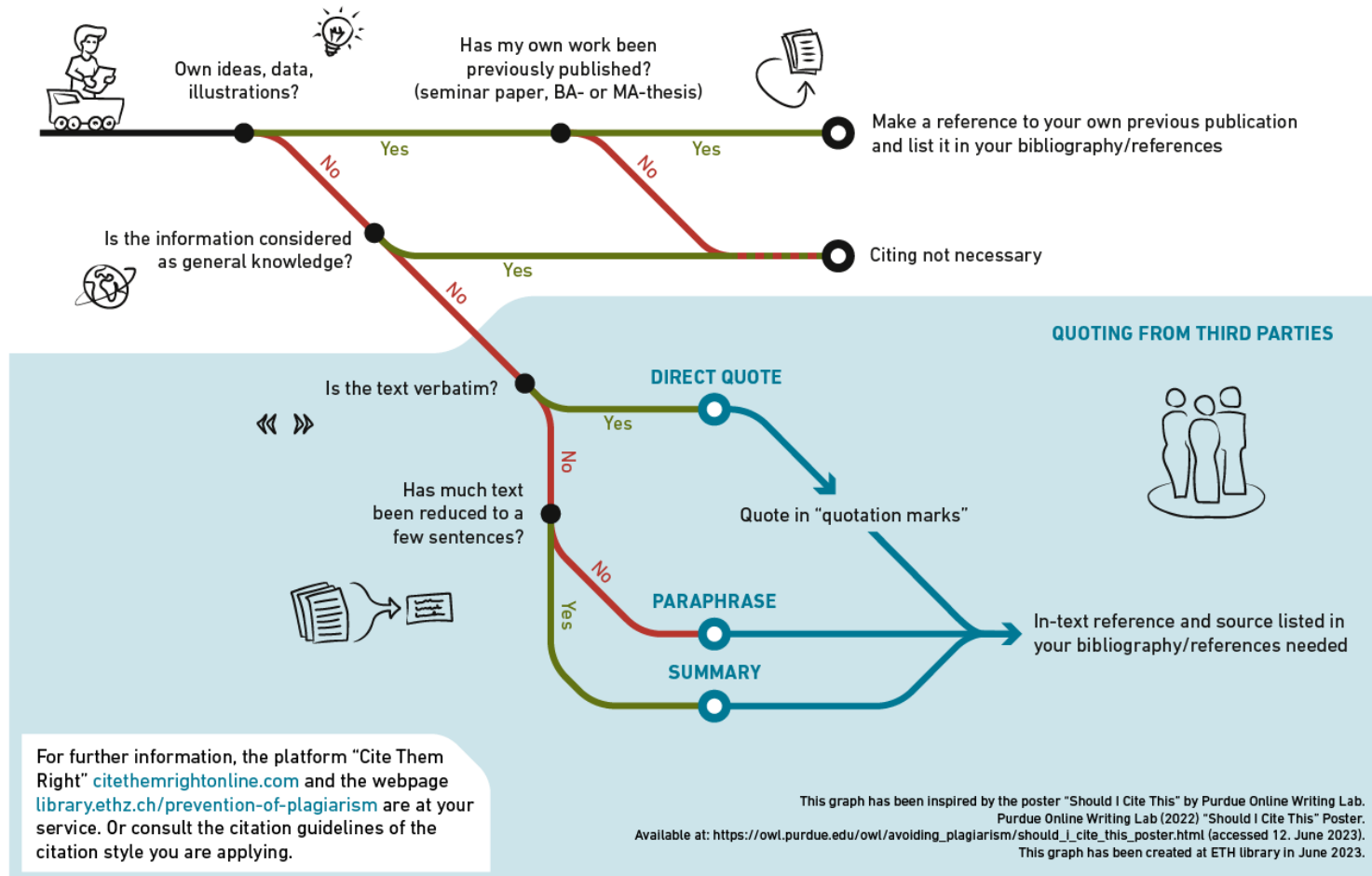
Example for transparently documenting the use of AI-based tools in a scientific publication

AI-Based Tool	Use Case	Scope	Remarks
 ChatGPT 4.0 Last date of access: 04.12.2023	Creation of the research question	Chapter 3, pp. 8 – 11	Chat history in Appendix 2
	Code generation for data visualization	Chapter 5, p. 56	Python
 Gemini Pro (formerly Google Bard) Last date of access: 18.03.2024	Revision of text for conciseness and spell-checking	Entire work	
 Microsoft Copilot Last date of access: 09.02.2024	Code generation	Chapter 4, pp. 37 – 41	In Python, documentation and methodological description in Appendix 3
 DALL-E3 Last date of access: 09.02.2024	Visualizations	Fig. 5, p. 13 Fig. 7, p. 17	Prompts in Appendix 1
 DeepL Pro Last date of access: 24.11.2023	Translation of text passages	Entire work	From Greek to English
 Grammarly Last date of access: 17.01.2024	Correction of grammatical and stylistic mistakes	Entire work	Premium plan with Microsoft Word integration

Source: Paschke, M., Sudau, M., Mihálka, R, "Assessing the Potential of Artificial Intelligence in Scientific Writing". Innovedum, ETH Zürich, 2023. / ETH Library  
Last updated: 14 February 2024

# Decision-making aid (poster)

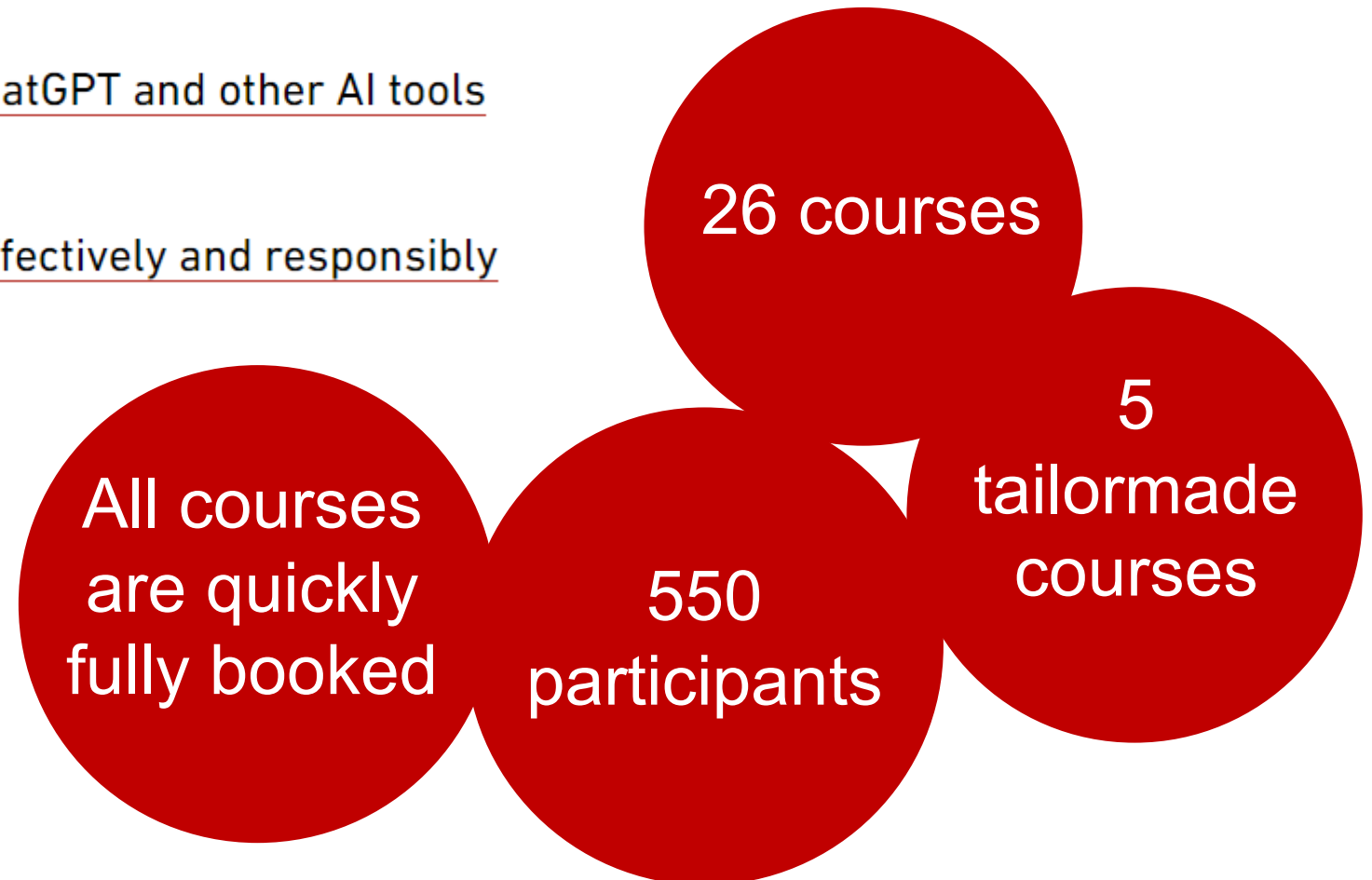
## Must I cite?



# Courses at ETH Library: using genAI tools in writing

since September 2023:

- Mastering scientific writing with ChatGPT and other AI tools
- Scientific writing: Using ChatGPT effectively and responsibly



# Self-learning course: Ready for Take-Off



<https://moodle-app2.let.ethz.ch/course/view.php?id=13753>

# Self-learning course: Find your reference management software!



# Strategies at ETH Library

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Services for  
ETH members

The era of genAI gives (university) libraries the chance to **strengthen their role** in teaching information literacy.



20.05.2023, Chat GPT 4o



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# Image sources

- **Slide 1 and 24:** ChatGPT 4o (22.05.2024) A vibrant and futuristic kitchen scene where generative AI tools are represented as holographic cooking utensils and ingredients. The kitchen is filled with a variety of colorful, glowing spices, exotic ingredients, and innovative cooking gadgets that symbolize AI tools. A chef, surrounded by these tools, is creating a dish with a sense of wonder and excitement. The scene should be dynamic, with digital elements blending seamlessly with traditional cooking, emphasizing the idea of AI adding new dimensions to the culinary process. The background can include a modern, high-tech kitchen setting with sleek, futuristic design elements.
- **Slide 2:**
  - Left: ChatGPT 4o (24.05.2024) An illustrative portrait of a female historian who now works at university library working in digital curation and teaching prevention of plagiarism. She has short, wavy brown hair and wears glasses. She is wearing climbing gear to show her love for the outdoor sports. The background features bookshelves filled with old and modern books as well as computers to represent her background as a historian working in the library. The style is more illustrative and artistic, with vibrant colors and defined lines. Please make the woman look kind of normal not overly pretty.
  - Right: Microsoft Copilot (24.05.2025) A portrait of a female physicist lecturer with long, wavy darker brown hair reaching just about the elbows, brown eyes, and a Western European appearance. She is wearing a lab coat, holding a flute, and smiling with her mouth open showing her teeth. She looks around forty years old with subtle wrinkles on her face, a rather long face and not too skinny. The background resembles a mixture of a library and a scientific physics lab. The style is illustrative, with vibrant colors and defined lines. She wears no glasses, looks realistic and relatable, avoiding a sexist depiction and not overly feminine.
- **Slide 4, 5:** Illustration *Competence Grid*: Copyright of ETH Library.
- **Slide 6:** ChatGPT & DALL-E 3 (2023) Photorealistic scene from a cutting-edge technical university emphasizing information literacy. A South Asian female student is immersed in her research using a grand holographic display filled with academic content. Not far from her, an African male student efficiently cross-references materials with the help of multiple floating holographic books. The overall setting is a sophisticated learning environment, showcasing a library equipped with both traditional and futuristic tools (accessed: 16 October 2023).
- **Slide 9:** ChatGPT 4o (03.06.2024) A colorful and modern clipart representing the organization development of an academic library, featuring people engaging in various services. The services include a book for courses, a clock for consultation hours, a group of people for workshops, and an information stand. These icons are arranged in a circular layout around a central library icon. The color scheme prominently features the color #B7352D along with other bright colors. Additionally, there is an element resembling a circuit board with 'genAI' written on it, linking into the other services to represent the integration of generative AI tools into existing offers. Include diverse characters interacting with these elements.
- **Slide 12, 16:** Photos: Copyright of ETH Library.
- **Slide 17:** ChatGPT & DALL-E 3 (01.11.2023) Photo of a spacious classroom filled with sunlight. Every student has their own translucent green AI ghost-like assistant interacting with them. The students and their respective AI figures are deeply engaged in various activities: an African male student is in conversation with his AI about something on his laptop, a White male student gets a thumbs-up from his AI as feedback, an Asian female student and her AI examine a 3D hologram together, and a Black female student's AI leans in to suggest something about her handwritten work. The AIs are lively, devoid of gender-specific features, and play the central role in tutoring and feedback. On the side, a Hispanic female lecturer stands silently, observing the blend of traditional learning and futuristic AI assistance without any active intervention.
- **Slide 18:** Paschke, M., Sudau, M- and Mihálka, R., "Assessing the Potential of Artificial intelligence in Scientific Writing". *Innovedum*, ETH Zürich, 2023. / ETH Library