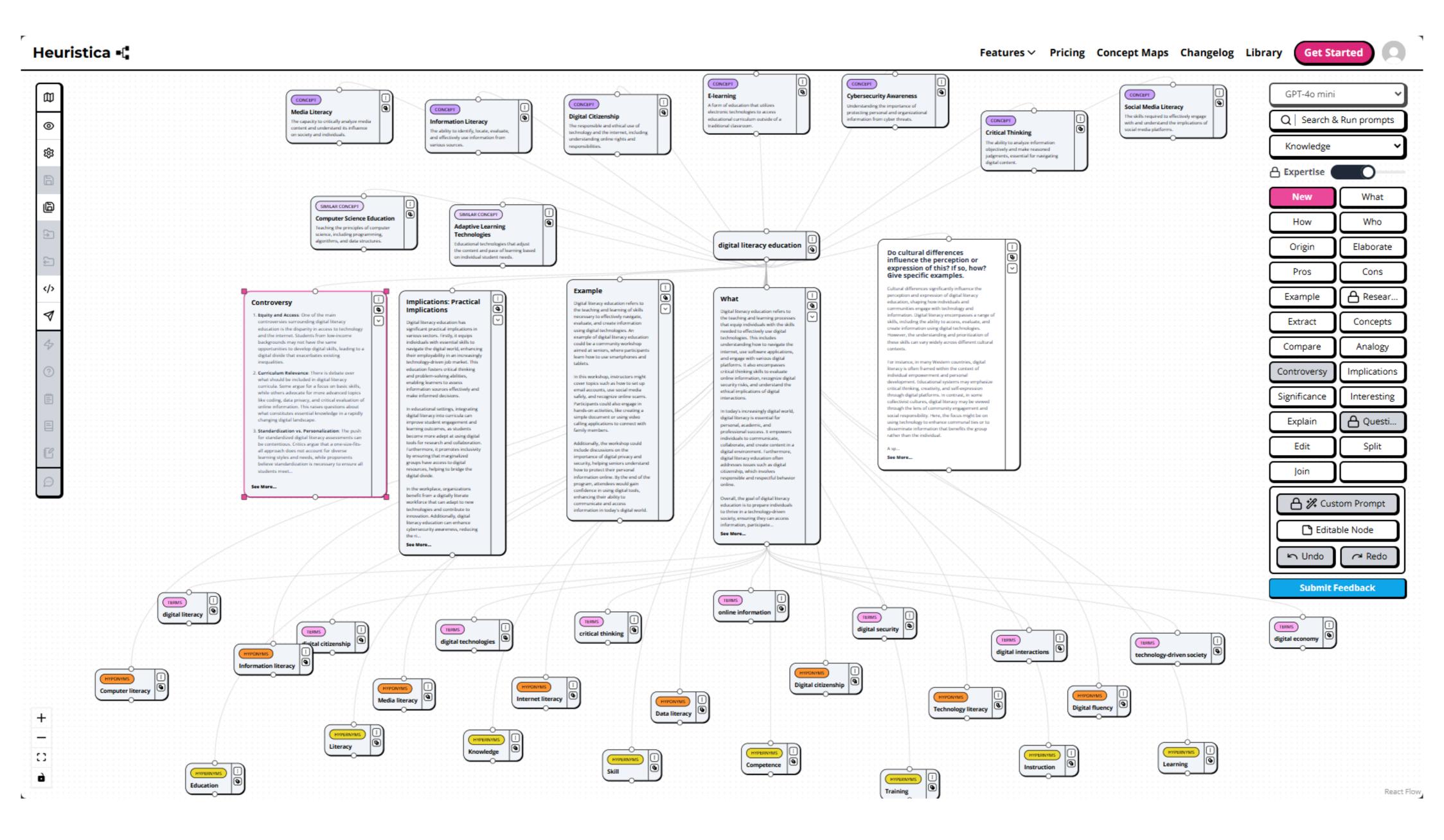
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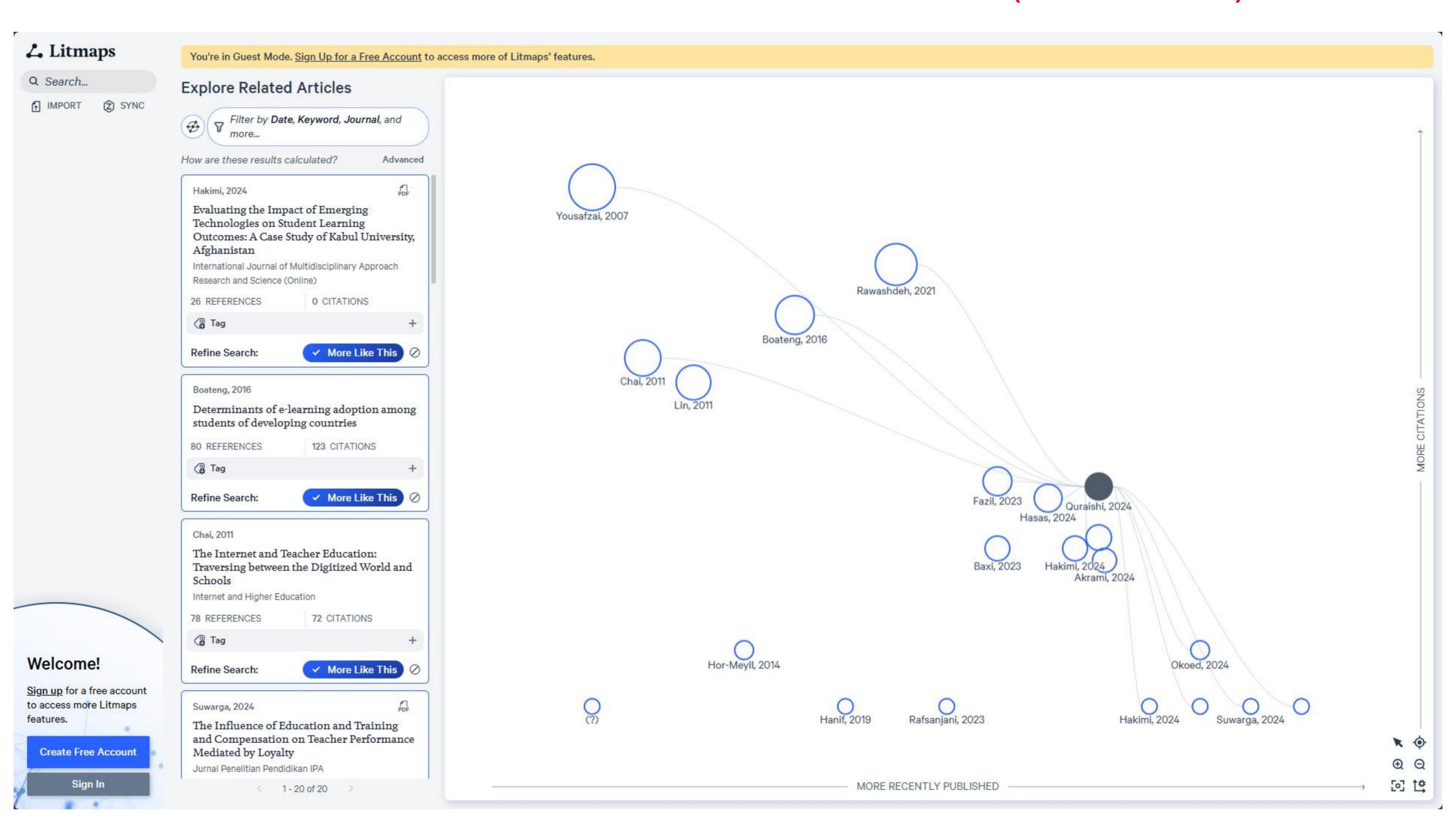
Mind-map Erstellung mit vorgefertigten Prompts



Litmaps



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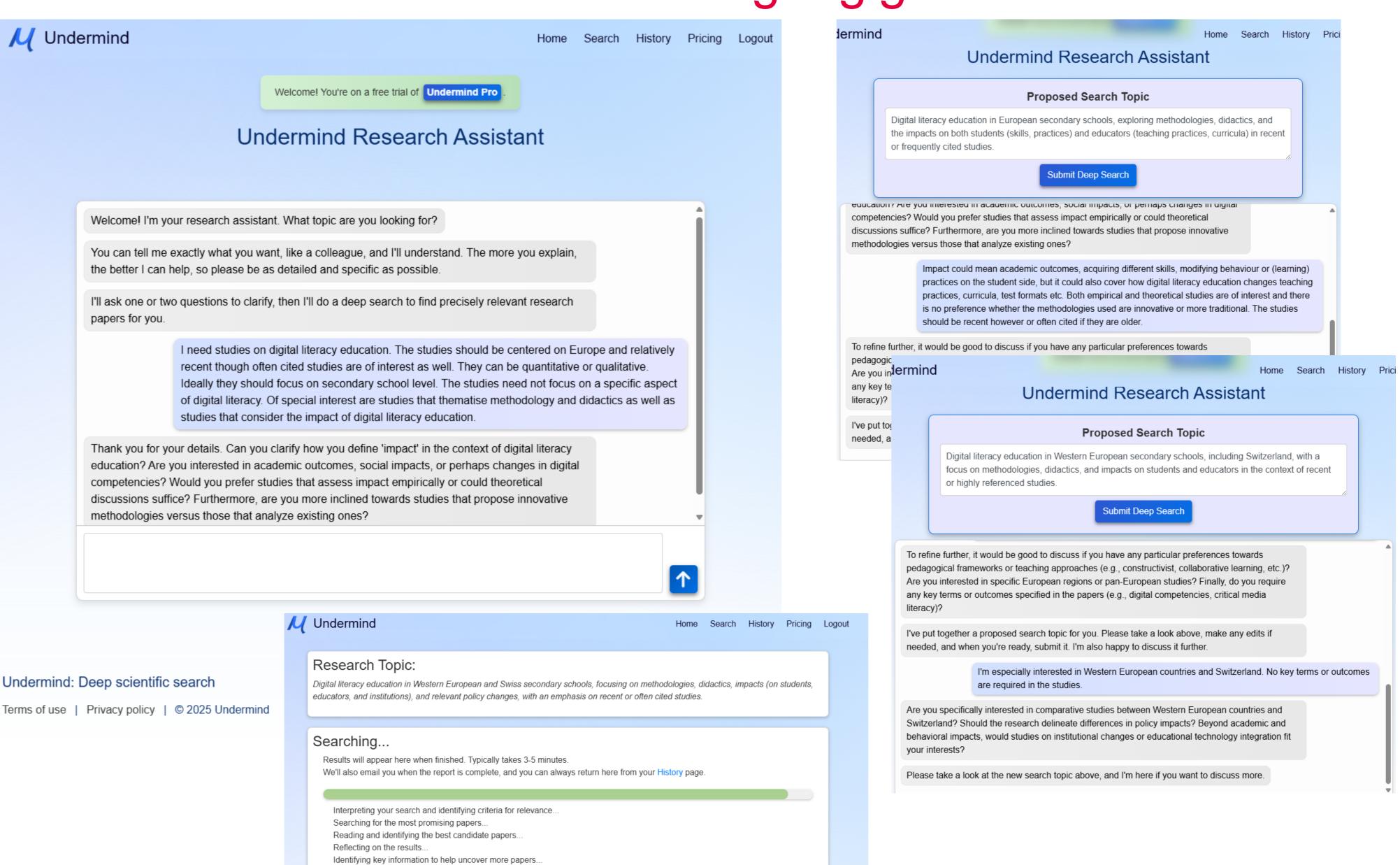
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Literaturrecherche basierend vorgängigem Chat

Adapting and searching again.

Adapting and searching again for comprehensiveness.

Identifying important categories of results...



Undermind



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Research topic

Digital literacy education in Western European and Swiss secondary schools, focusing on methodologies, didactics, impacts (on students, educators, and institutions), and relevant policy changes, with an emphasis on recent or often cited studies.

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Report

∧ Detailed summary

Recent research demonstrates that digital literacy education in Western European and Swiss secondary schools has advanced significantly, with promising methodologies like blended learning and teacher competence gaps, unequal access, and inconsistent policy implementation across decentralized systems like Switzerland's (e.g., EDUNUM [7]).

Crucial Findings on the Topic 1. Policy and Frameworks

- EU vs. Swiss Context: EU-driven frameworks (e.g., DigComp) have shaped curricula across Western Europe, emphasizing digital skills as core competencies for both students and teachers [15 , 16]. Switzerland adopts EU-aligned trends but operates through a decentralized approach, creating local variability in implementation [7 , 10].
- Policy Gaps: Despite these frameworks, uneven clarity in policy implementation and local adaptation slows progress, as observed in Switzerland's EDUNUM case [7, 10], and Austria's "Digital Education" program [1, 2].
- 2. Teaching Methodologies and Didactics
- Promising Approaches:
- Teacher-Centric Frameworks: Projects like DigiLit Leicester (UK) show scalable success in empowering educators through self-evaluation and professional development for embedding digital literacy into teaching [3 , 4].
- Inquiry-Based and Collaborative Methods: Interactive pedagogical models, including project-based learning [22] and blended learning approaches, enhance student engagement and skill acquisition [8 , 11].
- Critical Media Literacy: Some curricula focus on addressing misinformation, plagiarism, and ethical use of digital tools, often highlighting gaps in perception vs. ability (e.g., Austria, Norway) [6 , 9].
- Challenges: Studies consistently reveal insufficient teacher training and digital skill preparedness, even in highly digital nations like Norway [5] or Austria [1 , 21]. Teachers rely heavily on external supports for content and pedagogy adaptation [7 , 21].
- 3. Equity and Acces
- Digital Divide: Persistent inequalities exist in digital resource access, usage, and training, particularly between vocational and preparatory tracks [19] and socioeconomically disadvantaged areas [11]. Gender differences in digital skill perception are also significant [6].
- Infrastructure Challenges: Programs like 1:1 laptop initiatives expose limitations in equitable implementation, with gaps in device use and integration into meaningful classroom activities [19].

4. Impact

- Students: Positive correlations between digital literacy education and improved academic performance, ethical digital behavior, and critical thinking skills are reported [6]. 12]. However, the "attitude-ability" gap (students overestimating their skills) complicates curricula design [6].
- Teachers: Teacher attitudes and competence are crucial; studies indicate that enthusiasm, recent training, and adaptability strongly influence implementation efficacy [8 , 13].
- Institutions: Broader institutional change, spurred by COVID-19's push for digitalization, underscores the need for sustained hybrid learning resilience [24].

5. Research Gaps

- Evaluation Tools: There is no unified framework for assessing the long-term impacts of digital literacy initiatives; most studies focus on short-term skills acquisition (e.g., surveys) rather than broader societal outcomes [14, 15].
- Scalability: Pilot program results (e.g., [13 , 22]) are promising but lack longitudinal follow-up to validate outcomes across broader contexts.

Key Takeaway

While digital literacy education has seen commendable advancements in methodologies and frameworks, widespread implementation remains restrained by systemic inequities, teacher preparedness, and challenges in bridging the "digital divide." Future improvement necessitates robust teacher training, accessible resources, and unified evaluation standards.

- Categories of papers
- Timeline and citation network
- Discovery progress: more than 90% complete (~5-18 papers found)

References

Show only:
\[Last 5 years \] Last 2 years \[\] > 1 citation per year \[\] > 5 citations per year Toggle all abstracts Topic Match Cit./Year Paper Relevance Summary Year Paper [1] Digital Literacy in Austrian Lower Secondary Education - A Synthesis and Evaluation of Experiences in the First Two Provides an evaluation of Austria's new mandatory digital literacy curriculum in lower secondary education Focuses on teachers' implementation experiences, challenges, and opinions two years after introducing "Digital Education" as a subject or integrated curriculum. Years Relevant to methodologies and educator impacts but geographically outside Western Europe/Swiss scope; limited to early-stage analysis with no broader policy 2021 6th International STEM Education Conference (iSTEM-Ed) 2021 - 0 citations - @ Show abstract - 66 Cite [2] Digital Literacy in Lower Secondary Education - A First Evaluation of the Situation in Austria Provides an evaluation of Austria's implementation of "Digital Education" in lower secondary schools. Examines curriculum design (digital/media/civic competences), implementation approaches (standalone vs. integrated), and challenges like teacher availability. Corinna Hörmann and B. Sabitzer 0.2 2020 83.5% Focuses on Austria, not Western Europe or Switzerland, but offers insights into policy-driven digital literacy education with systemic challenges. International Conference on Informatics in Secondary Schools 2020 - 1 citations - @ Show abstract - 66 Cite [3] Digital Literacy and Open Educational Practice: Digilit Leicester Provides insights into digital literacy development for secondary school educators. Focuses on improving educators' digital skills and practices via innovative methodologies, with an emphasis on open educational practices. 0.2 2018 82.0% Digital Literacy Unpacked Limited to UK context (Leicester), omitting student impacts, institutional changes, and Western European or Swiss policy relevance. 2018 - 1 citations - @ Show abstract - 66 Cite



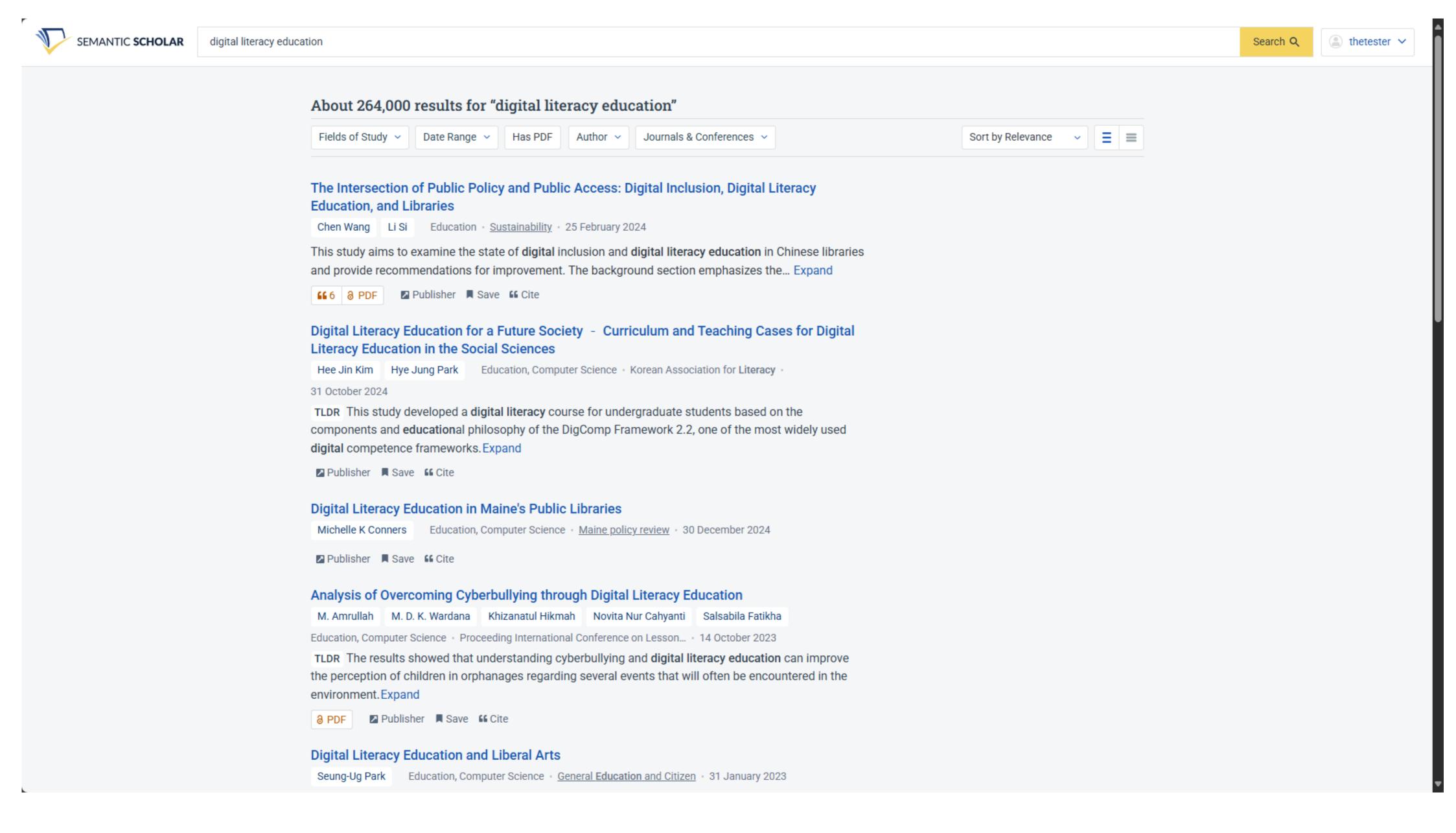
Provides a self-evaluation digital literacy framework for secondary educators.

[4] Defining a Self-Evaluation Digital Literacy Framework for Secondary Educators: The DigiLit Leicester Project.

Semantic Scholar



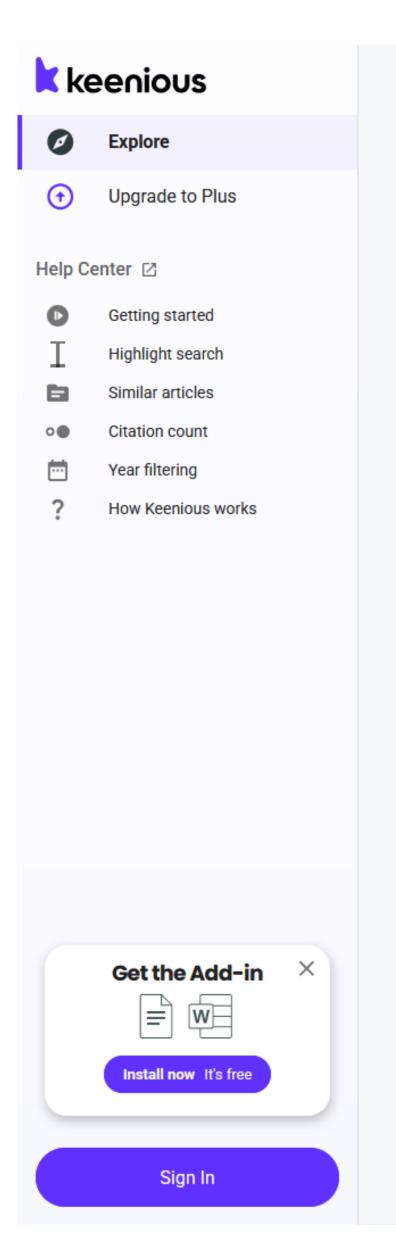
"Klassische" Stichwortsuche mit KI-Unterstützung



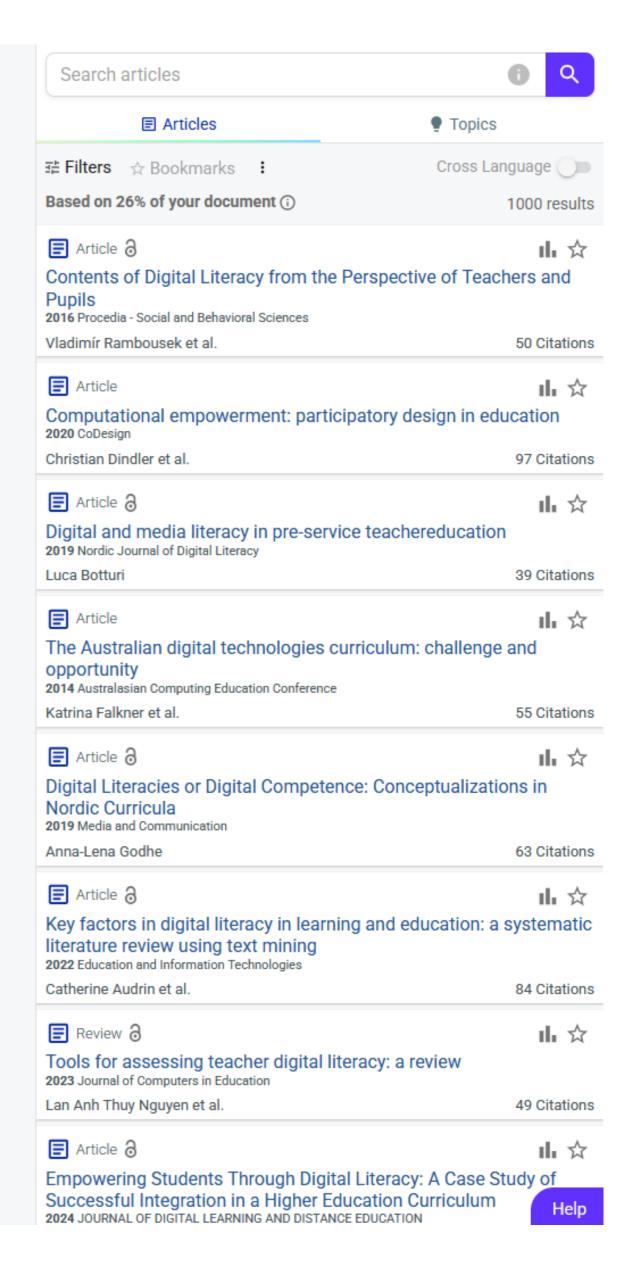
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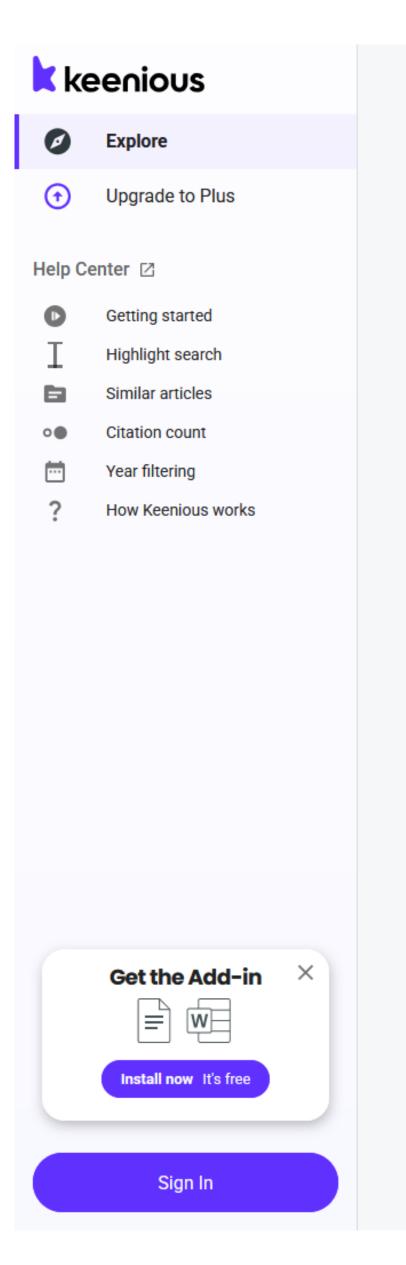




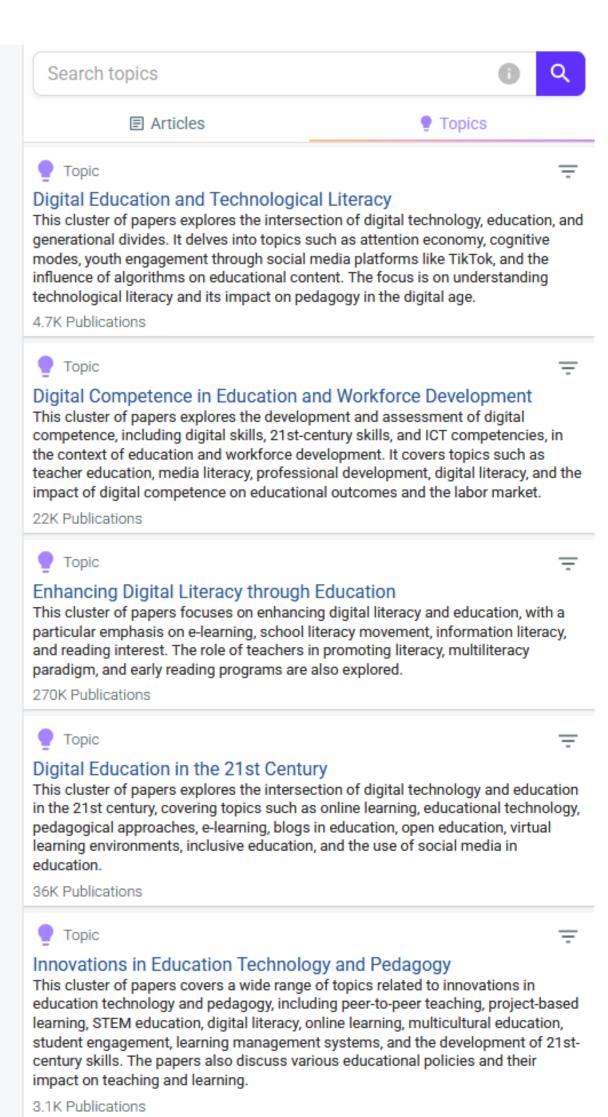
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This cluster of papers covers a wide range of topics related to innovative

approaches in education, technology integration, and sustainable developr

Topic

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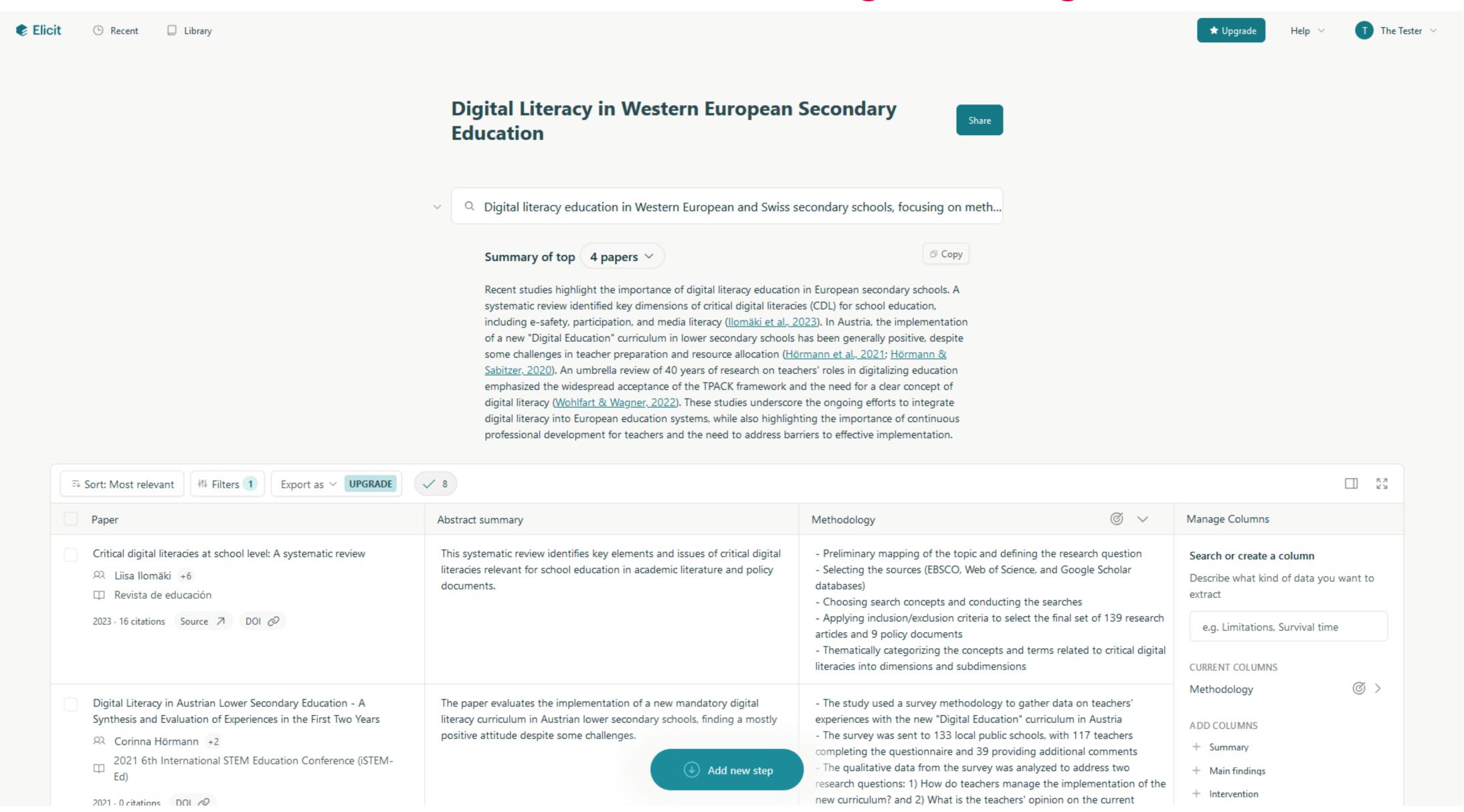
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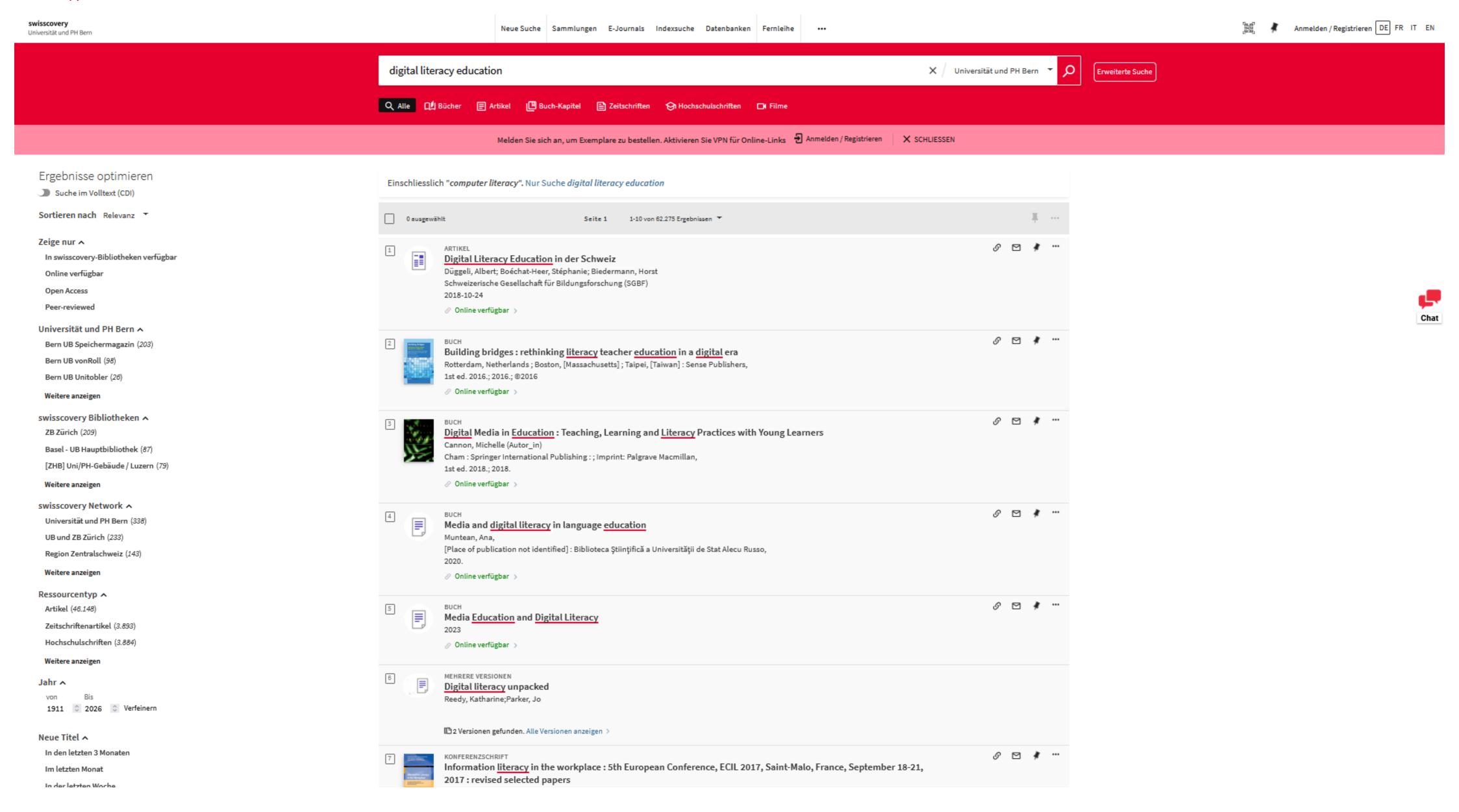
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	Q Digital literacy education in Western European and Swiss secondary schools, focusing on methodologies, didactics, impacts (on students, educators, and institutions), and relevant policy changes, with an emphasis on recent or often cited studies.					\times
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Digital literacy education in Western European and Swiss seconda Sort: Most relevant Filters 1 Export as VUPGRADE International Conference on Informatics in Secondary Schools 2020 · 1 citation Teachers' data literacy for learning analytics: a central predictor for digital data use in upper secondary schools K. Michos +2 Education and Information Technologies: Official Journal of the IFIP technical committee on Education 2023 · 10 citations Source IDOI Digital literacy and fluency in education: Enhancing teacher education preparedness policy Nongluck Manowaluilou +4 Journal of Infrastructure Policy and Development 2024 · 2 citations Source IDOI DIGITAL SWING SOURCE IDOI DIGITAL SWING SWIN	Critical digital literacies at school level: A systematic review Liisa llomäki +6 Revista de educación 2023 · 16 citations Source 7 DOI Ø	This systematic review identifies key elements and issues of critical digital literacies relevant for school education in academic literature and policy documents.	- Preliminary mapping of the topic and defining the research question - Selecting the sources (EBSCO, Web of Science, and Google Scholar databases) - Choosing search concepts and conducting the searches - Applying inclusion/exclusion criteria to select the final set of 139 research articles and 9 policy documents - Thematically categorizing the concepts and terms related to critical digital literacies into dimensions and subdimensions - The study used a survey methodology to gather data on teachers' experiences with the new "Digital Education" curriculum in Austria - The survey was sent to 133 local public schools, with 117 teachers completing the questionnaire and 39 providing additional comments - The qualitative data from the survey was analyzed to address two research questions: 1) How do teachers manage the implementation of the new curriculum? and 2) What is the teachers' opinion on the current situation? - Synthesizing findings from 23 systematic reviews, comprising a total of 1062 primary studies - Focusing on technology integration and aspects of digital literacy in the teaching profession - Examining the TPACK framework and the concept of digital literacy - Identifying and discussing parallels and barriers related to teachers' digital literacy development and technology integration - Survey of 117 teachers in Upper Austrian schools approximately 2 years after the implementation of the "Digital Education" subject - Evaluation of the challenges schools faced in implementing the new subject, such as a lack of teachers or teaching hours - Examination of how schools were implementing the "Digital Education" curriculum, either as a standalone subject or integrated into other subjects The study used a survey methodology with a sample of 1,059 teachers from upper secondary schools in Switzerland. The researchers conducted descriptive analysis of the survey responses and used multilevel modeling to investigate the factors that predict teachers' use of digital data, including school-level, teacher-		Search or create a column Describe what kind of data you want to extract e.g. Limitations, Survival time	
	Digital Literacy in Austrian Lower Secondary Education - A Synthesis and Evaluation of Experiences in the First Two Years Corinna Hörmann +2 2021 6th International STEM Education Conference (iSTEM-Ed)	The paper evaluates the implementation of a new mandatory digital literacy curriculum in Austrian lower secondary schools, finding a mostly positive attitude despite some challenges.			CURRENT COLUMNS Methodology ADD COLUMNS + Summary + Main findings + Intervention + Outcome measured + Limitations + Intervention effects Show more	>
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	Digital Literacy in Lower Secondary Education - A First Evaluation of the Situation in Austria Corinna Hörmann +1 International Conference on Informatics in Secondary Schools 2020 · 1 citation	The paper evaluates the implementation of mandatory digital education in lower secondary schools in Austria, including challenges around teaching resources.				
	Teachers' data literacy for learning analytics: a central predictor for digital data use in upper secondary schools R. K. Michos +2 Education and Information Technologies: Official Journal of the IFIP	Teachers' data literacy is a central predictor for their use of digital data in upper secondary schools.				
			+ Outcome measured			
Developing Digital Competence and Media Literacy through PBL: Web 2.0 tools used in #DigitalEU – we'll do! eTwinning project Reference Cîmpean +1 Educatia 21 2022 · 3 citations Source 7 DOI	The paper discusses how eTwinning projects can develop digital and media literacy competencies in education.	 Observation of students Analysis of students' work Questionnaire-based survey of 30 students involved in the project 	+ Limitations + Intervention effects Show more			
Bildung digital? Wie Jugendliche lernen und Schulen lehren Barbara Engels +1 2020 · 1 citation DOI	The paper examines how German youth use the internet for learning and the importance of digital and media literacy education in schools.	 A survey of young people in Germany to examine how they use the internet for learning and selecting educational videos Analysis of 2018 PISA data to assess the extent to which students' online behavior at home is discussed in school lessons and how well they are taught to use digital media A two-pronged analysis comparing the "demand" (student use) and "supply" (school teaching) sides of digital education 				
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