

Knowledge power and the learning city

HCII2026

Debates in digital knowledge and learning

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A snapshot of conversations

A first look at the literature to find out the topics and context of debate in areas of interest to this research



The theoretical and practical concerns of knowledge provision for learning in the context of a learning city

Topics of interest



Ownership of knowledge

Access to knowledge

Dissemination of knowledge

Context of knowledge *online*

- Select from areas of interest
- Human interpretive selection and choices
- Use conventional text analysis - AntConc
- Develop ideas for extended study of topic areas

Sourcing literature

Total 30 sources
4 books – multiple chapters
Approx equivalent 80 articles

Google scholar

Connected papers

Related papers

Brave & Google search

Search terms

Frameworks of technology providers in education

Platform governance frameworks

Knowledge and social media

Digital transformation; digital transformation in education

Algorithmic disinformation / pedagogy or similar

Economic control of digital knowledge access

Communication visibility / Knowledge visibility

Knowing, free will, self realisation

AntConc Textual Analysis

- Prof. Laurence Anthony, Applied Linguistics.
- Free software since 2014
- AntConc
<https://www.laurenceanthony.net/software/antconc/>

July 2026

AntConc

File Edit Settings Help

Target Corpus

Name: knowledge-power-

Files: 30

Tokens: 747145

A socio-technical view of platform ecosystems Systematic review Beyond Fairness in Computer Vision Gebru Denton.pdf Contributions_to_a_public_e-learning_platform_infr.pdf Criticism of ideology in the age of algorithmic governance Filk.pdf Dialnet-DigitalTechnologyAsATriggerorLearning-7615207.pdf Digital technology and the futures of education.pdf Emerging technologies in the curriculum.pdf gleiss-et-al-2023-governance-principles-and-regulatory-needs-for-KerssensVandijck_Governed by Edtech.pdf Moving Forward to New Educational Realities in the Digital.pdf nichols-dixon-roman-2024-platform-governance-and-education-Platform design framework conceptualisation and application.pdf Reranking partisan animosity in algorithmic social media feeds alt The critical study of digital platforms and infrastructures.pdf The foundation for future education, teaching, training, learning, The New Digital Education Policy Landscape - From Education sys World Yearbook of Education 2024 Ben Williamson, Janja Komljen Advancing AI governance gvaf013.pdf Democracy_in_the_Digital_Age.pdf eccher-rossi-2025-beyond-technological-sovereignty-practising-Free Will in action in a digital and AI world.pdf Global OAR Infrastructure.pdf Interplay-between-AI-Act-EU-digital-legislative-framework.pdf Introduction Critical studies of digital education platforms.pdf leonardi-meyer-2014-social-media-as-social-lubricant.pdf Leonardi-SocialMediaKnowledge-2014.pdf mak-wagner-2025-multi-platform-social-media-use-and-incident The Digital Knowledge Economy Index Mapping Content Product The World Bank and Education- Governing through knowledge,pc When public policy fails and venture capital saves education.pdf

KWIC Plot File View Cluster N-Gram Collocate Word Keyword Wordcloud ChatAI

Total Hits: 2214 Page Size 100 hits 1 to 100 of 2214 hits

	File	Left Context	Hit	Right Context
1	The New Digital Education Policy Landscape - From ...	In retrospect, it is striking how many studies published in	educational	technology in higher education – even those that had a
2	The New Digital Education Policy Landscape - From ...	MOOCs as multiplexes of spaces and times." International Journal of	Educational	Technology in Higher Education, 16 no. 28 (2019), 1–30. https://doi.org/10.1186/s41239-018-0109-y
3	World Yearbook of Education 2024 Ben Williamson, Janja ...	big data infrastructure for the 'smarter university.' International Journal of	Educational	Technology in Higher Education, 15(12), 1–26. https://doi.org/10.1186/s41239-018-0109-y
4	Introduction Critical studies of digital education ...	of the ongoing digitizations of higher education. International Journal of	Educational	Technology in Higher Education, 15(1), https://doi.org/10.1186/s41239-018-0109-y
5	The New Digital Education Policy Landscape - From ...	the ongoing digitizations of higher education." International Journal of	Educational	Technology in Higher Education, 15 no. 1 (2018), 1–10. Christophers, B. "The problem
6	The New Digital Education Policy Landscape - From ...	the ongoing digitizations of higher education." International Journal of	Educational	Technology in Higher Education, 15 no. 22 (2018). https://doi.org/10.1186/s41239-018-0109-y
7	Emerging technologies in the curriculum.pdf	the developing world: A review of trends and approaches for	educational	technology in a global context. International Journal of Artificial
8	World Yearbook of Education 2024 Ben Williamson, Janja ...	pp. 213–266). Department of Audiovisual Instruction. McClelland, D. (1969). The Role of	Educational	Technology in Developing Achievement Motivation. Educational Technology, 9, 7–
9	The New Digital Education Policy Landscape - From ...	Holistic Advancement. Government of India, 2019. Miglani, N., and Burch, P. "	Educational	technology in India: The field and teacher's sensemaking."
10	Digital technology and the futures of education.pdf	paper makes a case for approaching the future potential of	educational	technology in more circumspect and, we would argue, more
11	Emerging technologies in the curriculum.pdf	graduate of Imperial College, London who fell in love with	educational	technology in the early days of the web in 1996.
12	World Yearbook of Education 2024 Ben Williamson, Janja ...	the Mouse. How Constructivist Learning Theory Shaped Artificial Intelligence and	Educational	Technology in the 1960s. History of Education, 50(1), 93–111. Hof, B. (2023).
13	World Yearbook of Education 2024 Ben Williamson, Janja ...	killing-us-all Selwyn, N. (2021). Ed-tech within limits: anticipating	educational	technology in times of environmental crisis. E-Learning and
14	World Yearbook of Education 2024 Ben Williamson, Janja ...	of Cleaner Production 38: 1–6. Selwyn, N. (2021). Ed-tech within limits: anticipating	educational	technology in times of environmental crisis. E-Learning & Digital
15	Emerging technologies in the curriculum.pdf	interests include digital and disciplinary literacy and the integration of	educational	technology and digital tools across content areas. Helen Crompton (
16	Emerging technologies in the curriculum.pdf	interests include digital and disciplinary literacy and the integration of	educational	technology and digital tools across content areas. 14 Computational Thinking
17	Emerging technologies in the curriculum.pdf	Old Dominion University. She holds a Ph.D. in	Educational	Technology and Mathematics Education. Her research is primarily focused
18	Emerging technologies in the curriculum.pdf	at Old Dominion University. She holds a Ph.D. in	Educational	Technology and Mathematics Education. Crompton's research is primarily
19	Emerging technologies in the curriculum.pdf	at national and inter- national conferences on the topic of	educational	technology and published over 100 articles, chapters, and white papers
20	Emerging technologies in the curriculum.pdf	at national and inter- national conferences on the topic of	educational	technology and published over 100 articles, book chapters, and white
21	Digital technology and the futures of education.pdf	on our joint and separate work in the fields of	Educational	Technology and Educational Futures since the mid 1990s. One
22	Emerging technologies in the curriculum.pdf	Teachers guide to the 21st century learning model: Connected learning.	Educational	Technology and Mobile Learning. King, C., Robinson, A., & Vickers,
23	Moving Forward to New Educational Realities in the ...	in education. The second article, titled: Co-designing Data-driven	Educational	Technology and Practice Reflections from the Japanese Context,
24	Emerging technologies in the curriculum.pdf	T. (2010). Turning to Turnitin to fight plagiarism among university students.	Educational	Technology and Science, 12(2), 1–12. Bertram Gallant, T. (2008). Moral panic: The
25	Emerging technologies in the curriculum.pdf	Cronje, J. C. (2010). Defining mobile learning in higher education landscape.	Educational	Technology and Society, 13(3), 12–21. Fishman, T. (2016) Academic integrity as an
26	Moving Forward to New Educational Realities in the ...	Japan. It addresses the gap between contemporary developments in	educational	technology and their practical implementation in educational settings.
27	Digital technology and the futures of education.pdf	s, accelerated the development of language-free interfaces, and established	educational	technology as a policy priority in many low and

Search Query ☒ Words ☐ Case ☐ Regex Results Set All hits Context Size 10 token(s)

Start ☐ Adv Search

Sort Options Sort to right Sort 1 1R Sort 2 2R Sort 3 3R Order by freq

Progress 100%

Time taken (creating KWIC results): 1.2954 sec

Select keywords to find quotes

- Word Frequency -
 - minimum of 500 occurrences (frequency)
 - minimum of 1 source (range)
- *This limit returned 179 ranked results (not all were content words, the list included multiple function/operator words)*
- Keyword In Context (KWIC)
- Review of collocate or cluster words ‡
- Consider term(s) in relation to topics of interest, context and prominence of meaning or significance within the sentence and paragraph of text(s) in File View.

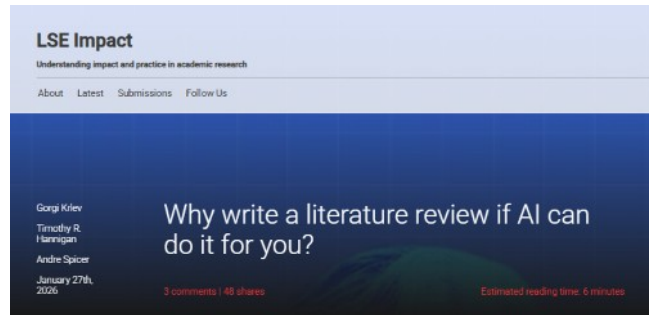
‡ **Clusters** (for example which word follows the search term);
Collocation (the search term in relation to another term)

Why these topics? Why this approach?

- emphasis is on user point of contact and interactions with digital knowledge in platform society
- in a context of a municipal digital sovereignty of the individual and community

A systematic or nuanced literature review

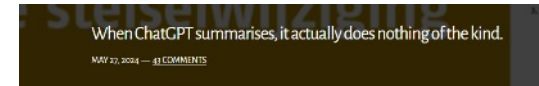
Krlev, Hannigan, Spicer, 2026



<https://blogs.lse.ac.uk/impactofsocialsciences/2026/01/27/why-write-a-literature-review-if-ai-can-do-it-for-you/>

A manual Text Analysis or Generative AI summary

Wierda, 2026



<https://ea.rna.nl/2024/05/27/when-chatgpt-summarises-it-actually-does-nothing-of-the-kind/>

Forming groups of quotes

1. Ideological, theoretical and political perspectives
2. Technological and system infrastructure
3. Learning and social contexts
4. User interaction characteristics



1. Ideological, theoretical & political perspectives

Ideological, theoretical, socio-technical

- Digital literacy is more focused on the ideologies that underpin the platform and the practices it induces
- A theoretical framework for understanding AI comprises cultural, political-economic and computational expertise
- A socio-technical system such as education requires supporting the human side

Political, economic, cultural, polarization

- Digital technology has permeated all realms and is having a direct impact in education
- Edtech investors became economic and political actors in education influence policy and practice
- Digital connectivity promises to empower voices that have been traditionally marginalised, providing new avenues for political participation and civic activism

[All quotes abridged]

2. Technological and system infrastructure

Platforms, openness, governance

- ... addresses the entire platform ecosystem
- ... the ecosystems they control ... such as data
- ... openness and possible restrictions for access to resources and information

Edtech industry, investment, governing

- Governing Edtech as a Public Good - of platformization, privatization, datafication, for autonomy in education
- Google's big investment in edtech not surprising given their crucial stakes to enforce connections between hardware, hosting, storage, authentication and analytics

Policy, landscape, implications

- Platforms can replace or impact education systems – eg the role of edu policy in platform-based technology
- “platformization of education” holds promise for helping educational systems meet policy goals ... but reliance on platforms creates new policy challenges

Systems, recommender, intelligent, surveillance

- black-box AI recommender systems promote the echo chambers ... polarization is accelerated
- intelligent tutoring systems have always aimed at mimicking the “gold standard” of one-on-one learner–teacher interaction
- Digital platforms facilitate and accelerate the engagement of parents in processes of data-driven surveillance

[All quotes abridged]

3. Learning and social contexts

Learning, platforms, governance, adaptive, lifelong, personalised

- Algorithmic education - importance of data-driven educational technologies in teaching, learning, and educational governance
- algorithms to analyse user behaviour with learning artifacts to present customised content based on results
- lifelong learning seen as solution to increasingly rapid digital development in (imagined) future of rapid technological and societal change
- digital platforms caused huge shift from exam-oriented learning to personalized and interactive learning... with technologies and creative techniques

Social, justice, welfare, network(s), sharing

- Social, environmental justice, decolonisation - beyond platformisation as individual problem/responsibility
- human centred approaches ensure technological design and use serve social justice goals
- difference between humans, trolls, social bots designed to impersonate humans
- examine how different social media platforms relate to incidental exposure to news and political information
- digital platforms, social media, data networks brought hyper-connectivity, so individuals can disseminate their views at greater scale than previously possible

4. User interaction characteristics

Users, interactions, access, interfaces

- Algorithmic governance of education... disempower public govt. as intermediaries; directly target children, students, parents, staff as consumer-users
- Pedagogical models hidden in user interfaces & algorithms, pedagogical actions steered by invisible data flows behind walled gardens of **intraoperability**, educators have few insights into the pedagogic dimensions of platforms
- Data should be 'open data' for platform participants ... provided the user has voluntarily given consent. If we handle consent management in a decentralised way, abuse by the platform owner can be diminished

Data, algorithms, mining, protection, privacy

- amassing data from users and turning them into monetizable assets ... hardware, software, cloud services, analytics, social ...lead to integrated data 'ecosystems'
- issues of data security, protection of and access to personal info, how use of personal info impacts users; and new types of learner-teacher interaction arising from ITS MI advancement
- educational institutions could validate a set of joint technical standards and governing principles - interoperability, open standards, data portability - to regain governing power over their online learning environments

Barcelona *smart city* data sovereignty

- Data driven *citizen based* civic democratic service provision
 - *DECODE and Decidim are cornerstones of municipal data sovereignty policy and participatory democracy ... suggest that smartphones and functional integration with federated knowledge systems in a platform infrastructure for integration with social media, r learning*
- A 'Public *e-learning* Platform' (source 3, Naeve et al, 2005)
 - *Learning as a creative act; social and intellectual .../*
 - *e-learning infrastructure with a decentralised vision*
- Personal data-pod for user-learners
 - to identify, collect and share content into other platforms. The possibility of interoperable user-learner datapods such as ActivityPods .../



Further comments & research opportunities



- Recommender system results influence lit reviews:
 - a high % of LLM or AI related studies not relevant to the review
 - papers considered too old to include in a small corpus
- Compare and contrast AI generative text app analysis output(s) with findings of text analysis apps
- Alternative methodology of *phenomenography*
 - analysis of central meaning in a sentence or short paragraph in relation to the wider corpus, with categories of variation being developed

Conclusions

The study provided a way to discover debate in literature around topics of interest - the ownership, access and dissemination of digital knowledge through formal educational or via informal social media.

Contextualising debate with Barcelona helped visualise provision for learning and interacting with knowledge within a municipal urban space, and adds to debate and ideas that can be developed further as a part of the on-going research



Thank you

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