

AI for Senior Management

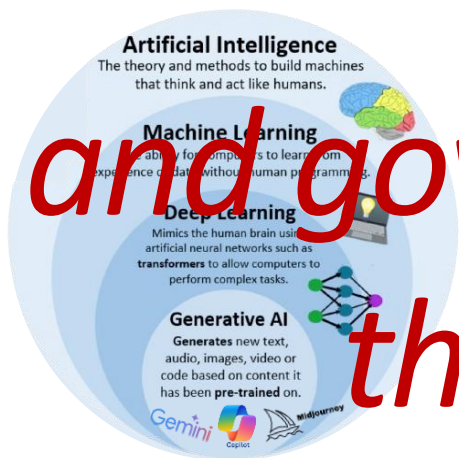
AI will not replace universities ...

... but universities that

understand

and govern AI will outperform

those that do not ...

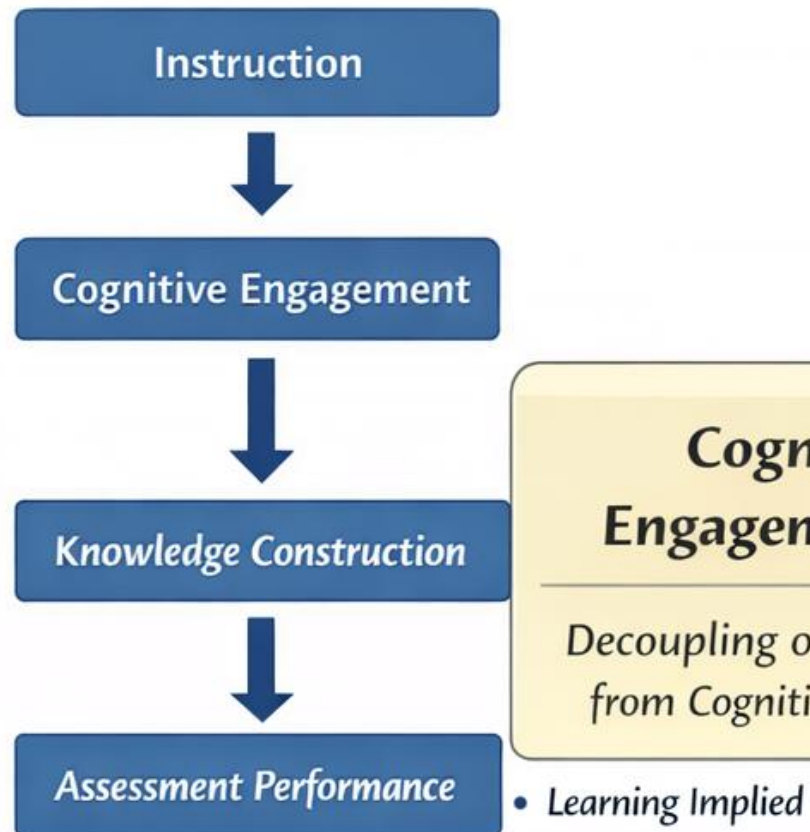


- What is GenAI & ML
- GenAI under the hood
- Limitations
- Prompting basics

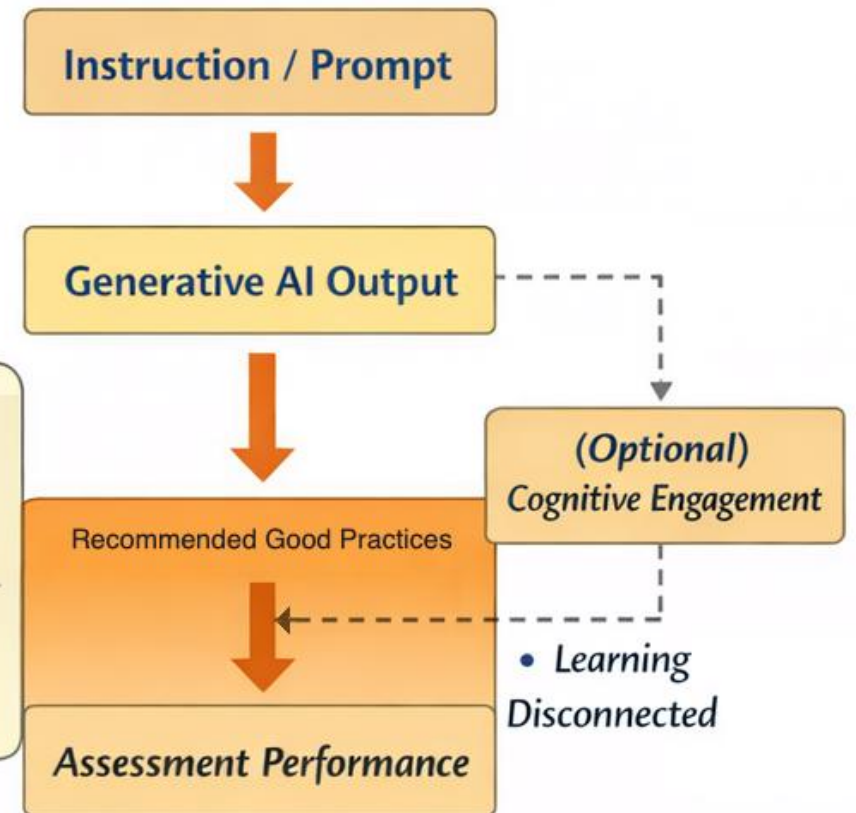
Workshop 1

Teaching & Assessment

Pre-Generative AI (*Cognitive Necessity*)










Generative AI Era (*Cognitive Choice*)



Workshop 2

Academic Research & Writing

Generative AI Academic Research & Writing

| | | |
|------------------------------|---|---|
| 1. Keyword Creation | <p>Tools: ChatGPT, Gemini, Copilot, Perplexity</p> <p>Prompt: Act as if you are a researcher in [the name of your field], aiming to read and summarize the literature on [the field you want to research]. Using the block method, suggest some main keywords to search for and then write a [search engine name: Web of Science/ EBSCO/ PubMed/ Scopus, etc.] search string. [Optional: include the following keywords in the search]</p> |  |
| 2. Retrieve Top Cited Papers | <p>Tools: Academic search engines such as Scopus, WoS, PubMed, Medline, etc.</p> <p>Goal: Run the search on Scopus, WoS, PubMed, Medline, etc., and rank by top cited. Export results as a ".ris" file.</p> |  |
| 3. Locate Central Papers | <p>Tools: VOSviewer, LitMaps, Research Rabbit</p> <p>Goal: Find "central" papers—the ones everyone has cited.</p> |  |
| 4. Download PDFs | <p>Tools: Zotero, Sci-Hub</p> <p>Goal: Download PDFs of the identified papers.</p> |  |
| 5. Design Extraction Process | <p>Tool: ChatGPT, Gemini, Copilot, Perplexity</p> <p>Prompt: Act as if you are a researcher in [your research field]. If you want to review the top 100 most cited papers in your literature to understand the main trends, theories, and findings, what are 5-8 main questions you want to explore and know from each of these papers? Write each question in one short question format. Present results in table format with column 1 a short title for the questions and column 2 the actual question.</p> |  |
| 6. Extract and Analyse | <p>Tools: Petal.org, Elicit.org, explainpaper</p> <p>Design: Use the questions designed in the previous step. These tools will "ask" those questions from all the papers efficiently and quickly. Export results.</p> |  |
| 7. Read, Learn, Apply | <p>Tools: ChatGPT, Gemini, Copilot, Perplexity, Claude, Explainpaper</p> <p>Goal: Use the summary created in the past step as the "context" for this step. Use it to generate research ideas, identify gaps in literature, formulate hypotheses, conduct literature reviews, and assist with writing.</p> |  |

1. Keyword Creation & 2. Retrieve Top-Cited Papers

I am researching Artificial Intelligence, aiming to read and summarise the literature on user profiling. Using the block method, suggest some main keywords to search for and then write a Scopus search string.

Memory updated

For researching user profiling in Artificial Intelligence, here are some suggested keywords organized by the block method:

Block 1: Core Concept

- Artificial Intelligence
- AI
- Machine Learning
- ML
- Deep Learning
- Generative AI

Block 2: Focus Area

- User Profiling
- User Modeling
- Personalization
- Recommendation Systems

Welcome to a more intuitive and efficient search experience. [See what is new](#)

Search within: Article title, Abstract, Keywords
Search documents: "artificial intelligence" OR "machine learning" OR "deep learning"

AND

Search within: Article title, Abstract, Keywords
Search documents: "user profiling" OR "user modeling" OR "personalization" OR

Save search

Set search alert

Add search field

Reset

Search

Documents Preprints Patents Secondary documents Research data

15,309 documents found

Analyze results

Refine search

All Export Download Citation overview More>Show all abstracts Sort by Cited by (high: [dropdown] [dropdown]

Search within results

Filters

Year

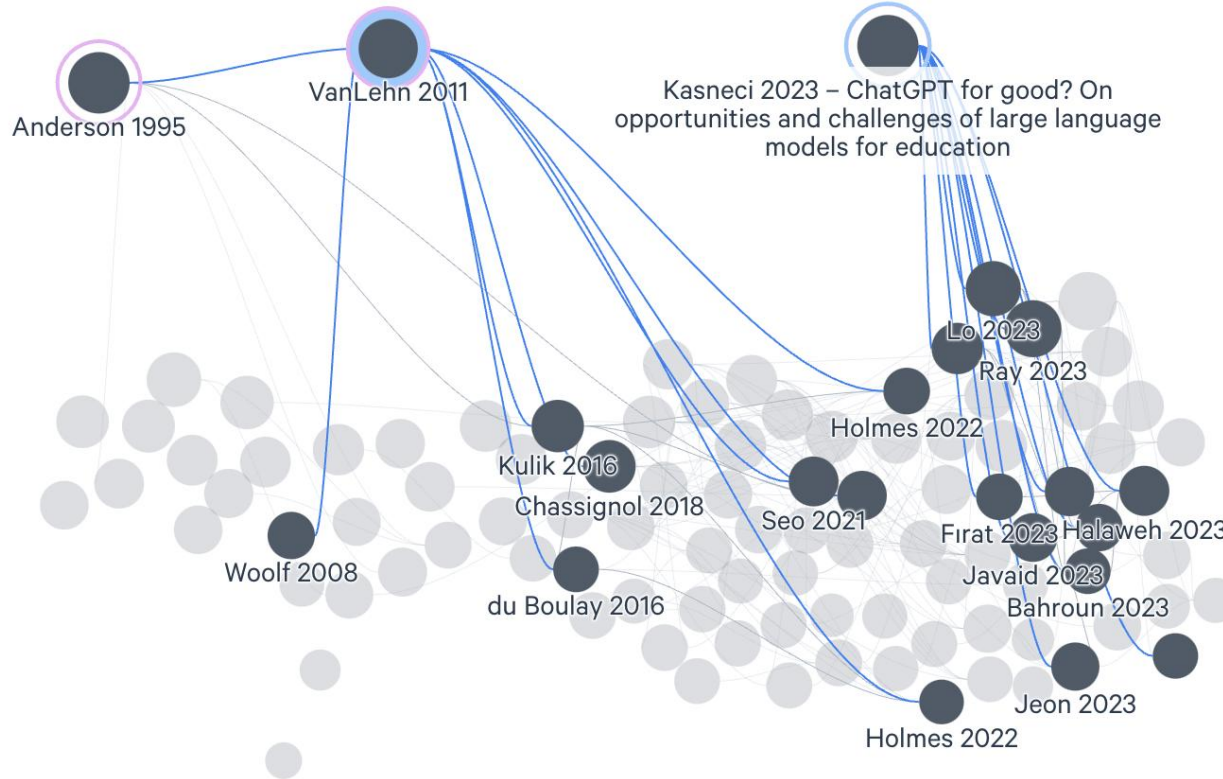
Range Individual

Document title Authors Source Year Citations


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1 TY - JOUR
2 AU - Zhao, X.
3 AU - Yan, X.
4 AU - Yu, A.
5 AU - Van Hentenryck, P.
6 TI - Prediction and behavioral analysis of travel mode choice: A comparison of machine learning and logit
7 PY - 2020
8 T2 - Travel Behaviour and Society
9 VL - 20
10 SP - 22
11 EP - 35
12 DO - 10.1016/j.tbs.2020.02.003
13 UR - https://www.scopus.com/inward/record.uri?eid=2-s2.0-85079530405&doi=10.1016/j.tbs.2020.02.003&partner
14 M3 - Article
15 DB - Scopus
16 N1 - Export Date: 24 November 2024; Cited By: 233
17 ER -
18 TY - JOUR
19 AU - Kosinski, M.
20 AU - Stillwell, D.
21 AU - Graepel, T.
22 TI - Private traits and attributes are predictable from digital records of human behavior
23 PY - 2013
24 T2 - Proceedings of the National Academy of Sciences of the United States of America
25 VL - 110
26 IS - 15
27 SP - 5802
28 EP - 5805
29 DO - 10.1073/pnas.1218772110
30 UR - https://www.scopus.com/inward/record.uri?eid=2-s2.0-84876861994&doi=10.1073/pnas.1218772110&partner
31 M3 - Article
32 DB - Scopus
33 N1 - Export Date: 24 November 2024; Cited By: 1825
34 ER -
35 TY - JOUR
36 AU - Rashidi, P.
37 AU - Cook, D.J.
38 TI - Keeping the resident in the loop: Adapting the smart home to the user
39 PY - 2009
40 T2 - IEEE Transactions on Systems, Man, and Cybernetics Part A: Systems and Humans
41 VL - 39
42 IS - 5
43 SP - 949
44 EP - 959
```

(TITLE-ABS-KEY("artificial intelligence" OR "machine learning" OR "deep learning" OR "generative AI")
AND TITLE-ABS-KEY("user profiling" OR "user modeling" OR "personalization" OR "recommendation systems")
AND TITLE-ABS-KEY(education OR eLearning OR healthcare OR marketing OR "social media" OR e-commerce))

3. Locate Central Papers & 4. Download PDFs




[View PDF](#) [Download full issue](#)

 Learning and Individual Differences
Volume 103, April 2023, 102274

Commentary


ChatGPT for good? On opportunities and challenges of large language models for education

Enkelejda Kasneci ^a ✉, Kathrin Sessler ^a, Stefan Küchemann ^b, Maria Bannert ^a, Daryna Dementieva ^a, Frank Fischer ^b, Urs Gasser ^a, Georg Groh ^a, Stephan Günemann ^a, Eyke Hüllermeier ^b, Stephan Krusche ^a, Gitta Kutyniok ^b, Tilman Michaeli ^a, Claudia Nerdel ^a, Jürgen Pfeffer ^a, Oleksandra Poquet ^a, Michael Sailer ^b, Albrecht Schmidt ^b, Tina Seidel ^a, Matthias Stadler ^b, ...Gjergji Kasneci ^c

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to open science

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Educational Psychologist, 46(4), 197-221, 2011
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ISSN: 0046-1520 print / 1532-6985 online
DOI: 10.1080/00461520.2011.611369

 Routledge
Taylor & Francis Group

The Relative Effectiveness of Human Tutoring, Intelligent Tutoring Systems, and Other Tutoring Systems

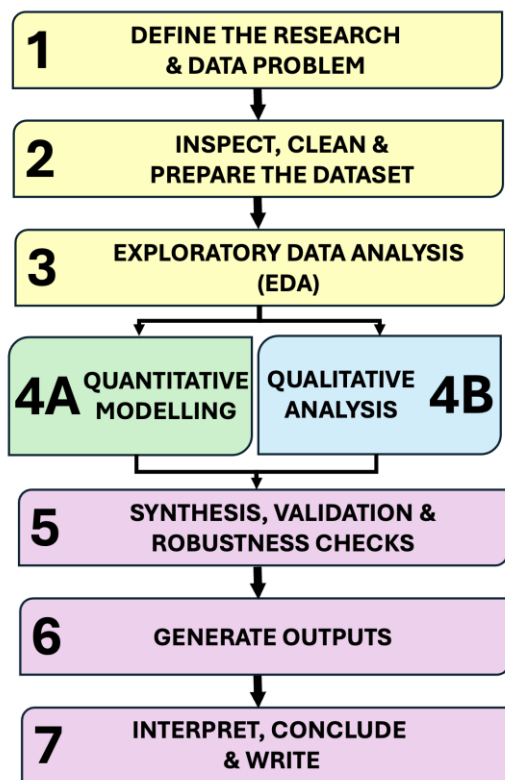
Kurt VanLehn
Computing, Informatics and Decision Systems Engineering
Arizona State University

This article is a review of experiments comparing the effectiveness of human tutoring, computer tutoring, and no tutoring. "No tutoring" refers to instruction that teaches the same content without tutoring. The computer tutoring systems were divided by their granularity of the user interface interaction into answer-based, step-based, and substep-based tutoring systems. Most intelligent tutoring systems have step-based or substep-based granularities of interaction, whereas most other tutoring systems (often called CAL, CBT, or CMI systems) have answer-based interaction.

27 February 2015

Workshop 3

Data Analysis



Generative AI Data Analysis

| | | |
|--|---|--|
| ① Define the Research & Data Problem | <p>Clarify what needs analyses, what your dataset looks like, and what questions you aim to answer.</p> <p>Prompt: Act as a data analyst in [field]. I have a dataset containing variables [list]. Suggest 3–5 possible research questions and hypotheses aligned with common theories in this field.</p> | |
| ② Inspect, Clean, Prepare the Dataset | <p>Get an overview of the dataset and prepare it for analysis.</p> <p>Tools: NotebookLM, DataLab, Noteable Prompt: Here is the dataset. Provide a summary of missing values, outliers, and variable types, and propose cleaning steps.</p> | |
| ③ Exploratory Data Analysis | <p>Detect initial patterns, distributions, correlations, and themes.</p> <p>Prompt: Generate a full EDA report describing distributions, correlations, anomalies, and data types, including visualisations.</p> | |
| <p>Quantitative Modelling Qualitative Analysis</p> <p>Generate appropriate models based on statistical assumptions and/or machine-learning methods.</p> <p>Prompt: Given this type of dependent variable, suggest appropriate statistical tests or ML models and justify them.</p> <p>Derive themes, patterns, and insights from textual, audio, or visual data.</p> <p>Prompt: Act as a qualitative researcher. Here are 10 interview excerpts. Generate initial in vivo codes and explain why they were assigned.</p> | | |
| ⑤ Synthesis, Validation & Robustness Checks | <p>Ensure your analysis is rigorous, unbiased, and replicable.</p> <ul style="list-style-type: none"> Review this statistical model & identify weaknesses, assumption violations or alternative models. Check whether the qualitative themes are internally coherent and distinct. Suggest rival explanations. Propose triangulation strategies (methods, data sources, theoretical). | |
| ⑥ Generate Outputs | <p>Create high-quality representations of results.</p> <ul style="list-style-type: none"> Create APA-style tables for Reg./ANOVA/ML results. Generate thematic summary tables with supporting quotes for each theme. Write a 300-word results section summarising key findings for a peer-reviewed article. | |
| ⑦ Interpret, Conclude & Write | <p>Move from analysis to insight.</p> <ul style="list-style-type: none"> Interpret these findings and relate them to theories in [field]. Include citations to well-known frameworks. Draft a discussion section including contributions, limitations, and future work. Translate quantitative results into implications for policy/practice. | |

Potential for Strategy ...

Positioning GenAI as an Institutional Capability

- Treat GenAI as a core institutional capability, not a set of isolated tools
- Embed GenAI into the university's digital transformation and academic strategy
- Align GenAI initiatives with mission: teaching excellence, research impact, and societal contribution

Leadership message:

“GenAI should scale what the university does best ... not redefine it.”

AI Policies

GenAI Acceptable Use Policy

- Defines *what is allowed, restricted, and prohibited*
- Covers teaching, assessment, research, administration, and communications
- Explicitly bans high-risk uses (e.g. automated grading without human oversight)

Transparency & Disclosure Policy

- Mandatory disclosure of GenAI use in:
 - Academic assessment
 - Research and publications
 - Administrative decision-making
- Emphasises process transparency

Academic Integrity Policy (Reframed)

- Shift focus from “*AI misuse*” to
“*AI-supported scholarly practice*”
- Encourage reflective accounts of AI use
- Align assessment with process/justification

Data Protection & Privacy Policy

- Clear guidance on:
 - Use of personal, student, & research data
 - Approved tools and data-handling standards
- Alignment with GDPR

Intellectual Property Policy

- Clarify ownership of:
 - AI-assisted teaching materials
 - AI-supported research outputs
 - Co-created content staff/students

AI-related Governance ...

Human-in-the-Loop by Design

- AI supports decisions; humans remain accountable
- No fully automated high-stakes academic or administrative decisions

Accountability & Auditability

- Clear ownership of GenAI-enabled processes
- Periodic audits of impact, bias, and effectiveness

Culture & Communication

- Senior leadership sets tone: **curiosity without fear, innovation with responsibility**
- Transparent communication with staff and students about why and how AI is used

✓ **Strategy:** Treat GenAI as an institutional capability

✓ **Policy:** Enable use through clarity, not prohibition


✓ **Governance:** Innovate fast, govern responsibly

Thank You.

If you have any questions, now is the right time to ask!
Contact me on the details below for further info:

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GenAI Workshop for the Arts