



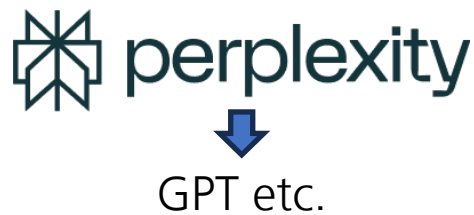
FernUniversität  
in Hagen

# KI-Tools für das wissenschaftliche Arbeiten

ZLI TechTalk, 24.1.2024

## Agenda

- Warum spezifische Werkzeuge?
- Vier Beispiele



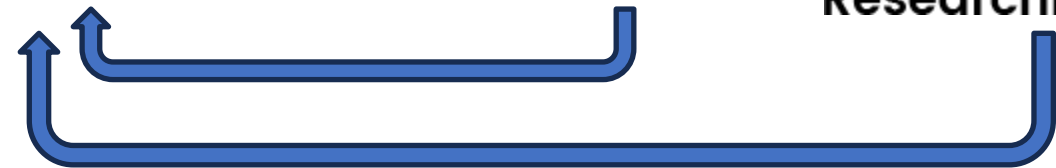
SEMANTIC SCHOLAR



Elicit



ResearchRabbit



- Erfahrungsaustausch
- Wunschthema für den ZLI TechTalk am 7.2.2024



## Warum spezifische Werkzeuge?

### PRO

- Fokussierung bei Datengrundlage
- konsolidierte und vertrauenswürdige Datengrundlage
- automatisierte Ergänzung der Prompts durch Kontext, Rolle, Aufgabe u. ä.
- besondere Aufmerksamkeit auf korrekten Ergebnissen (mit Einschränkungen)
- Austauschmöglichkeiten mit anderen Wissenschaftler\*innen

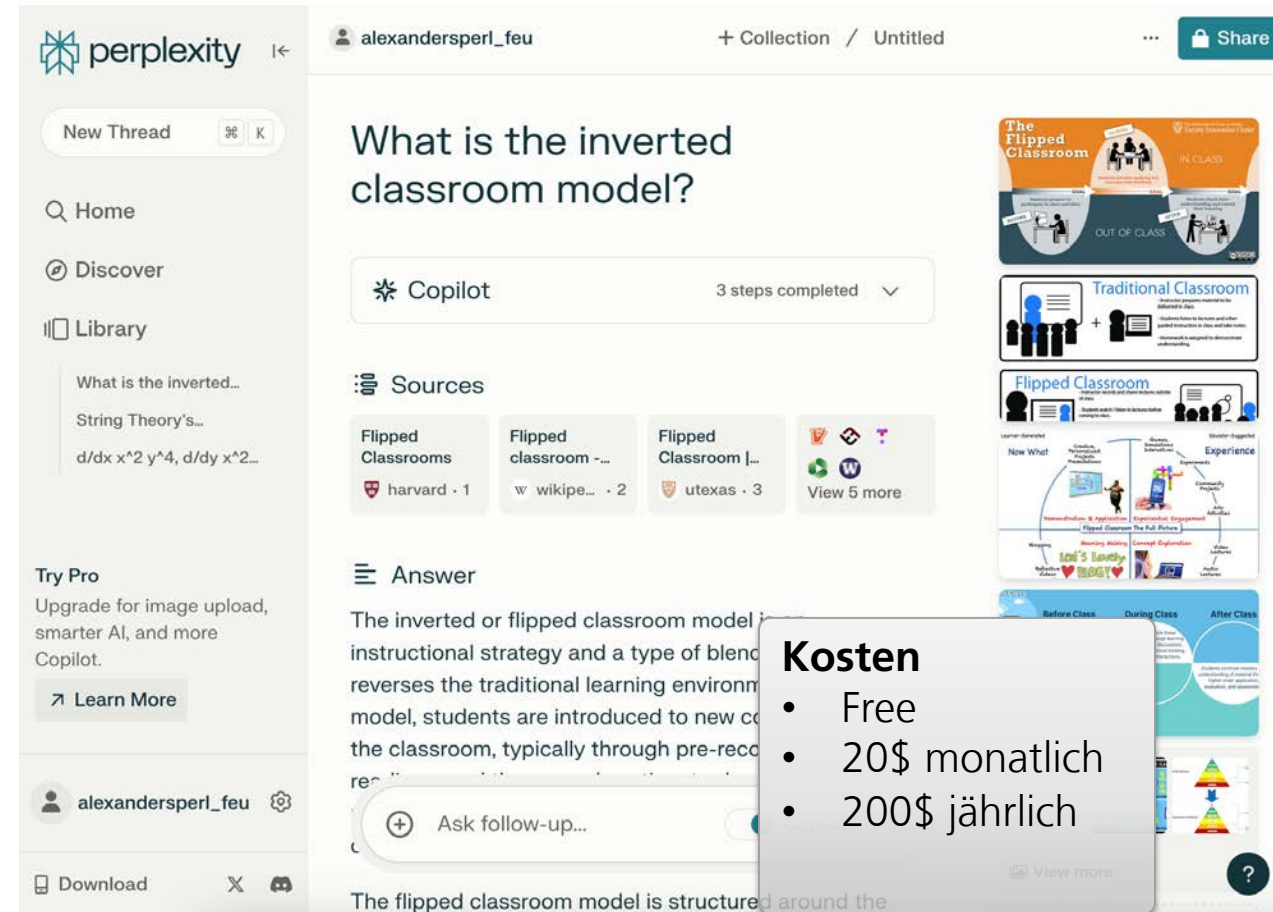
### CONTRA

- Funktionalität unterschiedlicher Tools ähnelt sich (teilweise sehr)
- zugrundeliegendes LLM meist (aber nicht immer) von OpenAI
- unterschiedliche Nutzungsbedingungen



## Perplexity.ai

- Kombination von Internet-Suche und Chatbot
- kuratierte Datengrundlage
- basiert auf GPT 3.5 in der kostenlosen Version
- Pro: Auswahl zwischen drei (vier?) LLMs:
  - GPT 4
  - Claude 2.1
  - Perplexity 70b
  - (Gemini Pro)
- Quick Search vs Copilot Search
- Search Focus (All, Academic, Writing (ohne Web), Wolfram Alpha, YouTube, Reddit)
- <https://www.perplexity.ai/>



The screenshot shows the Perplexity.ai web interface. At the top, the user is logged in as 'alexandersperl\_feu'. The main search bar contains the query 'What is the inverted classroom model?'. Below the search bar, the interface displays 'Copilot' status (3 steps completed) and a list of sources including 'Flipped Classrooms' from Harvard, 'Flipped classroom' from Wikipedia, and 'Flipped Classroom' from UTexas. The answer section provides a detailed explanation of the inverted or flipped classroom model, describing it as an instructional strategy and a type of blended learning that reverses the traditional learning environment. On the right side, there are several educational diagrams: 'The Flipped Classroom' diagram showing 'IN CLASS' and 'OUT OF CLASS' phases, a 'Traditional Classroom' diagram, and a 'Flipped Classroom' diagram comparing 'New What' and 'Experience' phases. A 'Kosten' (Costs) box is overlaid on the right side of the screenshot, listing: Free, 20\$ monatlich, and 200\$ jährlich.

**Kosten**

- Free
- 20\$ monatlich
- 200\$ jährlich

## Perplexity.ai

[...]

### User-Generated Content

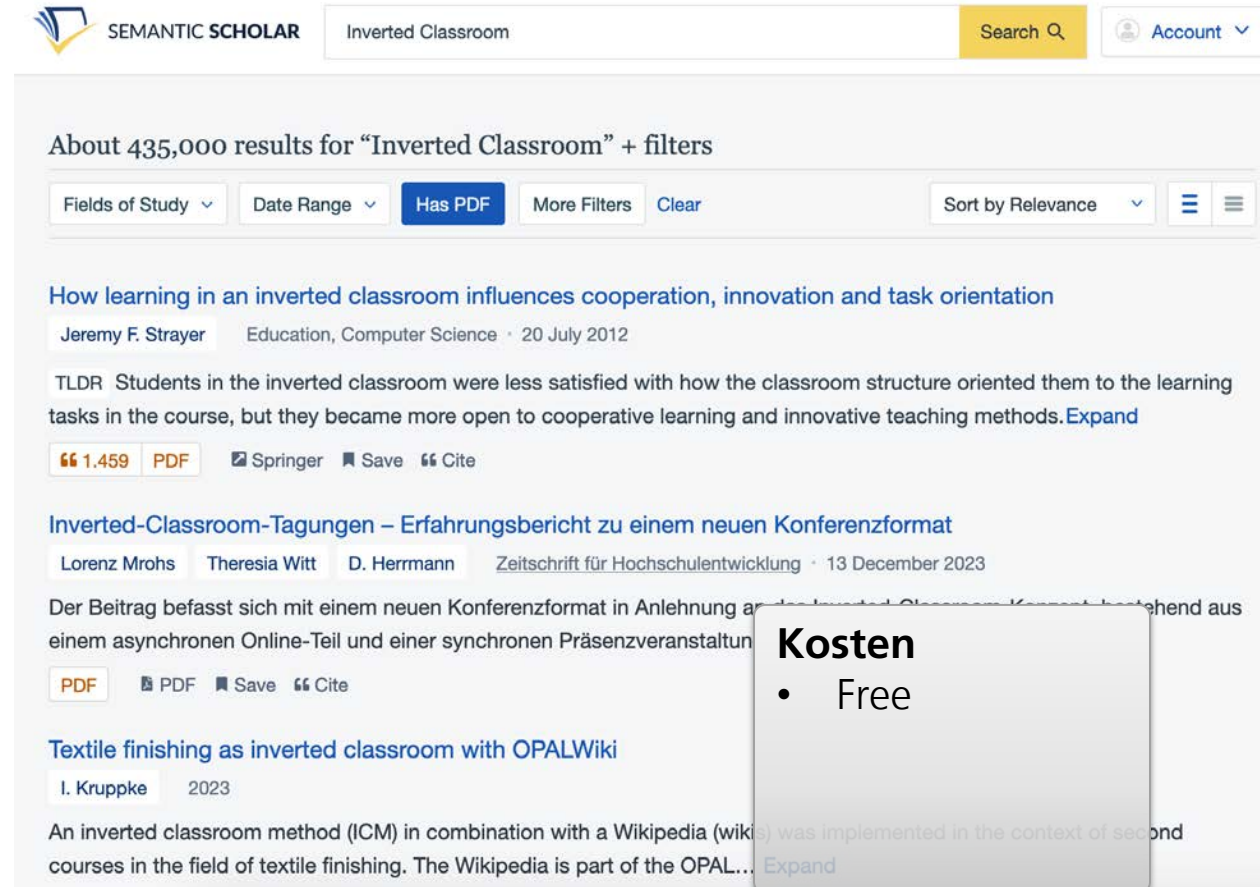
The Service may allow you to upload, submit, store, send or receive content. You retain ownership of any intellectual property rights that you hold in that content. In short, what belongs to you stays yours.

When you upload, submit, store, send or receive content to or through the Service, you give us (and those we work with) a worldwide license to use, host, store, reproduce, modify, create derivative works (such as those resulting from translations, adaptations or other changes we make so that your content works better with the Service), communicate, publish, publicly perform, publicly display and distribute such content. The rights you grant in this license are for the limited purpose of operating, promoting, and improving our Service, and to develop new ones. Make sure you have the necessary rights to grant us this license for any content that you submit to our Services.

[...]

## Semantic Scholar

- Suchmaschine für Artikel basierend auf Deep Learning Technologien
- Suchergebnis mit Filtermöglichkeiten
- TL;DR: KI-generiertes Abstract des Artikels
- „Library“- und „Alert“-Funktionen
- Detailseite mit „Citations“
- Ask this paper (ChatGPT 3.5 Turbo)
- Semantic Reader
- <https://www.semanticscholar.org/>



SEMANTIC SCHOLAR Inverted Classroom Search Account

About 435,000 results for “Inverted Classroom” + filters

Fields of Study Date Range Has PDF More Filters Clear Sort by Relevance

**How learning in an inverted classroom influences cooperation, innovation and task orientation**  
Jeremy F. Strayer Education, Computer Science · 20 July 2012  
TLDR Students in the inverted classroom were less satisfied with how the classroom structure oriented them to the learning tasks in the course, but they became more open to cooperative learning and innovative teaching methods.[Expand](#)  
1.459 PDF Springer Save Cite

**Inverted-Classroom-Tagungen – Erfahrungsbericht zu einem neuen Konferenzformat**  
Lorenz Mrohs Theresia Witt D. Herrmann Zeitschrift für Hochschulentwicklung · 13 December 2023  
Der Beitrag befasst sich mit einem neuen Konferenzformat in Anlehnung an das Inverted Classroom Konzept bestehend aus einem asynchronen Online-Teil und einer synchronen Präsenzveranstaltung.[Expand](#)  
PDF PDF Save Cite

**Textile finishing as inverted classroom with OPALWiki**  
I. Kruppke 2023  
An inverted classroom method (ICM) in combination with a Wikipedia (wiki) was implemented in the context of second courses in the field of textile finishing. The Wikipedia is part of the OPAL...[Expand](#)

### Kosten

- Free

## Elicit

- Assistenz für die wissenschaftliche Recherche
- basiert auf Semantic Scholar
- mehrere LLMs
- durchsucht und fasst zusammen:
  - Open Access Literatur im Volltext
  - auch Preprint
  - ansonsten nur Abstracts
- Datenbank-Update einmal pro Monat
- factored verification
- <https://elicit.com/>

 Find papers

### What is the inverted classroom model?

- ☐ Searching more than 125 million academic papers
- ☐ Summarizing the first 4 abstracts
- ☒ Results

Summary of top 4 papers ▾

 Copy

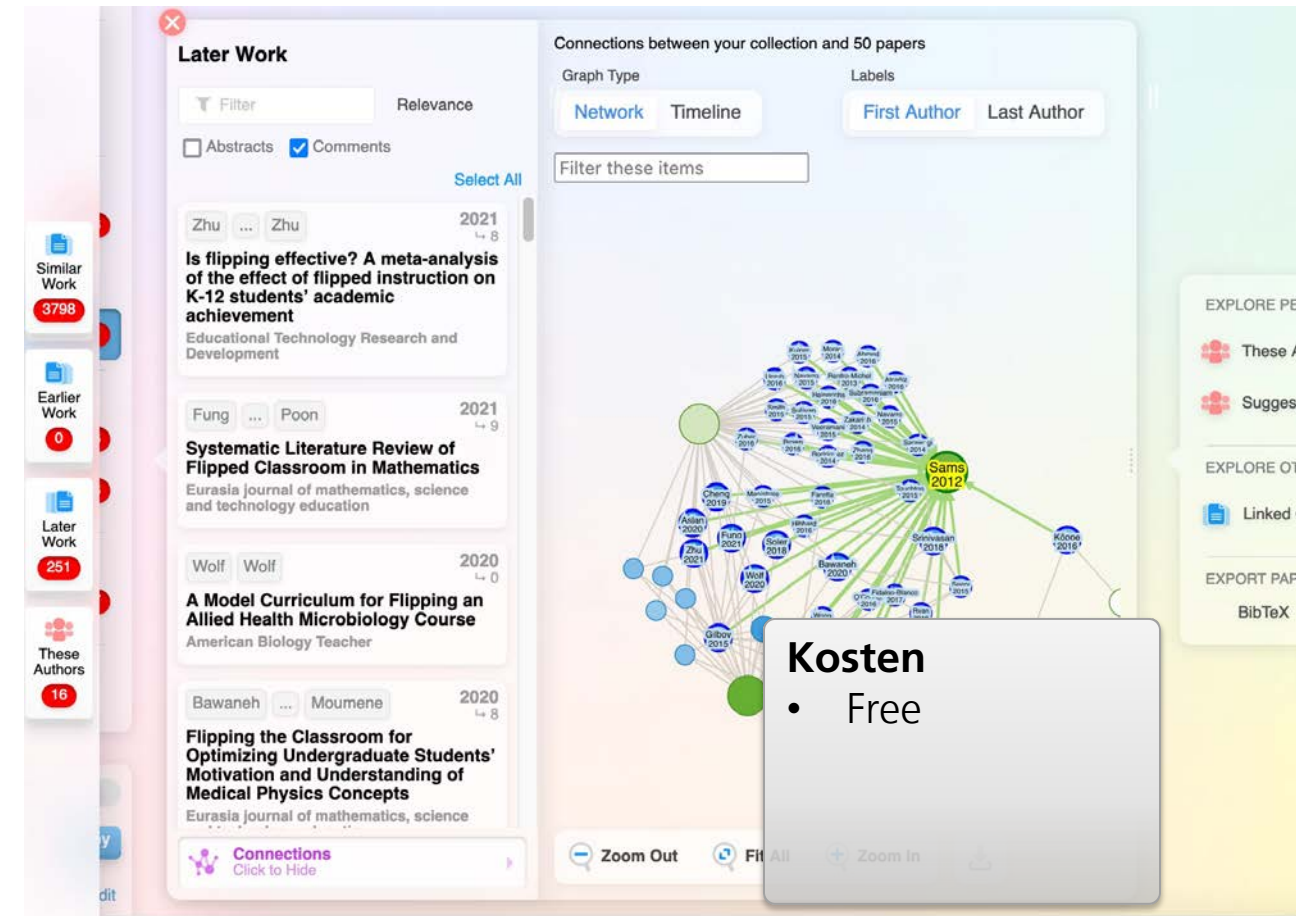
The inverted classroom model, as discussed by [Talbert \(2014\)](#), [Gannod \(2008\)](#), [Braun \(2014\)](#), and [Reza \(2015\)](#), involves students engaging with new information outside of class and using class time for higher-level activities. This model has been applied in various fields, including linear algebra ([Talbert, 2014](#)), software engineering ([Gannod, 2008](#)), and electrical engineering ([Braun, 2014](#)), and computer science ([Reza, 2015](#)). Technology, such as video lectures, is a key component of this model. It has been shown to improve learning outcomes, particularly in programming ability ([Reza, 2015](#)).

#### Kosten

- 5.000 Credits Free
- weitere 1.000 Credits 1\$

## Research Rabbit

- textuell-grafische Darstellung von Publikationen und ihren Zusammenhängen auf Basis der Zitation
- basiert auf PubMed und Semantic Scholar
- Zeitleisten- und Netzwerkdarstellung
- spaltenweises Vorgehen:
  - Basis-Artikel
  - Zitation und „Similar Articles“
  - Liste und grafische Darstellung
  - Autor\*innen
- Vorschlagssystem intransparent
- <https://researchrabbitapp.com/>





## Wunschthema 7. 2.

<https://app.conceptboard.com/board/gyct-1ien-ts5s-in61-xgcx>



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