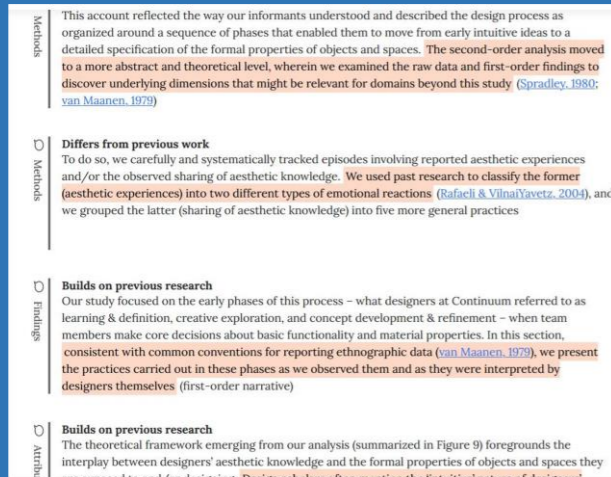


Scholarcy.com aims to help academic users analyse scholarly papers and research articles. Using AI, the software creates a “summary flashcard” where key concepts are extracted from the paper, and an abstract, a synopsis, a comparative analysis, and a scholarcy summary, among others, are created. In the comparative analysis the article is dissected in several parts, like “Methods and prior work”, in the methodology section, or “Differs from previous work” and “Counterpoint to earlier claims” in the discussion part.



Issues and possibilities when using AI-based analysis tools

AI-based analysis tools have a direct impact on research workflows. On the one side, the increasing amount of articles available can be challenging for researchers. Artificial intelligence is able to support researchers in identifying, analysing and summarizing relevant works of research. On the other side, AI-powered tools like Scholarcy invite to short cuts at the expense of academic integrity. Surrendering the valuable and meaningful work of analysis and summary to machine learning involves challenges for basic issues of scholarly education.

EXAMPLES OF AVAILABLE TOOLS

- keenious.com
- connectedPapers.com
- semanticScholar.org
- researchrabbit.ai
- openknowledgemaps.org
- annif.ai
- feedly.com
- hamlet
- scholarcy.com
- scinote.net
- jasper.ai
- ripeta.com
- proofig.com
- paper-digest.com
- escriptorium.uk
- scite.ai
- rayyan.ai
- frase.io
- quillbot.com
- resoomer.com
- copyshark.ai
- bit.ai
- trinka.ai
- readcoop.eu/transkribus/
- writefull.com
- longshot.ai



Artificial Intelligence-based tools
in the context of Open Science.
PhD on Track as a resource



Hege Charlotte Lysholm Faber - Norwegian University of Science and Technology Library
Andrea Alessandro Gasparini - University of Oslo Library
Michael Grote - University of Bergen Library

PhD on Track is a national web resource for PhD candidates and early career researchers in Norway. The website aims to enable researchers from all academic fields to easily access information on different aspects of the process towards a PhD degree. Main topics are the research process, communicating results, and open science.

A new wave of AI-based services and tools aimed to support researchers and students is entering academia. By addressing practical, methodological and ethical aspects of the use of AI-based tools in different research workflows, PhD on Track will contribute to avoid opacity and clarify non-intuitive aspects of the use of technology in academia. Projected is the discussion of AI-based support in the modules on reviewing, searching, writing, co-authorship and copyright.

Issues and possibilities for discussion: What happens when an AI-based tool co-creates knowledge together with a PhD candidate?

How does the use of AI affect the reliability, honesty, respect and accountability of research?

How should PhD education reflect on AI with respect to the principles of academic integrity?

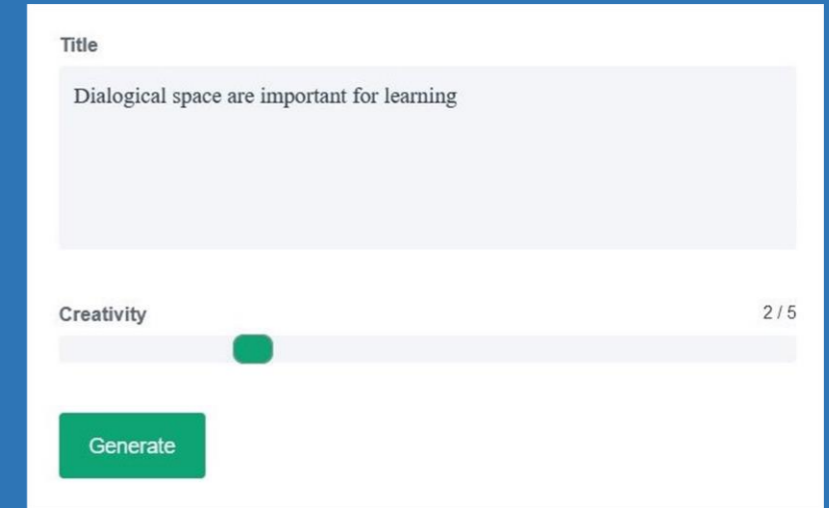
When and where should PhD candidates and researchers gather reliable information about AI-based services?

What is the minimum level of competence PhD candidates should have in machine learning and deep learning?

How can universities and academic libraries address ethical questions raised by the increasing availability and use of AI-based tools?

Images: flaticon.com, frase.io, scholarcy.com

Frase.io creates extended texts based on some keywords or a sentence. Testing made in the context of this poster shows that the service creates unique paragraphs each time it is used, and that the products pass standard plagiarism checks. Below the interface of frase.io:



The following is part of the output from frase.io.

1. Dialogical Space

Dialogical space is a concept developed by Paulo Freire (1921-1997) in his book Pedagogy of the Oppressed. He describes it as a place where people have the opportunity to learn about their own oppression and the ways they perpetuate it. Dialogical space is not only a physical space, but a social space as well. In a dialogical space, students feel safe enough to express themselves freely. Dialogical spaces allow for dialogue between teacher and student. Teachers should encourage their students to speak freely and openly about their experiences, thoughts, and feelings. Students should feel free to ask questions and voice their opinions. Students who participate in a dialogical space will gain knowledge and understanding about how they live in oppressive systems.

Issues and possibilities when using AI-based text generators

AI-based text generators can help users with disabilities, and they can also be helpful as brainstorming tools, giving you input and new ideas. However, tools like frase.io imply fundamental questions about the quality and accountability of research. What are the differences between human and machine generated knowledge? Who – or what – would be the author of an article generated by an AI-based text generator? The challenges for academic integrity are obvious. Ethical guidelines, copyright law and academic policies are designed with regard to research conducted by human authors. Machine-generated texts dare these regulations and invite to workarounds and questionable research practices.

