

EUNIS SIG AI4ALL online workshop 19/02/2025 summary

Webinar on Digitalization and Sustainability - introduction

Giuliano Pozza, lead of the EUNIS SIG AI4ALL, introduces the webinar and outlines the agenda, which includes two introductory speeches by Professor Laura Maria Ferri and John Magnus Furseth Kallevik, followed by an open talk and Q&A session. Bas Cordewener mentions there will be an evaluation form at the end. Bonaria Bianco, co-lead of the SIG introduces herself.

Integrating Digitalization and Sustainability Transitions

Giuliano then introduces Professor Laura Ferri, who will present on digitalization, sustainability, and AI's impact on growth and development. Laura discusses the concept of the "twin transition" - the idea of considering digital transition and sustainability transition as an integrated phenomenon rather than separate dynamics. She explains that digitalization and sustainability are intrinsically connected, and considering them together can help avoid negative impacts. Laura outlines how digitalization enables sustainability by providing new tools and frameworks to reach social and environmental goals, while sustainability can improve digitalization by opening new directions for innovation. She then focuses on the role of AI in boosting opportunities in areas like healthcare, education, and smart farming, while also highlighting potential risks related to energy usage, data privacy, and ethical implications. Laura concludes by discussing how AI can be applied in university settings, with both opportunities and risks in areas like campus management, student experience, teaching innovation, and office management.

[Slides of the presentation.](#)

AI Challenges and Inclusive Solutions

Giuliano introduces John Magnus Kallevik, the CTO at Stavanger University, who presents on the potential of AI to transform access to information and knowledge, but also highlighted critical challenges and risks. John emphasized the need for inclusive and cost-efficient AI solutions, and the importance of designing, testing, and implementing AI inclusively from the start. He also touched on the challenges of bias, misinformation, and language gaps in AI, and the need for diverse and unbiased data sets.

[Slides of the presentation.](#)

Open Talk:

Balancing AI in Education, Maturity in Sustainability and Accessibility

In the Open Talk representatives from national infrastructure organisation SURF, Jisc, and Cineca, share their perspectives.

Duuk Baten (SURF) emphasizes the complexity of implementing AI in education, highlighting the need to balance various public values such as sustainability, inclusion, privacy, and autonomy. He discusses the challenges of measuring and improving sustainability in AI use, particularly in research computing.

Paolo Commetti (Cineca) then shares Cineca's approach to AI development, focusing on both inclusion and sustainability. He outlines several areas where AI is being applied in Italy, including process automation, adaptive learning, predictive models for strategic planning, and cybersecurity. Paolo also describes efforts to reduce environmental impact throughout the AI development process.

Cal Innes (Jisc) discussed the work of the AI team within Jisc, focusing on AI maturity toolkit, accessibility and inclusion work, and digital sustainability initiatives. He emphasized the importance of facilitating a balanced discussion on the pros and cons of AI and digital tools, and the need for awareness and education on the environmental impacts of AI. Cal also highlighted the need for a two-way conversation between universities and service providers, and the importance of considering the embodied emissions and digital waste associated with AI technology. Giuliano asked about guiding users and the ecosystem towards environmental sustainability, to which Cal responded with the need for awareness and education.

Efficient AI Development and Sustainability

Paolo emphasized the importance of developing efficient applications and sustainable code to reduce resource consumption and environmental impact. He also highlighted the role of AI in improving software development and the need for smarter data management strategies.

Duuk discussed the complexities of AI's impact on society, including its energy consumption and the societal debate around digital sovereignty. He stressed the need for a balanced approach to sustainability, considering various perspectives and values. Both Paolo and Duuk agreed on the necessity of training and best practices to help individuals use AI technology more efficiently.

Balancing Values in Digital Transformation

Speakers discussed the ongoing tension between different values such as sustainability, inclusion, and accessibility. They acknowledged the importance of universities and educational institutions in shaping society and the need for digital sovereignty to prioritize these values. The conversation also touched on the potential trade-offs between these values, with Duuk highlighting the need to balance them. Cal emphasized the importance of considering the broader impact of digital transformation, including its effects on the global South and the need for collective responsibility in using AI ethically and responsibly.

Responsible AI and Education Integration

Giuliano led a discussion on responsible AI and its implications. Paolo emphasized the importance of following European guidelines on AI and transparency, and participating in ongoing consultations. Paul ... introduced a toolkit designed to guide the responsible use of AI in learning design. John discussed the need for inclusive design processes and the role of professionals as interpreters between users and technology. Laura and Giuliano debated the impact of AI on students' cognitive abilities and the need to adapt teaching methods to incorporate AI. They agreed that while AI presents challenges, it also offers opportunities for improvement and should be integrated into education.

Balancing Sustainability and AI Development

Laura emphasized the importance of considering sustainability in AI development, noting that it depends on the specific situation and can involve trade-offs. John Magnus discussed the challenges of running AI models locally to avoid biases and unfairness, suggesting that universities have a responsibility to contribute to these efforts. Azra ... raised concerns about the narrative of AI development being driven by efficiency and productivity, questioning who is pushing for this and whether it aligns with sustainability and inclusivity. Cal echoed these concerns, highlighting the potential for the rebound effect in AI development, where increased efficiency can lead to increased environmental and social impact. The conversation ended with Bas encouraging feedback on the workshop and Giuliano thanking everyone for their participation.

Links provided in the chat during the workshop:

Duuk Baten:

For those interested, some background on 'public values': Value Compass for digital transformation of education

<https://www.surf.nl/files/2022-01/surf-value-compass-english.pdf>

Paul Astles:

The Learning Design team at the Open University UK recently shared a really interesting conversation starter in the context of 'Responsible by Design' for considering how we interact with and design AI based activities on their LinkedIn page --->

https://www.linkedin.com/posts/learning-design-team-at-the-open-university-uk_ai-critical-literacy-and-responsible-by-activity-7294695886415122432-ChrP?utm_source=share&utm_medium=member_desktop&rcm=ACoAAEvPlz8BmCbqjMTC4UwYzCLfJARx5VEIKA4

Duuk Baten: 'A Beginner's Guide to Power and Energy Measurement and Estimation for Computing and Machine Learning'

<https://www.nrel.gov/docs/fy25osti/91518.pdf>

Gill Ferrell:

Interesting issue also is whether appearing to support accessibility can compromise actual learning? Students may appear to find things easier but are they really getting the support they need to undertake deep & impactful learning - see findings from this study on workers using AI 'The Impact of Generative AI on Critical Thinking: Self-Reported Reductions in Cognitive Effort and Confidence Effects From a Survey of Knowledge Workers'

https://www.microsoft.com/en-us/research/uploads/prod/2025/01/lee_2025_ai_critical_thinking_survey.pdf?ref=404media.co

Cal Innes:

For those interested, we provide a free monthly newsletter covering the latest news and trends around digital sustainability:

'Jisc Digital Sustainability Newsletter':

<https://infrastructure.jiscinvolve.org/wp/category/infrastructure/sustainability/>

Duuk Baten:

Within SURF we have been trying to get a discussion started about what taking these responsibilities look like. We started to call it 'responsible tech', basically arguing that within the sector we need to start seeing responsibility as a practice.

'Responsible Tech - On Public Values and Emerging Technologies'

<https://www.surf.nl/files/2024-04/2023.11.08-surf-discussion-paper-responsible-tech-en-def.pdf>

Very curious what all of you think of this. Does this resonate or not at all?

Duuk Baten:

Cool stuff!

'Responsible by Design - GenAI & Ethics from The Open University Learning Design Team'

<https://www.open.ac.uk/blogs/learning-design/wp-content/uploads/2024/12/RBD-Version-for-blog.pdf>

Bas Cordewener:

We would love to get some feedback on the online workshop. Here is the link to a few evaluation questions:

https://docs.google.com/forms/d/e/1FAIpQLSfQ_xinAzY-TKPvcWnW6iLHLoEsCBGrTUnFEopbbIsRGp01nQ/viewform?usp=sharing