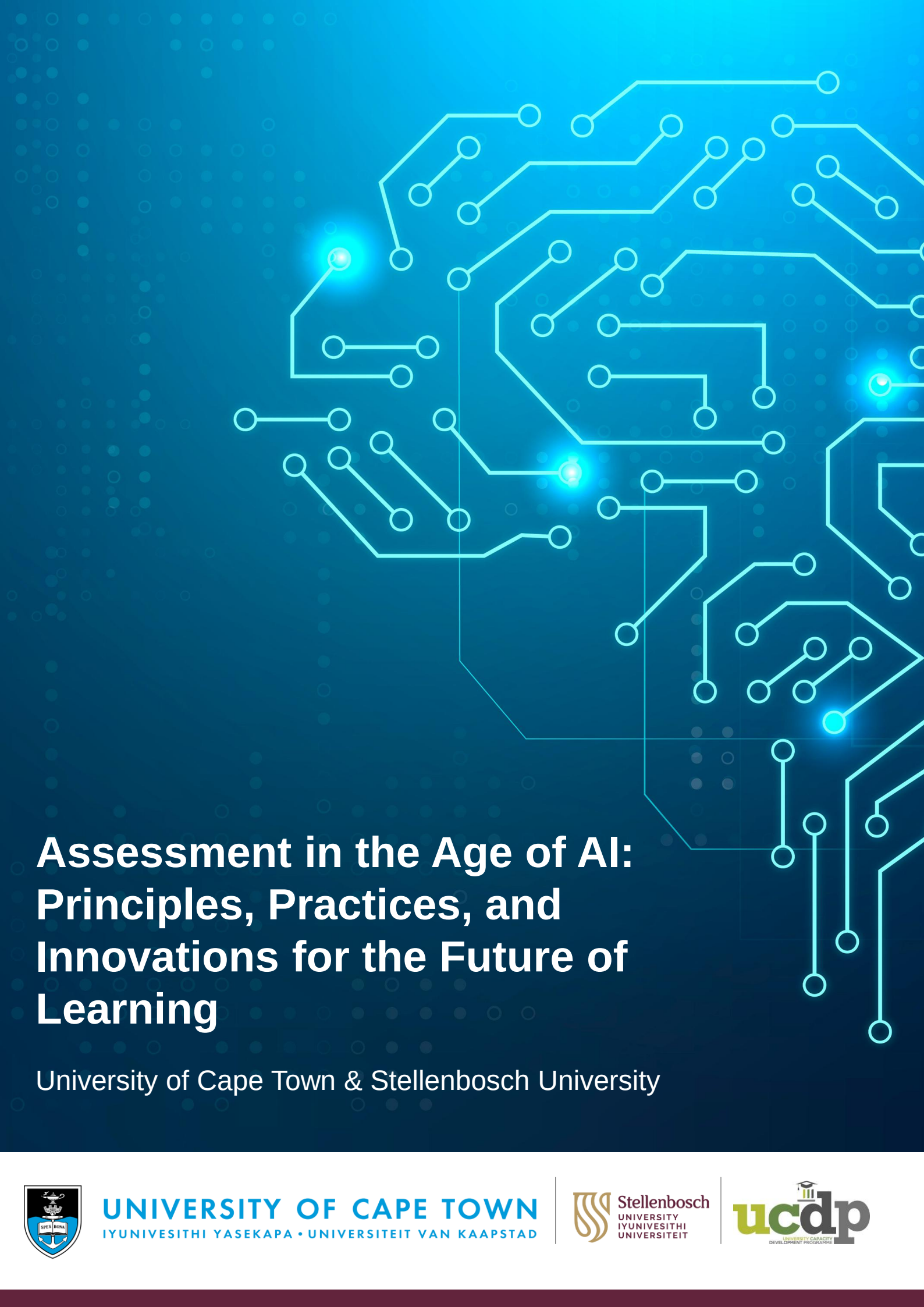


Assessment in the Age of AI: Principles, Practices, and Innovations for the Future of Learning

University of Cape Town & Stellenbosch University

UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

Stellenbosch UNIVERSITY IYUNIVESITHI UNIVERSITEIT

ucdp UNIVERSITY CAPACITY DEVELOPMENT PROGRAMME

Assessment in the Age of AI: Principles, Practices, and Innovations for the Future of Learning

University of Cape Town & Stellenbosch University

3rd of April 2025 | 9am to 4.30pm |
The Hasso Plattner School of Design Thinking Afrika

09:00-09:30	Main room	Registration and coffee
09:30-9:40	Main room	Welcome and opening remarks
09:40-10:20	Main room	UCT & SU student panel
10:20-10:30	Main room	Break

ROUND 1

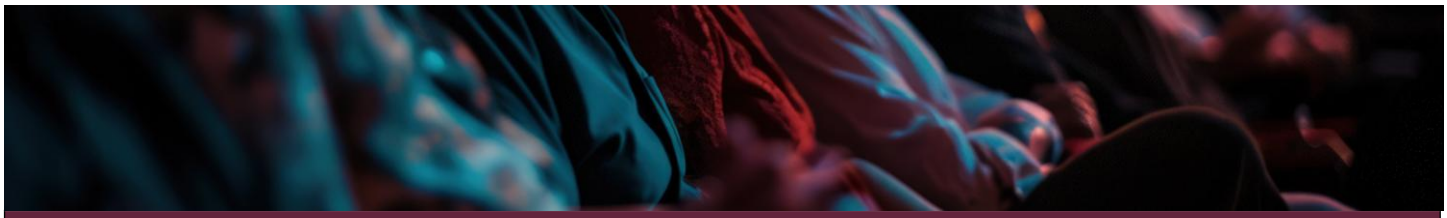
10:30-11:30 parallel sessions (round 1)			
Room 1: AI in Assessment Design		**Room 2: Theoretical Perspectives on AI and Assessment Culture**	
Presentation 1 10:30-10:45	**Designing with AI:** Assessment in an AI-integrated Learning Environment I Dr Cheng-Wen Huang & Associate Prof. Daniela Gachago (UCT)	**Presentation 2** 10:30-10:45	**Roots Before Branches:** Towards Epistemological Considerations Shaping AI Assessment Practices I Dr Sonja Strydom (SU)
Presentation 3 10:45-11:00	**Transforming Language and Literature Assessment Through Pre-Texts Protocol:** Reimagining AI Integration in Creative Literary Engagement I Dr Katia de la Cruz Garcia (UCT)	**Presentation 4** 10:45-11:00	AI Assessment and the Erosion of Epistemic Diversity and Knowledge-Building I Dr Jan Petrus Bosman (SU)
Presentation 5 11:00-11:10 (LT)	Integration of Voice Bots as an Innovative AI-powered Assessment I Ms Grazelde Langeveldt & Miss Qanitah Adam (SU)	**Presentation 6** 11:00-11:15	**Beyond the Algorithm:** Rethinking Assessment in the Age of AI I Prof. Nico Schutte (UWC)
Discussion 11:10-11:30		**Discussion** 11:15-11:30	

ROUND 2

11:30-12:30 parallel sessions (round 2)			
Room 1: AI, Student Learning and Assessment		**Room 2: AI Policy, Equity and Institutional Change**	
Presentation 7 11:30-11:45	**Rethinking Assessment in the Age of Generative AI:** A Case Study from Rhodes University I Mr Neil Kramm (RU)	**Presentation** 8 11:30-11:45	**AI in Assessment:** Navigating Ethics, Bias, and Fairness I Dr Sampath Jayalath (UCT)
Presentation 9 11:45-12:00	**Generative AI Tools in Reflective Essays:** Moderating Moral Injuries and Epistemic Injustices I Dr Nontsikelelo Mapukata (UCT)	**Presentation 10** 11:45-12:00	**ENABLE:** Assessment and Student Agency I Ms Janet Small and Ms Lara Karassellos (UCT)
Presentation 11 12:00-12:15	**From AI to AI:** How do we still uphold Academic Integrity (AI) in the face of Artificial Intelligence (AI)? I Dr Mariette Fourie-Jardim (UWC)	**Presentation 12** 12:00-12:10 (LT)	**AI Literacy in Higher Education:** Innovative Assessment Practices at Stellenbosch University I Miss Emma Swart (SU)
Discussion 12:15-12:30		**Discussion** 12:10-12:30	
12:30-13:30	**Main room**	**Lunch**	

ROUND 3

13:30-14:45 parallel sessions (round 3)			
Room 1: AI, Ethics, and Academic Integrity		**Room 2: AI in Disciplinary Assessment Practices**	
Presentation 13 13:30-13:45	AI-driven Research Assessment and Evaluating the Research Process I Miss Samira Gholizadeh (UCT)	**Presentation 14** 13:30-13:45	Co-opting AI Chatbots in Online Peer Assessment Projects in Materials Science I Dr Melody Neaves (SU)
Presentation 15 13:45-14:00	**Responsible and Equitable AI Utilisation in Assessment:** Balancing the Right to Education and Academic Integrity in Africa I Ms Bongiwe Zungu (UCT)	**Presentation 16** 13:45-14:00	**AI in Anatomy Assessment:** Challenges and Opportunities in Summative Evaluations I Ms Jodie Layman-Lemphane (SU)
Presentation 17 14:00-14:15	**Navigating the Intersection of AI and Fine Art:** Ethical Policies and Educational Strategies at the Michaelis School of Fine Art (UCT) I Mr Melvin Pather & Ms Zainab Gaffoor (UCT)	**Presentation 18** 14:00-14:15	**From Prompt to Product:** Elevating Computational Thinking with AI-Driven Assessment I Mr Hamman Schoonwinkel (SU)
Presentation 19 14:15-14:25 (LT)	**Academic Integrity:** Are These Principles Still Valid in the Age of GenAI? I Ms Magriet De Villiers (SU)	**Presentation 20** 14:15-14:25 (LT)	**Revolutionising Accounting Assessments through AI-Powered Self-Assessment:** Insights in Accounting Education I Mr Chris Guattari-Stafford (UCT)
Discussion 14:25-14:45		**Discussion** 14:25-14:45	
14:45-15:00	**Main room**	**Plenary Tea break**	



Plenary		
Presentation 21 15:05 - 15:25	**Beyond the Algorithm** – Rethinking Assessment as an Act of Learning in the Age of AI I Dr Hanelie Adendorff (SU)	
Discussion 15:25-15:30		
15:30-16:15	Main room	Way forward conversation cafe
Closing **16:15-16:30**	**Main room**	**Networking**

ABSTRACTS

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Presentation 1

Designing with AI:
Assessment in an AI-integrated Learning Environment

Dr Cheng-Wen Huang & Associate Prof. Daniela Gachago (UCT)

Designing with AI is a six-week course that aims to foster critical engagement with generative AI. Assessments in the course, thus, have been purposefully designed to incorporate AI as a thinking partner. This presentation showcases AI's integration into the three assignments: weekly reflections, group presentations, and an evaluative report.

The weekly reflections have been designed to engage participants in three different approaches to reflection: individually, with a chatbot and with a custom-made chatbot.

The group project is designed as a series of group activities that feed into the participants' final individual assignment as well as culminate in a group presentation at the end of the short course. The assignment requires participants to develop a solution to a group challenge they would like to explore in relation to generative AI. The development process is done in consultation with group members and various generative AI tools.

The final assignment is a reflective report which requires participants to delve deeper into an exploration of generative AI's potentials and limitations within their professional context. This assignment resembles the traditional essay the most. To bring academic integrity issues to participants' attention, participants are asked to co-create an AI statement in class.

Overall, these approaches are meant to develop critical AI literacies in participants (Bali, 2024; Huang et al in press), based both on modelling critical inquiry, intentionally foregrounding questions on ethics, situating and encouraging awareness of the contextual nature of ethical issues and supporting the transfer of knowledge into participants' practice.

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Presentation 2

Roots Before Branches: Towards Epistemological Considerations Shaping AI Assessment Practices

Dr Sonja Strydom (SU)

Drawing on the 'synthetic knowledge crisis' as coined by Jeppe Stricker, this conceptual paper argues for the importance of reflecting on personal epistemological beliefs about knowledge as a prerequisite in responding to assessment considerations in the age of Generative AI (GAI). Knowledge production and legitimacy constitute complex, interrelated constructs.

These include but are not limited to our understanding of knowledge construction vs knowledge production; the relationship between knowledge authority and source evaluation; the levels of certainty and complexity of knowledge; and the positioning of learning processes and final products in the demonstration of knowledge acquisition. How academics view knowledge, learning and the role of digital technology fundamentally shape their assessment approaches. Building on the work of scholars across various disciplines, this paper examines theoretical frameworks of knowledge constructs, their alignment with and expression through assessment approaches, and their potential influence on assessment decisions and methodologies within the GAI landscape. To deepen our understanding of how Generative AI (GAI) influences assessment design, it is essential to first uncover the epistemological foundations of academics. This foundational understanding will facilitate the development of diverse branches of assessment knowledge, ultimately enriching our understanding of GAI's role and impact in the educational context.

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Presentation 3

Transforming Language and Literature Assessment Through Pre-Texts Protocol: Reimagining AI Integration in Creative Literary Engagement

Dr Katia de la Cruz Garcia (UCT)

As artificial intelligence increasingly challenges traditional assessment methods in language and literature education, this presentation explores an innovative solution through the integration of the Pre-Texts protocol. Rather than attempting to "AI-proof" conventional assessments, we propose leveraging Pre-Texts' artistic interpretation and dual reflection methodology to create authentically human learning experiences that can be enhanced by AI. This approach transforms the challenge of AI-generated content into an opportunity for deeper engagement with texts.

Our framework centers on Pre-Texts' core elements: listening to texts, creating artistic responses, and engaging in two distinct reflection phases. We demonstrate how these components create natural assessment opportunities that are inherently personal and difficult to replicate with AI. The methodology emphasizes multi-modal engagement with texts, where students transform AI-generated interpretations through creative expression, documented through both initial and final reflections. This dual-reflection process provides robust evidence of learning while maintaining assessment authenticity.

The presentation offers practical strategies for implementing this integrated approach. Our goal is to showcase how the Pre-Texts protocol can help educators use AI as a tool for enhancement while preserving the deep thinking and personal growth essential to language and literature education.

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Presentation 4

AI Assessment and the Erosion of Epistemic Diversity and Knowledge-Building

Dr Jan Petrus Bosman (SU)

In the current maelstrom of beating, joining or ignoring generative AI (GenAI), higher education teachers are vulnerable to experimenting with or being experimented on by shiny AI assessment tools. Viewing AI-infused assessment systems (generative or machine-learned) as epistemic/ knowledge technologies adds a critical component to understanding how knowledge-building and epistemic diversity are potentially eroded through uncritically including such systems in assessment practices.

The central idea is that assessment should be seen as core to knowledge-building and that this essential pedagogical act of epistemological practice cannot (simply only) be entrusted to a machine system. This is valuable human teaching work and elicits inquiry into how different commercial AI Assessment systems are epistemically (dis)charged, i.e. what are their foundational knowledge base. To surface the clearly unseen knowledge-building strategies of this class of AI tools, digital technographies were developed around three prominent tools to find out what these technologies want to achieve through their existence. Through this imaginative and self-reflexive methodology, we start discovering how these technologies dream to become part of everyday teaching practices. The (un)intended epistemic aspirations are interrogated in terms of their veracity to support epistemic diversity (from the South) and to contribute to powerful knowledge building.

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Presentation 5

Integration of Voice Bots as an Innovative AI-powered Assessment

Ms Grazelde Langeveldt & Miss Qanitah Adam (SU)

As artificial intelligence (AI) continues to reshape education, innovative assessment methods are emerging to enhance engagement, accessibility, and authenticity. This presentation explores Voice-activated assessments, an AI-driven approach that enables students to respond verbally to questions posed by voice bots. By enabling spoken interactions, this method fosters critical thinking, language proficiency, and real-world communication skills, providing a more natural and dynamic assessment experience.

The session will cover:

- How voice-activated assessments function and their role in modern education.
- Key benefits of implementing voice bots, including improved engagement, accessibility for diverse learners, and authentic assessment of verbal skills.
- A live demonstration showcasing a voice bot in action.
- Current challenges and considerations, such as accuracy, bias, and implementation hurdles.
- Future potential and emerging trends in AI-driven assessment.

Voice bots have the potential to redefine assessment practices, offering personalized, scalable, and adaptive evaluation that aligns with 21st-century learning needs. By the end of this session, attendees will gain insight into how voice-activated assessments can enhance learning and assessment in the AI era.

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Presentation 6

Beyond the Algorithm: Rethinking Assessment in the Age of AI

Prof. Nico Schutte (UWC)

The rise of Artificial Intelligence (AI) has negated our long-held assumptions about assessment, provoking a crucial rethinking of how learning is measured, valued, and facilitated. Traditional models of assessment, rooted in standardized testing and rigid grading structures, are finding themselves increasingly contradictory with the powers of AI-enabled tools that create text, solve complex problems, and even mimic human cognition.

This article explores how AI can be used not just as a tool to automate assessment but to reimagine assessment in ways that emphasize higher-order thinking, creativity, and authentic learning. With research from contemporary educational theory and emerging empirical evidence, we argue for a shift from an assessment of learning to assessment as learning where AI become integral to both formative and summative assessment design in enabling more nuanced and richer engagement, personalized feedback and development of dynamic skills.
This paper introduces alternative assessment models, including AI-augmented portfolios, adaptive assessment ecosystems, and human-AI co-creation, that challenge foundational understandings of academic integrity while creating meaningful engagement with AI technologies in ethical and critical ways, to produce authentic learning experiences.
Through a critical cross-examination of the tensions between AI's affordances and the risks attendant to its use, this article invites a critical discussion about the future of assessment in higher education. How do we design assessments that are robust to the generative power of AI, but that also embrace its capacity for deep learning? What ethical and pedagogical considerations should guide this transition? Through these questions, the session invites a critical and discursive consideration of the changing nature of assessment in an AI-mediated world.

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Presentation 7

Rethinking Assessment in the Age of Generative AI: A Case Study from Rhodes University

Mr Neil Kramm (RU)

The emergence of Generative Artificial Intelligence (GenAI) tools, such as ChatGPT and Claude, has introduced significant challenges for assessment in higher education. The ability of these systems to generate essays and exam responses within seconds has raised concerns among academics, particularly regarding academic integrity. These concerns have negatively influenced the trust relationship between students and academics.

The initial response from many academics involved proposals to ban GenAI tools, redesign assessments to circumvent AI capabilities or rely on the development of AI detection technologies. However, these approaches often fail to address the broader implications of AI for learning and assessment. This paper presents an approach adopted at Rhodes University to support academics in rethinking assessment within the context of AI. The framework emphasizes the construction of disciplinary knowledge, ensuring that assessments uphold academic integrity while fostering deep student engagement and understanding. By shifting the focus from content recall to the ways in which knowledge is created, communicated, and applied within disciplines, this approach seeks to maintain the trust relationship between academics and students while adapting to the evolving technological landscape.

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Presentation 8

AI in Assessment: Navigating Ethics, Bias, and Fairness

Dr Sampath Jayalath (UCT)

The increasing integration of Artificial Intelligence (AI) in assessment systems has raised critical concerns regarding ethics, bias, and fairness. As AI-driven evaluation tools become more prevalent, it is essential to address the potential risks and consequences of relying on algorithms to measure student learning and performance.

This presentation explores the complex interplay between AI, ethics, and assessment, highlighting the need for transparency, accountability, and inclusivity in the development and implementation of AI-powered assessment tools. By examining the intersection of AI, bias, and fairness, we can work towards creating more equitable and effective assessment systems that prioritize student learning and success.

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Presentation 9

Generative AI tools in Reflective Essays: Moderating Moral Injuries and Epistemic Injustices

Dr Nontsikelelo Mapukata (UCT)

The emergence of large language models such as ChatGPT with transformative elements is already influencing healthcare delivery, research, and training for the next cohort of healthcare professionals. In a consumer-driven market, their capabilities to generate new forms of knowing and doing for experts and novices and their ability to condense volumes of data to the absolute present both a promise and a threat to the livelihood of patients whose care is entrusted to healthcare professionals.

This article explores burdens imposed using generative artificial intelligence (AI) tools in reflective essays submitted by novice first-year health sciences students registered for professional degrees at the University of Cape Town. Constituting an estimated 20% of a class of 450 students (n=90) in a curriculum centered around Vision 2030 with its three pillars focusing on excellence, transformation, and social accountability, this reflection does not seek to underscore the benefits of AI in education and healthcare provision, nor is it intended to impose judicial sentences. Instead, it explores the outcome of deviations from prescribed guidelines in a reflective essay requiring students to demonstrate an understanding of the models of disability and present as evidence epistemic injuries that included academic thieving through hallucinations and manipulation of references. Considering our obligations as educators to contribute to a humanizing praxis, the author evaluates an eroded trust between educators and students and offers an interim solution for attaining skills in academic literacy in a developing country.

ABSTRACTS

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Presentation 10

ENABLE: Assessment and Student Agency

Ms Janet Small and Ms Lara Karassellos (UCT)

Building student agency is a key tenet of Universal Design for Learning (UDL), an approach to learning design that promotes flexibility for diverse student cohorts. Many current conversations around assessment design in the age of AI centre on challenges and opportunities faced by teaching staff, such as strategies to prevent cheating or academic misconduct, or developing more consistent and efficient marking strategies.

These are real concerns but this presentation steps onto the other side of the assessment exercise – and considers student agency. A student agency lens in assessment design could include choices and opportunities for self-directed and active learning, consulting students about assessment options, and offering chances to apply learning challenges to meaningful real-world applications. The Enabling Accessible Blended Learning for Equity (ENABLE) framework brings into conversation the principles of UDL with curriculum and learning design processes and considers ways of building equity in education. There are seven elements where equity and accessibility can be consciously included in design decisions: Deliberative Course Planning, Student-centred Learning, Responsive Teaching and Online Engagement, Flexible Assessment and Feedback, Expansive Evaluation and Reflection, Accessible Technology and Materials, and Unambiguous Communication. Within each of these elements we will briefly touch on the ways in which AI could be explored to promote inclusion and equity for a wide range of students' needs (from neurodivergence to epistemological access), and argue that setting students up for success in assessments is based on enabling strong student agency.

Link to ENABLE: https://cilt.uct.ac.za/enable-designing-for-blended-learning

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Presentation 11

From AI to AI: How do we still uphold Academic Integrity (AI) in the face of Artificial Intelligence (AI)?

Dr Mariette Fourie-Jardim (UWC)

In the rapidly evolving landscape of higher education, artificial intelligence (AI) presents both transformative opportunities and complex challenges, particularly concerning academic integrity. This presentation will explore how higher education institutions can adapt teaching, learning, and assessment practices to responsibly and ethically integrate AI.

Using the metaphor of rising tides, it highlights the need for adaptability, growth through engagement, resilience amid challenges, and collective progress. The session outlines key considerations for balancing AI's educational potential with concerns related to critical thinking, plagiarism, and human involvement. It also presents a structured AI competency framework focusing on digital literacy, clear AI usage guidelines, capacity building, and curriculum responsiveness. By fostering critical AI literacy among faculty and students, higher education can harness AI's potential to enhance learning experiences while upholding ethical standards and academic integrity.

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Presentation 12

AI Literacy in Higher Education: Innovative Assessment Practices at Stellenbosch University

Miss Emma Swart (SU)

The rapid evolution of generative AI is transforming higher education, challenging academics to rethink how they design learning experiences and assess student understanding. At Stellenbosch University, forward-thinking academics are leading the way by embedding AI literacy into their curricula to foster critical thinking, evaluative judgment, and responsible AI use. This Pecha Kucha presentation draws from a case study booklet titled "AI Literacy in Higher Education," showcasing innovative assessment strategies that prioritize process over product.

Through six diverse case studies, we explore how academics in disciplines ranging from Engineering to Accountancy are using AI as a pedagogical tool. These approaches move beyond conventional assessments, and blur the boundaries between assessment and learning, by encouraging students to engage with AI-generated content critically, reflect on its accuracy, and develop a nuanced understanding of AI's affordances and limitations.

By embedding AI literacy as a core part of the curriculum, these innovative practices demonstrate how assessment design can harness AI's potential while reinforcing evaluative judgment and academic integrity. These approaches emphasize formative and sustainable assessment by promoting the responsible use of AI tools and encouraging ongoing reflection. As the integration of AI continues to transform the educational landscape, these practices offer a blueprint for fostering AI literacy and ensuring meaningful learning outcomes.

The case study booklet, in collaboration with Dr Hanelie Adendorff, can be viewed via https://bit.ly/coolthingsatsu

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Presentation 13

AI-driven Research Assessment and Evaluating the Research Process

Miss Samira Gholizadeh (UCT)

The integration of Artificial Intelligence (AI) in research assessment represents a transformative shift in how scientific research is evaluated and managed. This presentation explores the application of AI technologies in the evaluation of research processes, emphasizing AI's potential to enhance objectivity, efficiency, and accuracy in assessing the quality and impact of research outputs.

By automating data collection, analysis, and pattern recognition, AI can streamline literature reviews, identify emerging trends, and predict the future impact of research endeavors. Furthermore, AI-driven tools can support researchers in navigating complex datasets, offering insights into gaps in existing research and optimizing workflows. An overview of existing AI applications in research assessment, followed by an evaluation of their strengths and challenges in real-world academic environments will be presented. Finally, this presentation proposes a framework for implementing AI-driven research assessment systems that can complement traditional peer-review mechanisms, thus fostering a more transparent, accessible, and dynamic research ecosystem.

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Presentation 14

Co-opting AI Chatbots in Online Peer Assessment Projects in Materials Science

Dr Melody Neaves (SU)

Materials Science is a content-dense module with interconnected themes offered to second-year industrial, mechanical and mechatronic engineering students. Since 2021, ongoing renewal efforts have resulted in an integrative module approach wherein all module assignments and activities are explicitly connected across content themes (van Rooyen et al. 2022). The most time-intensive activities is a set of four projects where students are required to pose and peer assess examination-type questions and solutions.

The emergence of artificial intelligence (AI)-chatbots such as ChatGPT (2023-2024) allowed students to quickly generate reasonable questions and answers (given appropriate prompts) without any creative or critical thinking (Rudolph et al., 2023). This necessitated a paradigm shift wherein the projects were redesigned to leverage AI chatbots as answer generators. Students then critically analysed AI-generated responses, highlighting discrepancies with textbook materials. It is anticipated that this will provide additional ways to foster the development of integrative learning abilities, critical thinking, evaluative judgement skills and will expose students to the responsible use of AI as a professional tool.

Currently (2025), this initiative is in its third iteration during which the use of these tools are now well established since the students' secondary school years. This allows an evaluation of the student engagement over time with this type of assignment. We will track student development through lecturer observation and anonymous questionnaires, using Rolfe et al.'s (2001) reflective framework to analyse challenges and successes. This longitudinal study will provide insights into adapting assessment strategies to effectively evaluate learning in an AI-integrated environment, especially in the context of a content-rich engineering module.

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Presentation 15

Responsible and Equitable AI Utilisation in Assessment: Balancing the Right to Education and Academic Integrity in Africa

Ms Bongiwe Zungu (UCT)

Using artificial intelligence (AI) in assessment practices presents both challenges and opportunities to higher education in Africa. While AI-driven solutions can enhance access to quality education by tackling language barriers and addressing challenges faced by students with disabilities, they also pose a risk of intensifying the existing inequality in the educational context. Students with limited access to AI technologies may be disadvantaged, prompting issues over equity and the right to education.

The discussion will explore the following: 1) Briefly: How does the South African Constitution define the right to higher education? Given the growing AI use among the students, should guaranteed access to AI-driven educational resources, be included as a component of this right- at least at a policy level at the University? 2) The ways that the University can embrace AI use in assessments (balanced against academic integrity) to ensure assessment fairness for its diverse student population. The student population includes students with disabilities, well-resourced students and non-English speakers from various local and international backgrounds. 3) Lastly, the conversation will explore how AI can improve assessment efficiency at both student and lecturer levels by partly automating the assessment processes. The discussion will draw insights from foreign jurisdictions leading in the response to AI's rise and its impact on education. China and South Korea are prime examples of such jurisdictions. By proactively incorporating AI, the University can guarantee that the assessment process is ethical and that AI use in this context is responsible, promoting equity rather than intensifying educational differences.

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Presentation 16

AI in Anatomy Assessment: Challenges and Opportunities in Summative Evaluations

Ms Jodie Layman-Lemphane (SU)

The rapid integration of generative AI in higher education has prompted a reassessment of traditional assessment methods. This study explores how AI was incorporated into summative assessments for two student cohorts—undergraduate and postgraduate anatomical sciences students—examining both its potential benefits and challenges.

Students were required to complete a summative assessment consisting of either a written assignment and an oral presentation or a written piece alone. Additionally, both groups submitted a structured reflection on their experience using AI in the assessment process. Their reflections provided insights into AI's role in academic writing, content comprehension, and critical thinking. While students acknowledged benefits such as improved organization, efficiency, and access to diverse perspectives, they also expressed concerns about over-reliance on AI, reduced engagement with primary literature, and difficulties in critically evaluating AI-generated content.

Using the AI in Higher Education (AIHE) framework by Pretorius and Cahose de Caux (2024), we analyzed student AI literacy levels and examined how AI impacted their learning process. This study highlights the need for AI literacy development in summative assessment design to ensure AI is a tool for learning rather than a shortcut to completion.

This presentation provides insights into AI's evolving role in anatomical sciences education, proposing strategies for integrating AI into assessments while maintaining academic integrity, fostering critical thinking, and ensuring ethical AI use.

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Presentation 17

Navigating the Intersection of AI and Fine Art: Ethical Policies and Educational Strategies at the Michaelis School of Fine Art (UCT)

Mr Melvin Pather & Ms Zainab Gaffoor (UCT)

Fine Art coursework engages with various media, such as text, mixed media, imagery, animation, video, and sound. Although these areas were once completely human-centred, we now enter an age where Generative AI has become increasingly integrated into these mediums and begins to pose a significant shift for arts education. While we aim to promote academic integrity in our arts education, we cannot avoid students' usage of AI tools and are prompted to find manners with which to navigate traditional art disciplines by incorporating artificial intelligence solutions.

This allows us to create an increasingly progressive and innovative learning environment. This shift has led us to develop a policy on the ethical use of AI tools within the Michaelis School of Fine Art at the University of Cape Town. Our policy allows the academic staff to manage the use of AI in order to further creativity whilst still maintaining human knowledge production. Our core role is to foster creativity, critical thinking and originality amongst a diverse student population.

The production of visual art and written discourse requires students to attain the knowledge and understanding of the use of AI systems in order for them to be used responsibly and to consider the limitations of fair usage for studiowork projects, assessments, and exhibitions. Over the last few years, we have had numerous cases of AI use and have had to evolve ourselves into a department that considers AI practice whilst still maintaining a solid stance on its ethics.

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Presentation 18

From Prompt to Product: Elevating Computational Thinking with AI-Driven Assessment

Mr Hamman Schoonwinkel (SU)

In the face of generative AI (e.g., ChatGPT) becoming readily available, one might fear that assessment loses its rigor. However, this session argues that computational thinking is more vital than ever in an AI-driven educational landscape. Drawing from a real-world example in a spreadsheet automation module ("DLA 152"), I will show how students' iterative "prompt engineering" fosters deeper problem-solving: they must accurately decompose and articulate each sub-problem to acquire functional code from an AI model.

Students quickly learn that generative AI does not solve poorly defined tasks. Instead, the burden shifts to identifying relevant data structures, specifying constraints, and refining prompts based on immediate feedback. This highlights why core stages of computational thinking (e.g., decomposition, pattern recognition, abstraction) remain firmly in human hands.

A parallel can be drawn with calculators in mathematics: before typing "5 + 7," the student has already identified that 5 + 7 is the necessary sub-calculation. Similarly, generative AI executes a final algorithmic step but does not trivialize problem-solving. The learner remains responsible for the broader objective, coherent instructions, and integrating any output back into the solution.

Consequently, AI can empower educators to design unstructured assessments that reward iterative thinking, creativity, and resilience. By leveraging immediate feedback loops and requiring students to define each problem segment themselves, instructors can elevate academic rigor in the AI era—shifting focus from rote memorization to genuinely higher-order tasks.

Assessment in the Age of AI: Principles, Practices, and Innovations for the Future of Learning

University of Cape Town & Stellenbosch University

3rd of April 2025 | 9am to 4.30pm |
The Hasso Plattner School of Design Thinking Afrika

Presentation 19

Academic Integrity: Are these Principles Still Valid in the Age of GenAI?

Ms Magriet De Villiers (SU)

The onset of Generative AI (GenAI) in 2022/2023 profoundly exacerbated the post-COVID change fatigue and uncertainty that South African Higher Education (HE) was experiencing. GenAI quickly became a central concern while staff and students were readjusting to campus life. Questions were raised around AI literacies and skills development, the potential challenge of rewriting Teaching, Learning, and Assessment (TLA) content and the prevalence of student dishonesty and plagiarism, amongst others.

At Stellenbosch University (SU), the principles of Academic Integrity are emphasised to contribute to a constructive assessment culture. The principles of fairness, honesty, trust, respect, and responsibility, as outlined by the International Center for Academic Integrity (ICAI) in 2021, are deeply embedded in SU's plagiarism policies and guidelines. These principles also align well with current AI ethics discussions, as identified by Jobin et al. (2019). Highlighting how AI values and principles align with existing Academic Integrity approaches reassures staff and students that, despite the GenAI hype, there are established HE guidelines to navigate these new developments.

This is not a novel approach. Academic Integrity is ubiquitous within HE and the principles are widely accepted as guideposts within the TLA environment. However, we need to take a step back and review why these principles were created. Are they intended to form a broad ethical foundation for the scholarly, academic environment? Or are they more narrowly aimed at providing an ethical foundation for punitive measures? And do they (still) reflect the SA HE landscapes in which we find ourselves?

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Presentation 20

Revolutionising Accounting Assessments through AI-Powered Self-Assessment: Insights in Accounting Education

Mr Chris Guattari-Stafford (UCT)

This presentation explores the potential of AI-powered self-assessment tools in accounting education. Self-assessment tools that harness AI to provide students with real-time, objective grades and tailored feedback have the potential to fundamentally improve teaching and learning outcomes. Through the effective use of AI-powered self-assessment tools, accounting educators are empowered to better understand their students, harnessing technology to provide detailed performance metrics that enable them to identify student strengths and weaknesses across various accounting topics and question types which could be employed to create AI-enabled curated student learning journeys.

The session will also discuss strategies for integrating digital assessment tools into pedagogy, thereby enhancing educator assessment literacy and fostering a culture of continuous improvement. By analysing data trends in time management and answer patterns, educators can adapt their teaching methods to better support student learning. The use of an AI-enabled self-assessment tool in accounting education can drive measurable improvements in academic performance and engagement, demonstrating how technology can bridge the gap between theory and practice. Emphasising responsible and equitable AI integration, the presentation will also address challenges such as potential biases and the need for human oversight.

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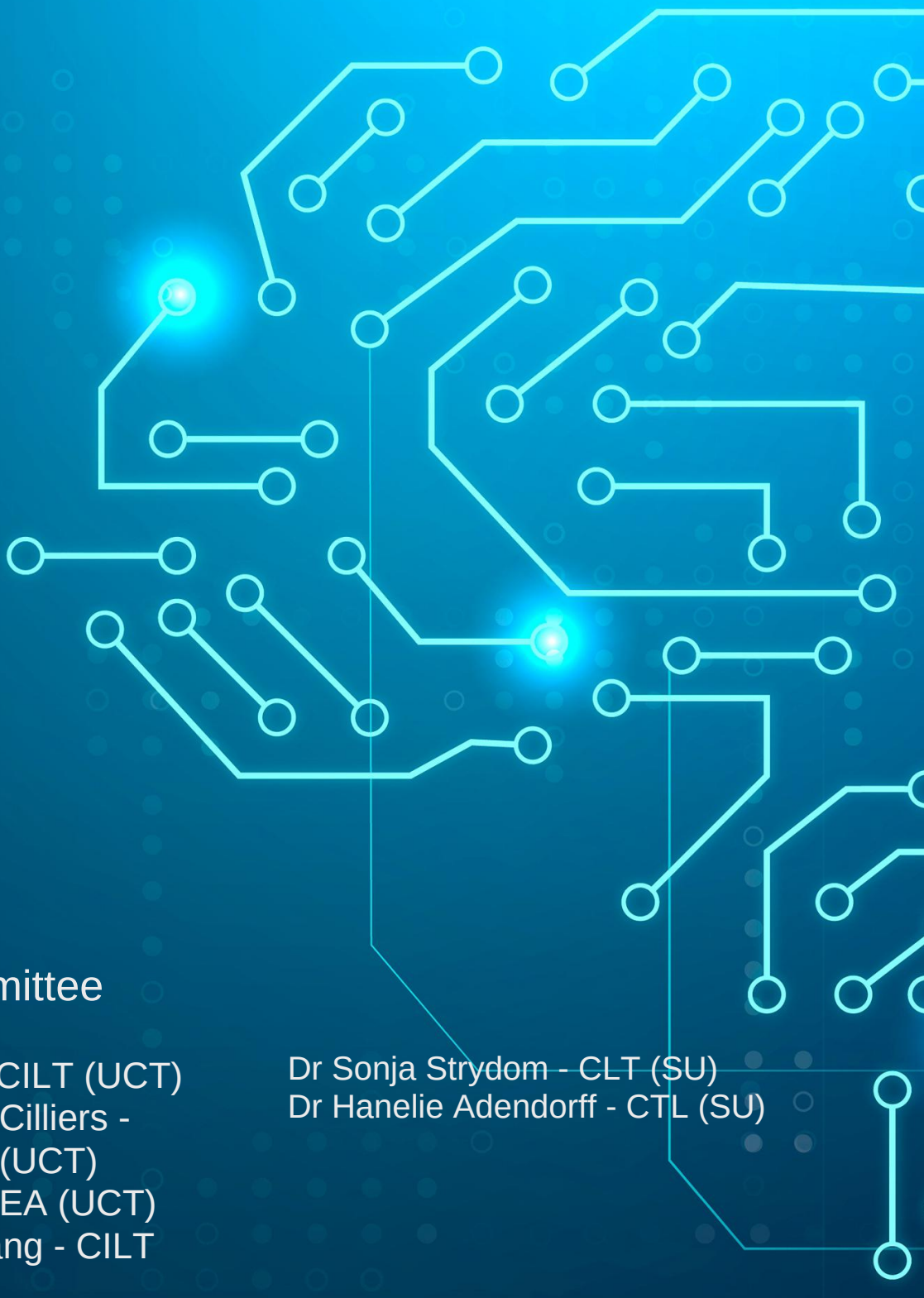
Presentation 21

Beyond the Algorithm – Rethinking Assessment as an Act of Learning in the Age of AI

Dr Hanelie Adendorff (SU)

The rise of generative AI (GenAI) has intensified anxieties about academic integrity, leading to a wave of institutional responses focused on detection, control, and restriction. Yet, these concerns reflect a deeper issue—the extent to which assessment in higher education has become a measure of calculative thinking rather than a space for intellectual and ontological grappling and transformation. If HE remains bound by audit-driven, product-focused assessment cultures, then AI may indeed pose a threat—not because it undermines learning, but because it exposes how little our current assessment practices genuinely foster it.

In this presentation, we argue that AI does not merely challenge HE's assessment models; it presents an opportunity to reimagine assessment as an act of care, intellectual agency, and epistemic and ontological transformation. Rather than reinforcing a culture of measurement, we explore how the emergence of AI in this space could allow HE to shift towards assessment practices that engage process over product, relationality over standardization, and deep inquiry over formulaic correctness. Drawing on Heidegger's concept of a clearing, our research into the tensions between HE's rhetoric of transformation and its structures of performativity, we use causal layered analysis to consider how a post-performative approach to assessment—one that values thinking, grappling, and human meaning-making—might emerge in the age of AI, not in spite of it.



Organizing committee

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Thank you