

# AI News Digest

01/19/2026 - 01/25/2026

WEEKLY DIGEST: EDUCATION & LEADERSHIP

## AI's Transformative Role in Education and Workplaces

Recent discussions highlight the dual impact of AI on education and the workplace, emphasizing the need for critical cognitive skills amidst automation. Strategies for integrating AI into academic settings focus on project-based learning to enhance problem-solving abilities. Concurrently, research suggests that AI could significantly boost productivity, potentially reshaping job landscapes. The environmental implications of AI systems, particularly in the Global South, also raise concerns about sustainability in technology deployment.

### KEY FINDINGS

- ✓ AI integration in education can enhance critical thinking through project-based learning.
- ✓ Over 20% of occupations may be at risk of job loss due to AI automation.
- ✓ The environmental impact of AI systems in Asia is significant, with high energy and water consumption.

### IMPLICATIONS

- Educational institutions must adapt curricula to prioritize critical cognitive skills.
- Workplaces may need to rethink job roles and training in light of AI advancements.
- Sustainable practices in AI development are crucial to mitigate environmental impacts.

Key Metrics: 20% of occupations at risk of job loss due to AI automation.; Significant energy and water consumption for training large language models.

## 1. A case study: rethinking "Average Intelligence" and the artificiality of AI in academia

**Category:** Education

**Departments:** Educational Leadership, Engineering Education & Leadership, Computer Science

**Topics:** AI Ethics & Safety, Critical Thinking in Education, AI Literacy Curriculum, Project-Based Learning

**Impact Score:** 26.0

**Rubric Scores**

Research Relevance: 4

Educational Value: 5

Innovation / Novelty: 3

Practical Impact: 4

Interdisciplinary Potential: 5

Ethical / Policy Implications: 5

This article discusses strategies for integrating AI into education while preserving critical human cognitive skills. It emphasizes the importance of fostering critical thinking and problem-solving abilities through project-based learning and interdisciplinary collaboration, allowing students to engage with complex, real-world problems. The authors advocate for viewing AI as a complementary tool rather than a replacement for human intellect, encouraging educators to teach students how to critically assess AI-generated information. Additionally, the paper calls for the incorporation of ethical AI literacy into curricula to ensure that future developments in AI promote human dignity and autonomy.

<https://link.springer.com/article/10.1007/s00146-026-02873-6>

## 2. Rethinking AI's future in an augmented workplace

**Category:** Research

**Departments:** Political Science & Public Administration, Economics & Finance, Computer Science, Engineering Education & Leadership

**Topics:** Enterprise AI, AI-Driven Automation, Workforce Augmentation, Economic Impact of AI

**Impact Score:** 25.0

**Rubric Scores**

Research Relevance: 5

Educational Value: 4

Innovation / Novelty: 4

Practical Impact: 5

Interdisciplinary Potential: 4

Ethical / Policy Implications: 3

Research led by Davis indicates that AI is poised to significantly enhance productivity, potentially surpassing the impact of personal computers on the economy. The study highlights that while over 20% of occupations may face job loss due to AI-driven automation, approximately 80% will experience a blend of innovation and automation, allowing workers to focus on higher-value tasks. Davis critiques traditional economic models for underestimating AI's potential by failing to account for its structural effects, particularly in the services sector, which has seen limited automation despite its substantial contribution to GDP. The research underscores the urgency for technological adoption in light of demographic challenges, suggesting that AI could play a crucial role in addressing workforce shortages as populations age.

<https://www.technologyreview.com/2026/01/21/1131366/rethinking-ais-future-in-an-augmented-workplace/>

### 3. Of the people, by the algorithm: how AI transforms the role of democratic representatives?

**Category:** Policy & Ethics

**Departments:** Political Science & Public Administration, Computer Science, Engineering Education & Leadership

**Topics:** Large Language Models, Algorithmic Decision-Making, Political Decision Automation, Data Quality in Governance

**Impact Score:** 25.0

**Rubric Scores**

Research Relevance: 4

Educational Value: 4

Innovation / Novelty: 3

Practical Impact: 4

Interdisciplinary Potential: 5

Ethical / Policy Implications: 5

The article discusses the dual role of AI in transforming political decision-making, focusing on how Large Language Models (LLMs) and Algorithmic Decision-Making (ADM) systems enhance representatives' capabilities and automate certain processes. LLMs assist in policy development and legislative drafting by processing large datasets, while ADM systems can automate decisions based on clear objectives and consistent patterns. However, the application of ADM in political contexts is limited due to the complexity of political decisions, which often involve competing values and cannot be easily quantified. Furthermore, the design and implementation of these systems raise concerns about data quality and the potential for political manipulation, highlighting the need for careful consideration of who controls these governance tools.

<https://link.springer.com/article/10.1007/s00146-026-02852-x>

### 4. From heat to harmony: toward a green AI for the Global South

**Category:** Policy & Ethics

**Departments:** Political Science & Public Administration, Computer Science, Public Health Sciences, Engineering Education & Leadership

**Topics:** AI Ethics, Sustainable AI Practices, Resource Consumption Mitigation, Cultural Perspectives in AI

**Impact Score:** 25.0

**Rubric Scores**

Research Relevance: 4

Educational Value: 3

Innovation / Novelty: 4

Practical Impact: 4

Interdisciplinary Potential: 5

Ethical / Policy Implications: 5

The article by Pengfei Li et al. (2023) critiques the environmental impact of data-intensive AI systems in Asia, highlighting the significant energy and water consumption required for training large language models and operating data centers. It notes that the infrastructure supporting AI, such as Microsoft's hyperscale data center in Hyderabad, exacerbates local resource depletion, including water shortages. The authors argue that the adoption of AI in Asia reflects a continuation of extractive practices reminiscent of colonialism, where local resources are exploited for global technological advancement. They advocate for a re-examination of intellectual traditions, suggesting that integrating Asian philosophical perspectives could lead to more sustainable and ecologically grounded approaches to AI development.

<https://link.springer.com/article/10.1007/s00146-026-02868-3>

## 5. The silent empire

**Category:** Policy & Ethics

**Departments:** Philosophy, Political Science & Public Administration, Educational Leadership

**Topics:** AI Ethics, Cognitive Colonization, Critical Thinking Diminishment, Knowledge Preservation Strategies

**Impact Score:** 25.0

**Rubric Scores**

Research Relevance: 4

Educational Value: 4

Innovation / Novelty: 4

Practical Impact: 3

Interdisciplinary Potential: 5

Ethical / Policy Implications: 5

The article presents a critical examination of the phenomenon termed "cognitive colonization," where artificial intelligence (AI) is seen as systematically undermining human cognitive autonomy and traditional modes of reasoning. It argues that AI's integration into various aspects of life leads to a reliance on machine-generated outputs, resulting in diminished critical thinking and memory retention. The author outlines a framework for understanding the stages of this colonization, which includes seduction, normalization, assimilation, ejection, and paralysis, ultimately positing that AI's influence transforms the human mind into a passive receptor of information rather than an active site of inquiry and creativity. The piece calls for strategic resistance to this trend to preserve diverse forms of knowledge and cognitive engagement.

<https://link.springer.com/article/10.1007/s00146-025-02829-2>

## 6. A review of Cyberboss: the rise of algorithmic management and the new struggle for control at work by Craig Gent

**Category:** Policy & Ethics

**Departments:** Political Science & Public Administration, Sociology & Anthropology, Educational Leadership

**Topics:** AI Policy & Regulation, Algorithmic Management, Employee Performance Metrics, Digital Oversight Resistance

**Impact Score:** 25.0

**Rubric Scores**

Research Relevance: 4

Educational Value: 4

Innovation / Novelty: 3

Practical Impact: 5

Interdisciplinary Potential: 4

Ethical / Policy Implications: 5

In "Cyberboss: The Rise of Algorithmic Management and the New Struggle for Control at Work," Craig Gent explores the growing prevalence of algorithmic management in various sectors, emphasizing its impact on the human experience of work. The book examines how algorithms are used to quantify employee performance, thereby decoupling the human aspect from labor metrics and reshaping policy implementation and oversight within bureaucratic organizations. By comparing the experiences of Amazon workers and Midwestern middle school teachers, Gent highlights the challenges faced by street-level bureaucrats as digital control expands. He advocates for collective resistance against algorithmic management, aiming to empower workers in the face of increasing digital oversight.

<https://link.springer.com/article/10.1007/s00146-025-02801-0>

## 7. Open Notebook: A True Open Source Private NotebookLM Alternative?

**Category:** Applications  
**Departments:** Computer Science, Educational Leadership  
**Topics:** Consumer AI, Open Source AI Tools, Data Privacy in AI, Local Deployment Solutions

**Impact Score:** 24.0

### Rubric Scores

|                       |                                |                                  |
|-----------------------|--------------------------------|----------------------------------|
| Research Relevance: 4 | Educational Value: 4           | Innovation / Novelty: 5          |
| Practical Impact: 4   | Interdisciplinary Potential: 3 | Ethical / Policy Implications: 4 |

Open Notebook is an open-source, AI-powered platform designed to facilitate note-taking and organization while ensuring user data privacy. Unlike cloud-based alternatives, it allows for local deployment or self-hosting, thereby mitigating risks associated with data exposure and vendor lock-in. The platform integrates AI capabilities such as summarization and contextual insights directly into the research workflow, catering to the needs of students, researchers, and professionals who prioritize data control and privacy. Its design addresses the limitations of traditional cloud-only solutions by offering a customizable environment for managing sensitive information.

<https://www.kdnuggets.com/open-notebook-a-true-open-source-private-notebooklm-alternative>

## 8. On including Sámi-knowledge in LLMs-see differences, accept differences, cherish differences!

**Category:** Policy & Ethics  
**Departments:** Computer Science, Educational Leadership, Political Science & Public Administration  
**Topics:** Large Language Models, Cultural Context in AI, Indigenous Knowledge Representation, Generative AI for Minority Languages

**Impact Score:** 24.0

### Rubric Scores

|                       |                                |                                  |
|-----------------------|--------------------------------|----------------------------------|
| Research Relevance: 4 | Educational Value: 3           | Innovation / Novelty: 4          |
| Practical Impact: 3   | Interdisciplinary Potential: 5 | Ethical / Policy Implications: 5 |

The article discusses the challenges of modeling minority languages, specifically the Sámi language, using large language models (LLMs) and generative AI. It argues that while technical solutions may exist for training LLMs on Sámi language data, deeper issues related to cultural context and knowledge systems must be addressed to avoid reinforcing colonial patterns and epistemic injustices. The author highlights the complexity of capturing the Sámi people's nuanced understanding of snow, which is deeply tied to their cultural practices and environment, suggesting that such contextual knowledge may not be adequately represented in digital form. Ultimately, the piece raises questions about the limitations of AI in mirroring Indigenous knowledge and experiences.

<https://link.springer.com/article/10.1007/s00146-026-02855-8>

## 9. Eco-cognitive computationalism

**Category:** Research  
**Departments:** Philosophy, Educational Leadership, Computer Science, Political Science & Public Administration  
**Topics:** AI Ethics, Cognitive Domestication, Cultural Contexts in AI, Abductive Reasoning in AI

**Impact Score:** 24.0

**Rubric Scores**

|                       |                                |                                  |
|-----------------------|--------------------------------|----------------------------------|
| Research Relevance: 4 | Educational Value: 3           | Innovation / Novelty: 5          |
| Practical Impact: 3   | Interdisciplinary Potential: 4 | Ethical / Policy Implications: 5 |

Magnani's Eco-Cognitive Computationalism proposes a framework for understanding computation as a human-centered practice that integrates tools, languages, and technologies within cultural contexts. The concept of "cognitive domestication" is central to this framework, highlighting how humans transform materials and symbols into co-agents of cognition, thereby linking technological invention with cultural learning. By emphasizing abduction as a key aspect of human reasoning, Magnani illustrates the interplay between creativity, interpretation, and the environment, while also addressing the ethical implications of technological integration in cognitive practices. This approach contrasts with biologically centered models by situating cognition within cultural and technological ecologies, prompting further exploration of the relationship between human cognition and broader biological foundations.

<https://link.springer.com/article/10.1007/s00146-025-02822-9>

## 10. Yann LeCun's new venture is a contrarian bet against large language models

**Category:** Applications  
**Departments:** Computer Science, Electrical & Computer Engineering, Industrial, Manufacturing & Systems Engineering, Engineering Education & Leadership  
**Topics:** Generative AI, Abstract Representation Learning, Common Sense Reasoning, Multimodal Data Integration, World Models for Robotics

**Impact Score:** 23.0

**Rubric Scores**

|                       |                                |                                  |
|-----------------------|--------------------------------|----------------------------------|
| Research Relevance: 5 | Educational Value: 4           | Innovation / Novelty: 5          |
| Practical Impact: 4   | Interdisciplinary Potential: 3 | Ethical / Policy Implications: 2 |

JEPA is a novel system designed to learn abstract representations of the world from video data, enabling it to make predictions in an abstract space rather than attempting to predict every detail of the future. This approach aims to establish a foundation for common sense reasoning in AI, which is essential for developing intelligent systems capable of real-world reasoning and planning. The system is being trained on diverse data modalities, including video, audio, and sensor data, with potential applications in complex industrial processes and assistive technologies like smart glasses. The article emphasizes the necessity of world models for reliable agentic systems, highlighting the limitations of current robotic technologies that lack a comprehensive understanding of their environments.

<https://www.technologyreview.com/2026/01/22/1131661/yann-lecuns-new-venture-ami-labs/>