UNIVERSITY OF CAPE TOWN
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CENTRE FOR HIGHER EDUCATION DEVELOPMENT

tlc Teaching & Learning Conference

TLC 2024

Book of Abstracts

ALL ABOUT CURRICULUM: NEW VISIONS AND FUTURE DIRECTIONS

#TLC2024

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SHOW AND TELL

WORKSHOPS & PANELS

SCHOLARLY

Presentation of Distinguished Teacher's Award and DTAs' responses

Professor Brandon Collier-Reed – Mechanical Engineering

UCT recognises Professor Brandon Collier-Reed for his innovative and student-centered approach in engineering education, which spans over 25 years.
Professor Collier-Reed has served the institution in a number of roles including head of the Mechanical Engineering Department and as a Deputy Dean Undergraduate Studies. Additionally, he has served on more than 20 UCT committees focused on teaching and learning and student experience. Professor Collier-Reed's focus on curriculum development has led to significant changes in how Mechanical Engineering is taught at UCT through the development of new courses and a capstone project. In addition to this, he has leveraged his role and the opportunity afforded by his position at UCT to engage with a wide range of stakeholders and collaborators outside of the institution at a national level, including through acting as a reviewer or providing quality assurance for than 60 engineering programmes. His influence in this area also stretches well beyond South African borders.

At the heart of Professor Collier-Reed's teaching philosophy is student agency and engagement. He views education as a guided apprenticeship where students become part of a professional community. His research on multilingualism and academic literacies has helped students overcome language and skills gaps, demonstrating his commitment to student success.

A nominating colleague writes that he:

> *prioritises students. He has an open office door policy and always makes time for both undergraduate and postgraduate students. Students find him approachable and inspiring and engage with him on a range of matters that influence their lives and academic work. He is understanding and respectful of students as well as displaying kindness, care, and decisiveness when appropriate.*

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And in the words of a student:

> *Personally if Prof Brandon does not attain this award a great deal of injustice would have been done on such a wonderful and passionate soul. He is by far the best lecturer I have ever had the pleasure to learn from.*

Student feedback and testimonies point to Prof Collier-Reed's focus on building strong channels of communication though maintaining a sense of approachability.
Prof Collier-Reed's commitment to teaching and learning extends to scholarly work in the field of education. Through a clear commitment to collaborative teaching practice and a research, Prof Collier-Reed contributes to the area of engineering education in the post-secondary education sector, engaging with a wide range of topics including an interest in engineering curriculum and course design, multilingualism in the engineering classroom, and educational technologies for engineering education.

He states:

> Teaching is an essential part of my *scholarship and I take it very seriously. Each student is an individual who comes to study with an educational history and a psycho-social* framing. It is up to us to take that student on an educational journey that enables them to develop the knowledge, skills, and values necessary to be a valued member of the engineering profession.

It is his love for being in the classroom and engaging with his students that shines through all the ways in which he supports students, colleagues and the broader UCT and engineering education community. While his innovation in curriculum development, dedication to student success and reflective teaching practice make him a deserving recipient of the Distinguished Teacher Award, it is Brandon's approachability, kindness and obvious love for his work, inspire us to amplify our connection to our work.
Ms Shanali Govender

Dr Bianca Tame – Sociology

Dr Bianca Tame is a Senior Lecturer in Industrial Sociology and teaches courses at undergraduate and postgraduate levels. Since being appointed at UCT in 2015, she has contributed immensely to teaching, learning and curriculum development. Her attentive, caring, benevolent and reflective approach has rightfully earned her the title of being "a departmental treasure". Not only does she consistently incorporate novel strategies in response to student needs, but she also mentors them to take up new opportunities that enrich their career development.

As the Vice President of the South African Sociological Association (SASA), she encourages students to attend and present their work at conferences. Furthermore, she collaborates with her colleagues towards a responsive curriculum. Together, they conceptualised material on "Care and Solidarity" to be incorporated into undergraduate and postgraduate courses.

Informed by social constructivist frameworks, Dr Tame's work is justice oriented. She previously worked in a collaboration between the Workers' College and the University of KwaZulu-Natal, which offered trade unionists and community-based activists' access to an undergraduate degree. This is one amongst many experiences that has shaped Dr Tame's approach and commitment to inclusive decolonial pedagogy.

She is a co-principal investigator, alongside Prof Ruchi Chaturvedi, in a project that

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developed the MPhil specialising in Theories of Justice and Inequality Programme which was launched in 2019. This programme is an effective transdisciplinary Master programme challenging students to understand multiple forms of inequality. With her expertise in Labour Studies, Dr Tame has supervised several postgraduate students. Her contributions have made her a sought-after lecturer and supervisor. Dr Tame's research also informs and enriches her teaching. She is part of the Africa Decolonial Research Network which provides discursive platforms for addressing decolonial concepts, theories and practices in higher education. Dr Tame is defined by her colleagues as "a socially engaged citizen who strives for social justice in all spheres of life" and "finds creative ways of translating social justice theories to everyday lived experiences for the students".

A/Prof Nomusa Makhubu

Dr George Hull –Philosophy

A teaching philosophy for our times!

Dr George Hull's teaching philosophy is highly engaging and responds to what many of us in academia have found daunting; the call to decolonize Higher Education. His intentional approach to drawing on a pedagogy of discomfort alongside a pedagogy of empowerment is persuasive in how it weaves a golden thread throughout his teaching, from his classroom practices in and out of the classroom, to his supervision. Dr Hull's carefully thought through pedagogies facilitate his students' engagements with local histories, bringing these up close and personal, for exposure, and importantly, for critique. This is facilitated in very careful ways that acknowledge the sensitivity of the space within which they engage in his Philosophy of Race course while encouraging students to venture into 'heavy' terrain. This has had a liberating effect on his students, expressed by one student as, "leading us to question the implicit biases or unfounded opinions that we did not even realise we held".

Dr Hull's teaching philosophy travels beyond UCT and our borders through his Foundations in Philosophy programme for school learners and his semester study abroad classes. Within both these spaces, the principles that inform his teaching philosophy come to life as he engages students, lecturers and school learners alike - daring them to be creative and imaginative in a discipline that has not been traditionally associated with these qualities. Dr Hull has not only challenged his students but the discipline through the choice he has made to include what he calls 'texts not previously recognized as philosophical", thus challenging stereotypical and essentialist ways of conceptualizing curriculum transformation. By inviting the voices of scholars such as our very own Neville Alexander through linking the canon to key works from SA thinkers and Black Consciousness movements, Dr Hull exhibits forward thinking that moves decolonization from mostly polarized perspectives by exploring the synergies between these.

Another aspect of Dr Hull's teaching practice that the committee foregrounds is his highly inclusive supervisory practice, where both quantity and quality are commendable. The committee was struck by his 'horizontal' (no leader) discussions with students and noted how the care that Dr Hull puts into mentoring postgraduate students is carried through to his collaborations within UCT and beyond. Very positive and strong letters of support from his students, as well as the wide-ranging and high-quality support from colleagues speak to the educator that he is. The Deputy dean of Postgrad studies describes his pedagogical style as gentle, kind, and open-ended and accommodating of diverse learning styles, while a colleague in Languages and Literature commends him on his ability to "foster intellectual bravery and a spirit of real debate".

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The impact of Dr Hull's teaching beyond the formal space of the classroom is evident in several initiatives with which he has very intentionally aimed to demystify Philosophy. Imagining the intellectual debates that are sparked in a Xhosa for Philosophers setting is important for illustrating the innovation that is possible in undertaking decolonial work in disciplines such as Dr Hull's. The most effective way to summarise Dr Hull's exceptional contribution to teaching and learning would be with a quote from one of his former students' letters of support: "Dr Hull's teaching marked a noticeable and radical break with the traditional modes of teaching philosophy, a break that gave the philosophy department a new life and opened it up to pertinent philosophical questions that the analytic tradition would usually fail to consider. Dr Hull's place in the renewal of the philosophy department cannot be overstated".

A/Prof Bongi Bangeni

Dr Yunus Omar – School of Education

Dr. Yunus Omar is a senior lecturer in the School of Education. The Distinguished Teacher Award Committee noted the depth of thought and meticulous preparation evident in his teaching portfolio. Dr. Omar's educational philosophy is grounded in principles of social justice oriented pedagogical frameworks, with an emphasis on fostering a respectful abd rigorous classroom environment. Testimonials from his students and colleagues highlight his role as a "conductor of a symphony," orchestrating his lectures to invite diverse perspectives and dynamic engagement.

Dr. Omar's teaching approach stands out for its inclusivity and responsiveness. He maintains an open-door policy and welcomes colleagues into his lectures for critique and feedback, demonstrating his commitment to reflective practice and growth. His facilitation of debate within the classroom and responsiveness to the unique circumstances of his students were commended as distinctive qualities that elevate the learning experience.In addition to his teaching excellence, Dr. Omar has made significant contributions to curriculum renewal through collaboration with colleagues on programme design and his role on the departmental transformation committee. His dedication extends to organising seminars and the Neville Alexander Conference, showcasing his active engagement with broader educational dialogues.

The Committee noted the profound impact Dr. Omar has had on his students, many of whom cite his influence on their academic choices and career pathways. His inclusive use of technology and openness about his own biases have fostered a space where students feel seen and heard partly owing to his conscientiousness in providing detailed student feedback. Although Dr. Omar may have initially approached digital learning with caution, he demonstrated a strong commitment to adapting and engaging with students on online platforms. Dr. Omar's teaching philosophy and practices are deeply rooted in his personal journey, informed by his early experiences with educational inequities. The Committee observed how this foundation shapes his dedication to fostering lifelong learning and his focus on social justice. The continuity between his teaching philosophy, curriculum work, and scholarship highlights his alignment with transformative education principles.

In conclusion, the Committee strongly endorsed Dr. Omar's nomination, noting his significant impact, innovative teaching, and unwavering commitment to inclusivity and transformation. His portfolio exemplifies the qualities that the Distinguished Teacher Award seeks to recognise—excellence, dedication, and a profound influence on student lives and learning.

Dr. Marlon Swai

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Day 1 Keynote: Hussein Suleman

BIOGRAPHY

Hussein Suleman is the Dean of Science and a Professor of Computer Science at the University of Cape Town (UCT) in South Africa. He was previously Head of Department of Computer Science at UCT from 2016-2023, where he has worked as an academic since 2003. He earned his PhD from Virginia Polytechnic Institute and State University in 2002, after a BSc, BSc(Hons) and MSc from the then University of Durban-Westville. His research is situated within the Digital Libraries Laboratory in the Department of Computer Science, with a focus on digital libraries, ICT4D, African language Information Retrieval, cultural heritage preservation, Internet technology and educational technology.

STATEMENT

Automation for transformation in learning spaces

Students from diverse backgrounds take classes together, usually with a single lecturer attempting to teach everyone as a single cohort. However, the learning pathway of each student is personal and often different from other students. Students who come to university from poor communities, rural areas and townships often find that the system has been optimized for someone on a different learning journey. For those students, transformation means levelling of the playing field and ensuring learning opportunities for all. I argue that to empower all our students, we can and should use technology to automate much of how we teach. I have developed many experimental teaching tools over the years, with an emphasis on low-resource solutions that address systemic bias while empowering students in their learning. My most successful project is an automated marking system for computer programs, but I have also developed communication tools, archiving tools, etc. Many of these are the subject of further research studies with students to explore how the use of simple automation can improve and transform student learning experiences.

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Plenary Panel

DAY 2

CURRICULUM CHANGE IN PRACTICE - SHOWCASING FACULTY-WIDE ENGAGEMENT

The Curriculum Change Facilitation Team

As part of the institutional-wide Taking Curriculum Change Forward (TCCF) project at UCT, the Curriculum Change Facilitation Team (CCTF) was set up to support critical engagement on Curriculum Change at UCT. The team consists of colleagues across all faculties who work closely with CHED and Institutional Planning and Development, to support departments and faculties in implementing curriculum change in their contexts. The role of the CCTF is to facilitate curriculum change discussions, coordinate conversations within the university's curriculum change projects, ensure a cohesive and collaborative effort for successful progress of the curriculum change projects, guide and address ongoing activities within and beyond the university's curriculum and change projects. This includes research and monitoring and evaluation activities. The plenary will contextualise curriculum change process within HE landscape, share case studies for critical reflection, provide space for discussion and engagement on critical CC initiatives.

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Blumenthal, Mark

Digital lab manuals in second-year physics labs

10min + 5min

In modern education, particularly in STEM fields, there is a growing need to integrate digital tools that enhance student engagement and learning. This talk explores how live scripts in MATLAB can effectively replace traditional printed manuals, offering a dynamic and interactive learning experience. MATLAB live scripts allow for the seamless integration of simulation apps, videos, and real-time data capturing and analysis into a single document, transforming static lessons into immersive, hands-on experiences. Students are not only able to read theoretical content but also engage with simulations, run code, and visualize outcomes immediately.

This method significantly enhances comprehension, particularly in complex subjects such as physics, engineering, and data science, by making abstract concepts more tangible. Furthermore, incorporating data capturing and analysis within live scripts exposes students to new and novel data technologies, preparing them for real-world applications.

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Damonse, Shireen
Hanske Flieringa

Holding hands to get to the other side: A story of support

10min + 5min

The Division of Disability Studies offers a one-year NQF level 5 qualification, the Higher Certificate in Disability Practice (HCDP). Graduates of this program serve as community rehabilitation workers, providing support, advocacy, and service to persons with disabilities and their families. Since its inception in 2012, the program has combined theoretical knowledge with practical skills, graduating an average of 20 Rehabilitation Care Workers annually.

Over the past five years the support for students within the program has increased and especially in 2023 when we students with varying degrees of disabilities. Hence the teaching methods needed to be adjusted without compromising the program and assessment standards. This year, 2024, we find ourselves in a similar situation with a large class size and student cohort that is highly diverse, representing a wide range of ages, races, languages, disabilities, and cultural backgrounds. This diversity sometimes poses challenges for students in understanding and applying the course content. To address these challenges, we have adopted a range of creative pedagogical approaches and support methods.

Central to our teaching is a humanizing pedagogy, which fosters learning environments that recognize and value students as whole individuals rather than mere recipients of information. Adapting our teaching methods and support systems has been crucial to ensuring that the program remains inclusive and accessible to all students.

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De Decker, Rik

CATHCHAT - a LIVE teaching and learning platform for paediatric cardiac catheterisation and more

10min + 5min

CATHCHAT is a novel and unique live online teaching and learning platform developed at Red Cross Children's Hospital for use during interventional paediatric cardiac catheterisation or other cathlab procedures. It is aimed at stimulating interventional cardiac catheterisation, aimed especially, but not exclusively, at developing capacity in Africa. The procedures are transmitted live online, and local and international audiences are invited to log in and witness the procedures in real time. Being able to view all the imaging available to the operators, the online audience can follow the procedure in high-definition, step-by-step detail. Viewers are also able to interact directly with the cathlab, through a knowledgeable "commentator", thereby not disturbing the operators.

The power of CATHCHAT is that renowned international experts are often invited to log in to watch the procedures and advise the operators live. The logged-in audience then witnesses this interaction. CATHCHAT is therefore a simultaneous teaching and learning tool to the on-site interventional team as well as for the logged-in audiences: an observed masterclass, at no cost.

In Africa, paediatric cardiologists receive training in general cardiac catheterisation during their subspecialist cardiology training. A growing number of catheterisation laboratories are beginning to appear in Africa, but frequently are not fully operative due to a shortage of skilled staff and/or consumables. However, there is a shortage of fully trained, specialist interventional paediatric cardiologists in Africa and CATHCHAT is able to extend our experience to those that are active. CATHCHAT therefore assists in the development of capacity for interventional paediatric cardiac catheterisation in Africa. Cardiac catheterisation does NOT require cardiac surgical or intensive care facilities to correct many of the common, simpler congenital heart defects, such as ASDs, PDAs, pulmonary stenoses and even some VSDs. Training to perform interventional repair safely is not arduous and methods for the development of skills exist.

CATHCHAT aims to assist in the development of capacity for interventional paediatric cardiac catheterisation.

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Deane, Nawaal
Kathryn Morrissey; and Swai Burgess

Integrating vodcasting into your curriculum

10min + 5min

This Teaching and Learning Conference session will explore innovative approaches to integrating vodcasts into higher education. Vodcasts, or video podcasts, have emerged as a dynamic tool in enhancing student engagement and learning outcomes. The session will feature two lecturers who have successfully incorporated vodcasts into their courses, offering a unique opportunity to examine their strategies and outcomes.

Both lecturers will discuss the use of vodcasts and how they are integrated into their curriculum and co-creation of media with students. The lecturer will share insights on the design process, technical considerations, and pedagogical implications of this approach, highlighting how vodcasts can cater to diverse learning styles and improve student comprehension and retention.

In this innovative practice, students are tasked with creating vodcasts as part of their coursework, encouraging them to engage deeply with the material and develop digital literacy skills. This approach not only fosters creativity and critical thinking but also allows students to take ownership of their learning. The lecturer will discuss the challenges and successes encountered in implementing this assessment method, including feedback from students and the impact on learning outcomes. The host will also include the student perspective and have requested a student join the session.

Attendees will have the opportunity to engage with the presenters through a Q&A session, where they can ask questions through the MS Teams channel and live feed into the room.

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Doyle, Greg
Veronica Mitchell

Navigating innovative Open Educational Resources in Health Sciences

10min + 5min

Traditional curricular content is being disrupted by the vast amount of information available through various AI tools. We propose incorporating Open Educational Resources (OERs), which can be transformative and make locally contextualised information accessible to all. Developing and publishing OERs in health sciences from the Global South fill knowledge gaps in previously neglected areas. This is important as healthcare remains a universal need, yet locally relevant teaching resources are essential. Furthermore, OERs can enrich databases used by AI language models, which are currently biased towards Global North data.

Our presentation highlights the creation of OERs within the Faculty of Health Sciences (FHS), advocating for the creation of OERs as part of curriculum transformation. We draw on several projects that demonstrate our commitment to OERs. A key motivation is preserving institutional knowledge when academics leave. We recently supported a retiree in developing an OER in Forensic Mental Health, showcasing his extensive experience. Also, publishing OERs is not restricted by copyright limitations and publishing hurdles. Open online textbooks, like the Physiotherapy E-book, can be continuously updated, becoming a dynamic resource. Finally, OERs offer personal rewards - there are FHS examples whose work is being used globally, contributing to a growing body of open-access knowledge.

We recognise the energy and dedication required to create OERs. While funding has been provided through grants and prizes, we call for reevaluating institutional policies to recognise and reward educators who create OERs. Adopting Nancy Fraser's framework of participatory parity, we assess how OER development contributes to social justice by redistributing knowledge, adapting materials culturally, and amplifying marginalised voices. OER has enabled the FHS to make education equitable and locally relevant. Through our experiences, we hope to inspire others to embrace OER and contribute to a more accessible educational landscape that promotes equity and sustainability.

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Ewing, Kathryn

Urban Design Africa Redesign: Threading strings of compassion on a learning design journey

10min + 5min

The presentation reviews the curriculum development and learning design of a course in the Master of Urban Design taught programme, called Urban Design Theory II Part 1, known as Urban Design Africa. Part 1 of the course includes different students from the urban design programme and a short course for participants in Continuing Professional Development from built environment practice. The course takes a human-centred approach to urban design and enables a courageous place to discuss wicked, 'real-world' challenges that we face in our African context.

The redesign question asks, how might we create a safe and caring online blended learning space so that all participants feel included, and reshape the course (experience, context, content, activities, resources, assessment) to be creative, accessible, and relevant towards authentic and collaborative learning? The design solution provides an overarching lens of equity-orientated learning design integrating a design thinking mindset. Compassion is intentionally built into the curriculum where co-design and collaboration are key elements of the reshaped Urban Design Africa.

The curriculum intentionally creates a SEE-K framework to enable a shifting-engaging-extracting process within each seminar and workshop over a block-week period. The redesign has created multiple spaces for innovation, imagination and creativity, key to an urban design learning journey and a solid grounding for students moving into Part 2. Lessons from teaching and learning in 2023 and 2024 are presented.

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Hoosain, Shanaaz

Applying humanizing pedagogy in large classes

10min + 5min

How do we engage with large classes both online and in person? Teaching large classes poses challenges not only in terms of administration, but also engagement in class. Large classes are known for not being effective for engaging students and teaching, critical thinking. However large classrooms with a student enrolment of above 150 students are the reality for many courses in higher education in South Africa. I attempt to address this question in the presentation as I reflect on how I have applied humanizing pedagogy in large classes using teaching platforms creatively and student engagement in class.

The purpose of the presentation is to demonstrate how humanizing and socially just pedagogies can be applied in the context of large classes where engagement is particularly challenging. Learning strategies to address access, improving the learning experiences of all students, specifically those from marginalized groups include reducing anonymity, creating a small class environment and co-creating knowledge with students are explored. Humanizing and narrative methods were employed where the emphasis was on storytelling. Storytelling can be viewed as decolonized approach in terms of inclusivity, collaborative problem-solving, and a safe environment for socially engaged dialogue and peer feedback. Students are able to engage with issues of power, privilege and marginalization.

I reflect on what humanizing pedagogy has meant for large class student engagement, what it meant for myself as a social work academic and what it meant for students. Students' reflections from course evaluations and reflective assignments indicate that they were able to integrate their histories, lived experiences and community knowledge into their learning.

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Jayakumar, Jaisubash

Advancing decoloniality in medical education: Leveraging humanising pedagogies to foster inclusivity and empower student success among pre-clinical MBChB students at UCT's Faculty of Health Sciences

10min + 5min

Re-imagining the curriculum in South African higher education institutions through a decolonial lens requires addressing the deep-seated challenges posed by the enduring legacies of colonialism. These historical remnants manifest in the structures, content, and practices of education, often perpetuating exclusionary norms that marginalise African knowledge systems and identities. To build an inclusive, Afrocentric, student-centred curriculum, these legacies must be dismantled. Central to this process is the adoption of humanising pedagogies, which serve as both a catalyst and a tool for driving decoloniality in higher education. These pedagogies promote inclusive practices that actively address both visible and hidden forms of oppression, inequality, and invisibility, especially for students from historically marginalised and underprivileged backgrounds.

Facilitating student success in this context requires educators to continuously reflect on their teaching approaches. This introspection is key to identifying and addressing the critical questions that arise when integrating context-specific, decolonial approaches like humanising pedagogies. In 2023, during my tenure as course convenor and lecturer for second- and third-year MBChB students in the Integrated Health Systems courses at the University of Cape Town's Faculty of Health Sciences, I engaged in such reflection. I closely scrutinised two diverse classroom environments, focusing on the delivery of course orientation, lectures, tutorials, and academic support from a decolonial perspective.

Through this process, I re-examined traditional educational practices, striving to eliminate colonial-era misconceptions while reinforcing students' sense of belonging. The humanising pedagogies I implemented were met with positive student feedback, significantly enhancing engagement and academic success in both courses. By adopting a pragmatic approach that centred African perspectives, I established a decolonial praxis that not only promoted social justice but also empowered students to take ownership of their learning, fostering a more inclusive and equitable educational experience.

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Ma, Yue

Towards a curriculum of foreign language adding an edge to compound talents

10min + 5min

It is a common understanding that language is a tool for communication and a foreign language expands one's vision of the world and broadens one's experiences of different cultures. In the job market, translators and interpreters have taken the roles of being a bridge between people who speak different languages. However, with the development of AI technology, it seems that meeting the gaps between international communication depends less and less on a human intermediary to facilitate intercultural linguistic communication. In many places of the world, foreign language majors face crisis of being cut out due to increasingly tense budget and austerity issues.

However, in many contexts the machine cannot completely replace interpersonal human communication, especially where intricate cultural and emotional elements are involved. This thus calls for a change of definition of the role of foreign language in cross-cultural communication, where compound talents would be preferred rather than a pure interpreter or translator. Therefore, for tertiary educational institutions, foreign language curriculum should bend more on language for specific purposes rather than focusing on the legacy topics of language and literature only, though the conventional focus areas need also to be preserved to meet the scarce needs in the society.

In light of these considerations we'd like to propose a curriculum change for foreign language programmes to aim at offering opportunities for students to turn themselves into a professional with compound talents that can find a place in international communication, commerce, trade, diplomacy and so on.

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Mabe, Phadi

Immersive Pedagogy and the Spatio-Visual Revolution

10min + 5min

This paper examines the transformative potential of virtual reality (VR) and immersive technologies within architectural education, with a particular focus on their application in the South African context. As emergent technologies, VR and other immersive tools remain underutilized in academic settings, despite their capacity to revolutionize pedagogical approaches. Drawing on theoretical frameworks provided by Chalmers (2022) and Tavinor (2021), which define VR as both interactive and immersive, this study posits that VR can significantly enhance the teaching of architectural history and theory by transcending the limitations of conventional two-dimensional mediums such as textbooks, images, and site visits.

While site visits and video content offer a degree of engagement, they are hampered by logistical, financial, and safety concerns, making them inadequate for fostering a comprehensive understanding of architectural spaces. Virtual reality, by contrast, provides a dynamic and interactive platform through which students can safely explore architectural environments that are otherwise inaccessible or hazardous. VR's capacity to offer immersive, three-dimensional experiences in architectural education presents a pedagogical paradigm shift that will not only mitigate the limitations of traditional methods but also foster a deeper, more empathetic understanding of architectural spaces and their historical contexts.

The study advocates for the expanded integration of VR in architectural pedagogy, positioning it as a transformative tool capable of addressing the unique challenges of the South African educational context. The slow adoption of VR in higher education underscores the need for innovative approaches to architectural teaching, where immersive technologies can bridge the gap between theoretical knowledge and practical experience.

Ultimately, VR represents the future of architectural education, offering the potential for a spatio-visual revolution that will reshape the way students engage with and create architecture.

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Mohomed, Tasneem
Shireen Damonse

Child Learning Development and Play: From the classroom to practice - a pedagogical shift

10min + 5min

The current Occupational Therapy (OT) curriculum at the University of Cape Town (UCT) covers five key domains: Physical Health, Mental Health, Work Practice, Community Development Practice, and Child Learning, Development, and Play (CLDP). Currently, CLDP content is delivered in a fragmented manner across various courses in the four-year undergraduate programme. This lack of integration makes it difficult for students to develop holistic interventions to address children's occupational needs in practice. Fragmented teaching methods often lead to confusion, duplication of effort, and inefficiency in creating educational resources. It can also prevent students from exploring new materials and approaches.

To address this, differentiated instruction has been introduced as a teaching method that adapts the content, process, product, or learning environment to accommodate the diverse needs, preferences, and abilities of students. This approach aims to move away from a one-size-fits-all model, providing multiple pathways for students to engage with and demonstrate their understanding.

The outcomes of this project will be assessed during and after practice learning blocks, with clinical educators from outside the CLDP domain observing to determine whether the pedagogical shift has helped students view their clients as holistic occupational beings. The goal is to develop a new teaching, learning, and assessment approach for the CLDP curriculum, in collaboration with the Centre for Innovation in Learning and Teaching (CILT), to help students adopt a holistic, contextually relevant, and evidence-based approach to addressing children's occupational needs.

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Ngubane, Simphiwe

Navigating language barriers: The impact of unilingual examiners on medical students' oral assessments at University of Cape Town (UCT)

10min + 5min

The Nelson Mandela Fidel Castro Program teaches medical students primarily in Spanish, preparing them to practice in a variety of linguistic contexts. When these graduates return to South Africa, they face significant difficulties in adjusting to English medical terminology, which can negatively impact their performance in oral assessments.

This proposal investigates how unilingual examiners, who may be unfamiliar with the linguistic and educational backgrounds of these students, unintentionally contribute to assessment difficulties. The study focuses on the disparity between the language of instruction in the program and the language used in South African medical assessments. This presentation aims to highlight the importance of more inclusive assessment practices by looking at the experiences of students and examiners. It proposes strategies for closing the language gap, such as examiner training and it suggests strategies for closing the language gap, such as examiner training and the creation of bilingual assessment tools, in order to improve fairness and accuracy in evaluating multilingual medical students.

This discussion is critical for creating a more equitable educational environment that values linguistic diversity and promotes academic success for all students.

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Nkosi, Lesego

Bridging the gap: Enhancing mental health support and curricular integration in universities

10min + 5min

In the past five years, there has been increasing concern about the lack of mental health support for university students and the mismatch between their needs and available resources. The growing frequency of mental health issues on campuses underscores the urgent need to address this overlooked problem (Burns, 2011; Scheirber, 2018; Bantjes et al., 2023). Higher education institutions could consider introducing required mental health curricula to improve student awareness.

Mental health issues not only limit students' capacity to attain their full potential, but they also affect their academic performance and overall well-being. This presentation examines the existing research on mental health difficulties and assesses the success of both mandatory and optional mental health programs in university settings throughout the Global North and South, with a particular emphasis on Africa. The goal is to suggest practical improvements to mental health at South African universities, resulting in a more supportive atmosphere for students from underserved, marginalized populations. When gathering information and developing solutions, any conclusions must acknowledge that South Africa is still in the process of significant decolonisation and transformation in higher education institutions.

This presentation also explores the strategies that universities, in partnership with students, can use to address the mental health crisis as a disability issue. It delves into the resources that can be made available to the student community and the tools that can be employed to combat the stigma associated with mental health issues. Students are active change agents in many of the challenges they face on campus, and mental well-being is an issue where they should be allowed to use their agency to improve their community. By utilising methods in partnership with higher education institutions, students' initiatives can create a more holistic experience in higher education.

References

- Bantjes, Jason., Kessler, Molly., Lochner, Christine., Breet, Elsie., Bawa, Ahmed., Roos, Janine., Davids, Charl., Muturiki, Memory. et al. 2023. The mental health of university students in South Africa: results of the national student survey. Journal of Affective Disorders, 321: 217–226.
- Burns, J. K. 2011. The mental health gap in South Africa - a Human rights issue. The Equal Rights Review, 6: 99-114.
- Schreiber, B., 2018. Mental health at universities: universities are not in loco parentis - students are active partners in mental health. Journal of Student Affairs in Africa, 6(2): 121-127.

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Orrie, Zaaid

AI in Amathuba: Automating Content Generation for Better Learning

10min + 5min

In this session we will explore Lumi, an AI-powered tool integrated into Amathuba to simplify and enrich content creation. Lumi can generate insightful quiz questions, create practice activities, and provide in-tuitive suggestions for new assignments and discus-sions that align seamlessly with the course material by analysing the course content that you uploaded.

Attendees will gain practical insights into harness-ing Lumi's capabilities to streamline course devel-opment which give you time to focus on enhancing your course design and teaching.

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Pead, Justin
Renee Smit

Navigating constraints: Engineering education through affordable, real-world projects

10min + 5min

Engineering professionals are crucial to solving problems in an increasingly complex world and help societies respond to the many challenges faced. The education and training of students for the engineering profession are critical in a modern economy. Engineers must solve problems in interdisciplinary contexts that demand innovation, creativity, and teamwork. Design is an essential engineering skill that involves using an iterative process to create real-world solutions within a specific disciplinary field.

One of the most effective ways to develop these skills is through project-based learning (PBL), where students work in small teams to solve a realistic, technically challenging design problem. In a technical discipline like electrical engineering, high costs are often associated with equipment, components and software licences. Additionally, the time required to gain proficiency with these tools must be balanced with the constraints of a limited academic year. Providing students with authentic learning experiences in a resource-constrained, austerity-driven environment presents a significant challenge for engineering educators.

In this paper, we report on a cost-effective and innovative approach to delivering an authentic PBL opportunity for senior electrical engineering students.

By leveraging the annual international competition, Micromouse, we developed a practical learning experience using a cost-efficient robotic platform designed in-house that integrates with MATLAB for each student. The Micromouse robot autonomously navigates a maze, challenging students to apply advanced problem-solving and programming skills. This platform introduces complex technical concepts while providing a gamified learning experience that encourages engagement. By replicating this global competition at reduced costs, we offer students a high-demand, affordable, hands-on project that mirrors real-world engineering challenges.

This paper presents the design of a cost-effective solution that allows students to build a sophisticated system as part of the Micromouse project. We also report on the course's implementation and feedback from the students.

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Pio de Paulo, Lisa
Jaisubash Jayakumar

Bridging the Gap: Enabling a smooth transitioning of first year health sciences students from high school to higher education at the University of Cape Town

10min + 5min

Universally first year students at higher education institutions experience their transitioning from high school to university in a myriad of ways and often perceive it as a daunting and stressful transition period The transition is marred with uncertainty and unfamiliarity as many students leave home, create new friendships, and adjust to tertiary education. Universities across the globe attempt to facilitate the transition to university by running orientation programmes.

The Faculty of Health Sciences (FHS) at the University of Cape Town runs a 10- day orientation programme for all first-year students. During the orientation period, students are introduced to their degree programme and courses and learn about what the University has to offer.

The study aimed to determine the perceptions and experiences of first year students at the FHS during the transition period from high school to university. Another objective was to identify the appropriate academic and non-academic support structures to assist students during the transition period. At the end of the FHS orientation, students from the five programmes namely Audiology, MBChB, Occupational therapy, Physiotherapy and Speech Language and Pathology programmes were invited by email to voluntarily participate in an online survey that included 36 questions. The preliminary findings of the survey highlighted FHS first year students' experiences, difficulties and challenges during their transitioning. The challenges encountered by students during their transitioning period included use of technology, exploring new social connections, establishing new relationships, navigating and adapting to the new UCT environment. It also revealed the benefits of both academic and non-academic support structures during the orientation period. However, non-academic support structures seem to have a significant impact on students. Through the lens of transformation, these findings could enable the re-imagining of a holistic student-centered and inclusive programme for a successful transition.

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Reddy, Mishka
Lovejoy Marozhe; and Janet Small

Critical generative AI literacy: Developing a framework

10min + 5min

We invite you to join a work in progress session where we will introduce a framework for critical generative artificial intelligence (AI) literacy in education. Developed through literature review, conversations with colleagues and experiential knowledge, this proposed framework aims to guide the provision of resources for staff and students in navigating generative AI in education. The framework does not include technical jargon to ensure relevance for a wide audience.

Our framework consists of five key themes related to generative AI in education:
- Understand how it works
- Assess appropriate use
- Engage critically
- Promote a just approach
- Examine ethical issues

We'll discuss how these themes evolved from other critical generative AI literacy frameworks (Bali, 2024; Ng et al., 2021), and our expansion of 'Engage critically' and 'Promote a just approach'. These adaptations reflect our emphasis on making the framework relevant for our context. We look forward to your insights and feedback to scrutinise, challenge and refine this framework.

References

- Bali, M. (2024). Where are the crescents in AI? LSE HE blog. https://blogs.lse.ac.uk/highereducation/2024/02/26/where-are-the-crescents-in-ai Title: Critical generative AI literacy: Developing a framework.
- Ng, D. T. K., Leung, J. K. L., Chu, S. K. W., & Qiao, M. S. (2021). Conceptualizing AI literacy: An exploratory review. Computers and Education: Artificial Intelligence, 2, 100041. https://doi.org/10.1016/j.caeai.2021.100041.

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Rule, Deirdre

The essential Research Integrity curriculum for university research students?

10min + 5min

Research Integrity (RI) education is vital to the integrity of our research institutions. In a world where technology, especially generative AI, is rapidly evolving, it's crucial that we equip our university research students with the knowledge and skills to conduct responsible scholarship. However, in South Africa, there's no national requirement for RI education in universities. Instead, each university sets its own policies and offers training, mostly voluntary. Recognizing this gap, this study aimed to investigate what a mandatory and comprehensive RI curriculum at a South African university should look like (course content), and how it can be taught effectively (pedagogy). Academics and other key university RI stakeholders were interviewed and RI policies in the South African and Australian universities were reviewed. Australia was chosen as a comparison case because there, the Australian Code for the Responsible Conduct of Research makes RI training compulsory for both students and staff.

The main findings were that RI education is crucial for maintaining research quality and public trust in research. Secondly, a solid RI curriculum should have three main parts: (i) General RI education that covers foundational topics (through standalone self-study online modules or blended training); (ii) Discipline-specific RI training (integrated into research methods courses); and (iii) AI education - applications and implications (integrated into both general and discipline-specific training (in i and ii) or through specialized AI modules led by AI experts). Whilst teaching about AI in RI comes with challenges, the study explored the benefits in the short, medium, and long term.

Implementing this kind of RI curriculum will ensure that university research students are equipped to navigate the complexities of responsible research, including the use of AI. This will create a culture of integrity that will extend beyond academia, benefiting society as a whole.

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Rylands, Laa-iqa

Adapting Peer-Led Team Learning (PLTL) for Flexible Curriculum Integration: Supporting Student Success and Development

10min + 5min

Peer-Led Team Learning (PLTL) is a model designed to help guide students in solving problems related to their course work in a structured setting. Traditionally, PLTL involves small groups of approximately eight students who meet weekly for 90 to 120 and work collaboratively under the guidance of trained peer leaders. Although it was not designed as a remedial program or to replace tutorial sessions, literature shows that PLTL enhances student engagement, critical thinking, and academic performance, particularly among underrepresented and underprepared students. There are many reported variants of the traditional PLTL model, which includes hybrid approaches, online PLTL, use of in-class peer leaders and increased student to peer-leader ratio. This highlights the adaptability of the model, making it suitable for a range of educational settings and needs.

In our third-year senior chemistry course, I introduced a variant of the PLTL model to support students alongside the usual tutor-led tutorial sessions. The PLTL was introduced as an additional revision session where students worked in small groups to collaboratively tackle challenging concepts or test questions that were poorly answered. By using test results to pair weaker students with stronger ones, I aimed to foster collaborative problem-solving and peer learning. This adaptation provided targeted support while aligning with the flexibility of PLTL seen in literature.

The success of this adaptation, as measured by improved mid-term course grades, mirrored findings from existing PLTL research, which demonstrate its effectiveness in improving student outcomes and supporting diverse learners. By adjusting the traditional PLTL structure to meet the specific needs of our course, I observed significant improvements in both engagement and comprehension. In this talk, I would like to use my application of PLTL as an example to educate, encourage and reinforce the use of PLTL.

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Sango, Tatiana
Kalpana Ramesh Kanjee

Using an Adaptive Online Assessment Tool informed by data and learning analytics to level the academic playing field

10min + 5min

The diversity in academic preparedness and mathematics knowledge among our first-year university students is a concern. We tackle this by increasing student engagement and feedback, and more recently using educational digital technologies, and developing adaptive online assessment and learning experiences. This study focuses on using assessment to improve support for first-year students, particularly by using data and learning analytics. The presentation is based on a case study that used high-stakes assessment data, course-level data analytics, and an AI-powered learning environment to enhance a first-year student support programme for engineering students. The use of course and student-level reports, as well as data from the National Benchmark Test (NBT), helped tailor the student experience to accommodate differences in students' geographical, social, and academic backgrounds.

Tailored ALEKS modules were provided to first-year engineering mathematics students at the University of Cape Town (UCT) for a semester. The ALEKS modules provided bridging topics and were mainly aligned with the material for the first Test. These modules were a mandatory requirement to strengthen pre-calculus skills. 70% (of the 542 students) completed the initial knowledge check during the initial six weeks of the course. After the first test, 89 students transitioned to a course on the extended curriculum programme. A comparison between NBT and ALEKS data with written tests was conducted on these students, and their responses to the survey were collected. Initial findings indicate that the students who performed better in their first Test were those who spent more time in ALEKS learning more topics. It appears that students who mastered the ALEKS topics were better prepared for and more successful in learning Calculus 1.

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Steyn, Paul

Lessons learned from a Virtual world

10min + 5min

The integration of Virtual Reality (VR) into health sciences education offers innovative opportunities for immersive learning. We evaluated the implementation of VR modules across anatomy and physiology, highlighting both successes and challenges. VR enhanced student engagement and spatial understanding of complex anatomical structures and physiological processes.

However, several challenges emerged, including frequent technical issues like hardware malfunctions and software compatibility problems, which disrupted learning. Additionally, the steep learning curve for both students and instructors required significant training and support. High costs associated with VR equipment also limited access, raising concerns about educational equity.

Despite these obstacles, our findings suggest that VR and Augmented reality (AR) can be a valuable tool in health sciences education with careful planning, ongoing refinement and technological advancement. Addressing technical and financial barriers will be crucial for broader adoption and effective integration. This work emphasizes the need for continuous evaluation to optimize the benefits of VR while minimizing its limitations in health sciences curricula. The future of VR/AR technology education requires adaptability and perseverance.

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Williams, Yasheemah

Exploring Gamification to enhance Student Engagement in a Quantitative Literacy classroom

10min + 5min

Gamification, the application of game-like elements in non-game contexts, has gained significant attention in the field of education as a means to enhance student engagement and learning outcomes. One prominent example of a gamification tool is Kahoot, an interactive online platform that allows teachers to create engaging quizzes and trivia games for their students. As the millennial and Generation Z students continue to populate university classrooms, the need to adapt traditional teaching methods to meet their preferences and learning styles has become increasingly important.
The use of Kahoot in the classroom has been found to have a positive impact on student motivation and academic performance.

The gamification approach facilitated by Kahoot has also been found to have a positive impact on student motivation. Students tend to be more ambitious and motivated to study when Kahoot is incorporated into the learning process, leading to enhanced engagement and better learning outcomes. Furthermore, existing research suggests that students perceive Kahoot as a useful and user-friendly tool, which further contributes to its effectiveness in fostering student engagement. (Zainuddin, Z., 2023) (Bicen, H. and Kocakoyun, S., 2018).

Kahoot will be used as a tool in a Quantitative Literacy classroom to investigate how it improves engagement, and motivation in the classroom. It will be used in a way to test the knowledge of the content and how it gets students to engage. A questionnaire will be used after the study about the Kahoot and how the students found it and how the elements of gamification encouraged engagement and motivation.

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Kefale, Kende
Stephen Marquard; Riashna Sithaldeen; Deepti Charitar; Jaamia Galant; and Sanet Steyn

Know Your Course & Students: A DASS Workshop on Data Analytics for Course Design

120min

We are delighted to extend a warm invitation to you for the upcoming workshop:
The DASS Team has dedicated three years to the development and enhancement of the "Know Your Course and Students" (KYCS) Reports. KYCS reports provide data analytics that gives you a profile of your students and the historical performance of students on the course. We are excited to invite you to take advantage of an exclusive opportunity to delve into the KYCS Report for your course at this workshop. This event promises to be an informative and interactive session that will empower you to gain deeper insights into your courses and students.

Workshop Format

1. Introduction to DASS, KYCS & Course Report Cards (30 min)
- Learn about the rationale behind KYCS and Course Report Cards
- Explore the intricate details of the reports.
- Discover how KYCS/CRCs can significantly impact your course design.

2. Student profiles and achievement gaps (30 min)
Engage in thought-provoking discussions centred around three key questions from your KYCS/CRC report:
- How diverse is the profile of students on your course, and what implications does this have for your teaching?
- What are the historical Achievement Gaps in this course and what implications does this have for your teaching?
- What innovative interventions can you envision, inspired by the insights from the KYCS reports?

3. NBT Diagnostics for Course Design (30 min)
Learn how to maximize the benefits of the KYCS NBT Diagnostics section by getting to know students' performance on the NBT subdomains. The following questions will guide the group discussions:
- What are the foundational knowledge domains that influence your students' performance?
- What innovative interventions can you envision, inspired by the insights from the NBT subdomain performance?

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4. Plenary Discussion (30 min)
- Seek clarification and answers to any questions you may have regarding the reports.
- Share your suggestions and ideas on additional elements you'd like to see in the reports.
- Provide feedback on the content and delivery of the KYCS reports.
- Reflect on the workshop's key takeaways and outcomes.

We look forward to your participation in this workshop, where you will gain a deeper understanding of your courses and students while contributing to the ongoing improvement of the KYCS reports.

Note: In preparation for the workshop, please send us (to: dass@uct.ac.za) the course code of a course you are teaching so that we can generate a KYCS report for discussion in the workshop.

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Muna, Natashia
Taahira Goolam Hoosen; Michelle Hannington;
Adibah Hendricks; and Thando Kubheka

All teachers are language teachers: Using transformative pedagogies to enable students' academic literacies acquisition

 **120min**

Many educators are acutely aware that students often struggle with the literacy assumptions and demands of university curricula. However, there is much uncertainty about who should respond to this challenge or how to do so in decolonial and transformative ways within disciplinary contexts.

Halliday (1993) asserts that language is the foundation of learning and as such, all teachers are language teachers. Taking this as our point of departure, this workshop will introduce participants to the transformative ideology of the academic literacies approach (Lea and Street, 1998; Lillis and Scott, 2007), which provides a framework for explicating the situated, value-laden, and tacit nature of academic language and disciplinary discourses (Gee, 1989).

Building on this theoretical foundation, we will guide participants through a series of experiential, reflective, and analytical activities designed to help them construct knowledge about the literacy assumptions and demands tacit within their own teaching contexts. In complement to this, participants will be capacitated with principles and practical pedagogical strategies to help them foster equitable teaching contexts that are intentional about enabling all students to succeed.

Designed and facilitated by the Faculty of Health Sciences Writing Lab staff team, we invite up to 30 participants to join us in this two-hour workshop, for a nourishing learning experience.

Workshop Outline

Introduction
- The Discomfort of not knowing: Like a duck out of water
- Reflecting on prior experience

Theoretical Foundation
- What is learning?
- The relationship between learning and language
- The relationship between language, power, and privilege

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Exploring teaching contexts
- Taking stock of the literacies demands of the curriculum
- Identifying the literacies assumptions of the curriculum

Scaffolding as a transformative pedagogy
- Establishing foundational understanding and validating students' prior knowledge
- Making tacit practices explicit
- Feedback/feedforward
- Dismantling the scaffold

Exploring teaching strategies
- Chunking
- Spoon-feeding
- Modelling

Reflection and discussion
- Key learnings
- Action plans

Conclusion
- The way forward
- Opportunities for further learning and development.

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Reddy, Mishka
Dr Tabisa Mayisela

Unpacking and reimagining curriculum transformation: A creative exploration of concepts and practices at UCT

120min

Workshop invitation

As far back as 1997, the Education White Paper 3 emphasised the urgency for the South African higher education system to be "transformed to redress past inequalities, to serve a new social order, to meet pressing national needs and to respond to new realities and opportunities" (DHET, 1997, p.1). However, the CHE (2022) recently highlighted that despite the numerous endeavours, curriculum transformation remains a worldwide challenge that still requires attention. In addition, the CHE (in a call sent out in 2023) expressed the lack of a common understanding of what curriculum transformation is. This implies there might be lack of a common language to describe what teaching staff are doing in terms of their curriculum. Thus, the question we are trying to address through this workshop is: What related concepts and practices do UCT teaching staff directly or circuitously align to curriculum transformation in their contexts? This will hopefully lead to the co-development of case studies on curriculum transformation at UCT, in the near future.

We invite you to join us in this workshop where we will be using creative methods to collectively unpack our conceptualisations of curriculum and curriculum transformation and explore how these are imagined and practised.

Workshop outline

Part 1: Exploring the concept of curriculum (30 minutes)
1.1 Individual reflection (5 minutes): Free writing task answering, "What is curriculum?"

1.2 Interactive plenary (20 minutes):
- Brief introductions
- Populate physical wall with key ideas on sticky notes
- Facilitator-led discussion of emerging themes.

1.3 Mini-lecture (5 minutes): Facilitators provide input on curriculum concepts, addressing gaps or misconceptions.

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Part 2: Unpacking curriculum transformation [30 minutes]
2.1 Warm-up activity (5 minutes): Metaphor mash-up
Participants choose an image that metaphorically represents curriculum transformation

2.2 Small group discussion (10 minutes):
- Share detailed explanations of chosen metaphors
- Identify common themes and divergent views.

2.3 Plenary sharing (10 minutes):
- Groups report key insights
- Open floor for lingering thoughts or questions.

2.4 Consolidation (5 minutes): Facilitators summarise key points and introduce relevant theoretical frameworks.

Part 3: Visualising curriculum transformation through collage [50 minutes]
3.1 Brief introduction to collage as an expressive medium (5 minutes)

3.2 Individual creation (30 minutes)
- Create a collage depicting your current curriculum
- Transform your collage or create a new one to represent your vision of a transformed curriculum. This vision can reflect changes you've already begun implementing in your course or transformations you aspire to make in the future.

3.3 Small group sharing (10 minutes)
Discuss your collages and insights in groups of 3-4.

3.4 Gallery Walk (5 minutes)
Display collages and allow participants to view others' work.

Part 4: Reflection and closing [10 minutes]
4.1 Individual reflection (5 minutes): write one insight gained and one question still lingering.

4.2 Closing activity (5 minutes): on a large poster contribute one word or short phrase that captures your main takeaway about curriculum transformation.

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Allie, Saalih
Dale Taylor; Tshiamiso Makwela; Alexander Sivitilli; Nuraan Majiet; Mayhew Steyn; Chad Leukes; and Memba Sikani

The role of discipline-based education research (DBER) in curriculum development

20min + 10min

The Physics and Astronomy Education Research (PhAsER) group aims to understand students' thinking in order to guide the development of curricula that incorporate the cognitive resources that students bring with them into physics and astronomy classrooms. This is particularly important in the South African context, in order to address issues of equity and to avoid students feeling inadequate and alienated from 'expert' knowledge. Physics and astronomy are grounded in observation and measurement, which are used to construct theoretical models around idealized concepts that are usually described mathematically. Thus, access to these disciplines requires a mastery of a wide range of tools to engage meaningfully with the material at hand.

We will introduce this session with the broad aim of PhAsER and the main research paradigm. We will then showcase the range of our research and provide examples that show the link between research results and subsequent activities in the teaching and learning space.

The topic covered are:
- Teaching measurement and uncertainty: descriptive language as a source of confusion
- Probing students' engagement of astronomical scales from an embodied cognition perspective
- How students make sense of observable astronomical phenomena
- Shaping the digital planetarium into a meaningful teaching and learning space
- Smartphones sensors as tools for physics experiments: designing a remote learning activity.
- Probing students' difficulties with idealized objects in advanced electromagnetic theory.

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Andrason, Alexander

Co-designing the curriculum: A radical-pedagogy approach

20min + 10min

The present article reviews and theorizes around two andragogical experiments involving 3rd-year and Honors humanity students that were implemented at a historically White South African university in 2021 and 2022. The first of these experiments led to the publication of an article written jointly by the teacher and students (see Andrason, Lange, Gysman & van Renssen 2022 [https://doi.org/10.7817/jaos.142.3.2022.ar023]) while the other reflected on that experience and, like the previous module, concluded with the publication of another joint study (see Andrason, Lange & Gysman 2023 [https://doi.org/10.3898/AS.31.1.05]) By couching his analysis within the frame of radical pedagogy – one of the most fertile branches of critical pedagogical thought and most unforgiving for the vices of the university system currently operating worldwide – the author, who was the co-creator of the two experimental courses, concludes the following: To be possible, a transformatory, empowering, and liberating education necessitates the inclusion of all, i.e., both the teacher and students, in the curriculum design of a(ny) university course.

The two experiments show that when these two types of actors collectively determine the particular scope of the module, its exact themes, objectives, readings, and forms of engagements and evaluation, the learning (and teaching) can indeed transform, empower and liberate all the participants. Although, in light of the largely favorable results experienced equally by the teacher and students in both courses, the positive impact of a radical curriculum-co-design approach could seem evident, the reality is more complex.

A cluster of reactionary responses from faculty (structures) demonstrates that this alternative and more valuable manner of teaching and learning can be jeopardized considerably by the conservative power systems that continue to dominate the ontological, epistemological, and relational landscape of (most) universities in the 21st century.

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Archer, Arlene
Orrie Staschen

Multimodal and embodied approaches to writing for multilingual students: Practices of the UCT Writing Centre

20min + 10min

This presentation by the UCT Writing Centre explores ways of using a range of modes and embodied approaches to extend and develop writing within multilingual and diverse higher education contexts. Some Western academic approaches position knowledge as non-corporeal, as separate from the body, neutral and context-independent, most commonly through the medium of the English language. In doing this, they potentially suppress alternative epistemic traditions and obfuscate the working of power within 'Anglonormative' (McKinney, 2016) educational spaces. By highlighting the dual function of language as both a means of communication and a carrier of culture (Ngugi wa Thiong'o, 1986), the UCT Writing Centre encourages students to draw on their diverse language repertoires, multimodal practices and the knowledges they bring with them to university.

To dispel prevailing discourses which view languages as bounded and hierarchical, and which prioritise language accuracy, this paper highlights the value of students' 'translingual practices' and the 'repertoire of codes' (Canagarajah and Ben Said, 2010) they use for meaning making. We look at the pedagogic implications of this for writing consultants. We reflect on how introducing more fluid genres and some discursive play in the less regulated space of the Writing Centre is seen as important, allowing students to draw on heteroglossic meaning-making practices such as 'register meshing' (Guzula, McKinney and Tyler, 2016) and 'translanguaging' (Creese and Blackledge, 2010) when single forms of communication fall short.

The hope is that a multimodal and embodied approach to developing writing will draw on multilingual student resources in order to inform a social justice and equity agenda.

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Botha, Ridaa

Incorporating Artificial Intelligence into Supported Problem Based Learning

20min + 10min

Supported Problem-based learning (SPBL) is an effective teaching pedagogy established in the MBChB curriculum at Faculty of Health Sciences (FHS) at the University of Cape Town (UCT) (Melanie Alperstein, 2008). SPBL has been incorporated into medical education because of its role of fostering self-directed learning, student engagement, collaborative learning, critical thinking and knowledge integration by linking theory to real-life scenarios (Hu et al., 2024). In his analysis of ChatGPT and future anatomical education (Leng, 2024) highlights that AI has the potential to revolutionise the Health Sciences Curriculum by merging human intellect with AI through a collaborative approach. AI has not yet been established in the SPBL pedagogy in the MBChB curriculum at UCT. As an emerging topic in the field of health education, not many studies have been done on the use of AI in SPBL. With that said, this innovation will investigate and evaluate students' knowledge, perspectives, experiences and attitudes of using an AI platform known as Chat Generative Pre-trained Transformer (ChatGPT) alongside SPBL. ChatGPT is a chatbot that promotes personalise learning for students and provide real-time feedback on a wide range of prompts (Leng, 2024). In this study, a comparison will be drawn in terms of knowledge, perspectives, experiences and attitudes between a group of students who will be using ChatGPT alongside SPBL and a group of students who will not be using ChatGPT.

The anticipated outcomes are that students that have used AI alongside PBL sessions will have less stress and anxiety, less burnout, be more efficient and productive and have better understanding of important concepts while linking it to the real case scenarios.

The value of this innovation is essential because the MBChB program has become increasingly stressful for many students and the use of AI will help lower the burden of mental health issues amongst medical students. The results of this study will also play a huge role in revolutionizing the MBChB curriculum.

References

- Hu, X., Li, J., Wang, X., Guo, K., Liu, H., Yu, Q., Kuang, G., Zhang, S. et al. 2024. Medical education challenges in Mainland China: An analysis of the application of problem-based learning. Medical Teacher. :1. DOI:10.1080/014215 9x.2024.2369238.
- Leng, L. 2024. Challenge, integration, and change: ChatGPT and future anatomical education. Medical Education Online. 29(1) DOI:10.1080/10872981.2024.2304973.
- Melanie Alperstein. 2008. Facilititator SPBL Guide. Educational Development Unit.

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Budree, Adheesh

Interrogating AI in Teaching and Learning: A postgraduate student perspective

20min + 10min

While artificial intelligence (AI) rapidly continues to entrench itself deeper in society, a yet to be determined area is how any type of AI should be treated in education: as a mere structuring and/or summarisation tool for academics and students, or a valuable partner in the teaching and learning process.

The investigation of generative AI and its potential applicability to and impact on education remains ongoing, however current findings tend to be inconclusive, with most reporting short-term rather than long-term effects, the latter of which in all probability only being truly evident through several years of research and observation. This study, building off research conducted by Brzezinska (2024), presents the case of a group assignment designed to reflectively implement text- and video-generating AI with full-time Information Systems Honours students at the University of Cape Town, while still maintaining student autonomy, creativity, engagement, and critical thinking. The assignment execution phase is followed by a qualitative and quantitative survey-based analysis conducted to evaluate the appeal and efficacy of AI in the learning process as experienced by the students. In addition, the ethical views around the (mis)use of AI were interrogated.

The findings are envisaged to contribute further to the ongoing discourse on the integration of AI in tertiary education and shed light on the potential advantages and pitfalls of incorporating AI tools into the classroom.

References

- Brzezinska, M. (2024, June). The Appeal, Efficacy, and Ethics of Using Text-and Video-Generating AI in the Learning Process of College Students: Predictive Insights and Student Perceptions. In International Conference on Human-Computer Interaction (pp. 23-42). Cham: Springer Nature Switzerland.

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Cain, Julia

Environmental documentary filmmaking – a pedagogical perspective on the affective aspects of creative practice

20min + 10min

The Film Theory & Practice honours programme at the Centre for Film & Media Studies (CFMS) at UCT provides an opportunity for students to pursue creative practice-based research to produce a 24-30-minute documentary film in small groups as an alternative to a written honours thesis. Students are encouraged to pitch whatever concept appeals to them as long as it is feasible for production during one academic year. A significant proportion of the films produced in this programme can be characterised as environmental films, indicating a high level of interest with environmental issues and/or environmental filmmaking by this diverse student cohort.

This research draws on retrospective interviews with 12 of the graduates that produced environmental films during the period from 2017 – 2022 to argue the following:

- the practice-based research these young researchers undertake is often transformative in terms of how it affects their fundamental beliefs and behaviours, specifically in relation to environmental issues;
- the production of environmental communication (in this case documentary films) has the potential to impact students' future activities in public spheres, including work, activism and networking;
- creative practice offers meaningful decolonial methodologies with the potential to achieve powerful affective and long-term impacts on students.

This presentation will analyse the affective power of creative practice as a pedagogy through different lenses related to human connectedness. This includes environmental filmmaking as an eco-pedagogy that fosters eco-philia, connecting students to the environments they physically inhabit and research (Hung, 2017).

More broadly, this form of creative practice research is explored as a fundamentally dialogical activity that puts students in conversation with others and nature too. In this I draw on several African scholars' ideas related to Ubuntu, Afrokology and filmmaking as a decolonial pedagogy (Massumi; Mano & milton; Mistry & Sakota).

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Cilliers, Francois
Cheng-Wen Huang; Sanet Steyn; Soraya Lester and Sukaina Walji

AI's curveball: Is the problem with assessment or with our learning outcomes?

20min + 10min

In the rapidly evolving landscape of education, the pervasiveness and capabilities of generative artificial intelligence (genAI) has thrown many traditional assessment methods into disarray. This presentation posits that the path to reimagining assessment in the genAI era begins not with tweaking existing assessment methods, but with a fundamental re-evaluation of the learning outcomes being assessed. We propose a framework to guide this redevelopment, addressing the complex interplay between human cognition and artificial intelligence in the educational sphere.

Through a critical conceptual exploration of the relationship between genAI capabilities and educational goals, we propose a typology of learning outcomes in a genAI-enabled world. Outcomes are categorised as AI-Delegable, Human-Centric, Hybrid, AI-Enabled, Reimagined, and Redundant. This typology serves as a basis for a framework for a systematic approach to assessment (and curriculum) redesign, offering educators a structured way to navigate the challenges and opportunities presented by genAI.

The proposed framework for redesign emphasizes the importance of a holistic approach. While addressing the technical aspects of AI integration, it is imperative that the process of redefining learning outcomes does not lose sight of the longstanding need to advance social justice and equity in the higher education system. This process, therefore, is not a simple tweaking of existing outcomes, but rather a comprehensive re-evaluation of what competencies are truly valued in a genAI-enabled world and how they can be fostered equitably.

In conclusion, we offer a roadmap for higher education institutions to proactively adapt to the AI revolution, shifting the focus from reactive measures in assessment to a proactive reimagining of learning outcomes. This presentation aims to provoke a thoughtful reconsideration of educational goals in an AI-saturated world. By providing a structured approach to redefining learning outcomes, we hope to catalyse innovations in assessment that transcend ideas of genAI disruption and actively incorporate genAI as a powerful educational tool.

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Clarke, Jumani

Who gets better at describing statistics and how: An intervention study

20min + 10min

In addition to knowing how to perform a core set of mathematical procedures, Numeracy requires proficiency at knowing how to communicate mathematical meaning in various relevant situations. In South Africa studies of large-scale standardized assessments of student preparedness for higher education (National Benchmark Tests) have shown that proficiency at numeracy is associated with both mathematics and language proficiency as measured by the National Senior Certificate exams. Furthermore, mathematics education research of teaching has demonstrated that teaching the various representations of mathematical knowledge, in which representations in language play a crucial part, substantially improves proficiency across demographic groups at primary and lower secondary schooling. And yet interventions that teach quantitative literacy itself at higher education do not in general focus on language development.

In a study of first year UCT humanity students taking a quantitative literacy course, I report on how their capacity to represent mathematical meaning improved when they were given explicit instructions about how to construct part-whole relationships in language. Adopting a discursive multimodal view of mathematics, the study finds that, independent of the intervention, improvements in these constructions were in general significantly associated with their NBT performance in Quantitative Literacy. However, among participants of a certain African home language, these improvements seem to also have been dependent on their exposure to the explicit language instruction in the intervention of the study.

The implication of these findings is that teaching numeracy as academic development at higher education as it currently stands may offer more substantial opportunities for academic success to some student groups than others according to their combined social-economic and language experience, if it lacks sufficient development of the multimodal capacities necessary for the representation of mathematical meaning.

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Davis, Clare

Innovative development of a clinical learning needs responsive course curriculum and design for children's nurses across Africa

20min + 10min

Nurses play a core role in frontline healthcare services across Africa. As the continent with the greatest population of children and the highest child mortality, the presence of trained children's nurses is key to changing child health outcomes. Undergraduate nursing programmes however have limited children's nursing content and while postgraduate specialist children's nursing programmes are being developed, there are still only seven available in the 54 African countries.

The Global Strategic Directions for Nursing and Midwifery (WHO, 2021) publication outlines the need to educate nurses and midwives to meet demand and national health priorities as one of four strategic directions. For Africa, this provides a clear imperative for additional contextually-aligned training opportunities to strengthen human resources in children's nursing.

In response, the UCT Children's Nursing Development Unit used a Backward Design model to develop a suite of short courses to be positioned in the postgraduate learning space. Mindful of the anticipated profile of nurse learners – geographically spread, full-time employed and mostly women with complex familial responsibilities –, and the severe financial and human resource constraints on releasing nurses for training, the courses were developed using a fully asynchronous online learning approach. Course design was grounded in the widely adopted Community of Inquiry (CoI) model, that guides the integration of cognitive, social and teaching presences to ensure an optimal online learning experience.

This presentation will share our learnings and examples, first in how the course structure and curriculum design was innovative in its response to local clinical learning needs, and second, of how the CoI model guided deep and meaningful learning in a participant group less conversant with an self-paced online learning approach. It is anticipated that such knowledge may be of interest to educators faced with a similarly challenged knowledge gap and training need.

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Dube, Bonani
Carima Adams; Dumisa Dlodlo; Khabonina Mthembu; and Daniel Munene

It takes a village to produce a graduate: Creating communities of learning through a first-year developmental course

20min + 10min

Academic support, cocurricular activities, learning support strategies and graduateness are concepts that are centred at developing students within the higher education landscape. At the University of Cape Town, in the Education Development Unit in Commerce, the course that intersects these elements is a developmental course, DOC1103H. The course offers academic support to all first-year students through learning support strategies. It allows for students to think about their learning as active participants and equips learners with the tools they need to make a success of their academic journeys at the beginning of their journey.

The course is designed to support students upon entering higher education to improve retention and success. Research shows that retention in first year is an important marker for future success. The course is anchored in the belief that for students to make a success of their learning in the new environment, they need to build effective learning communities and support structures and have meaningful relationships with both fellow students and staff. This fosters a sense of belonging that will enable them to learn and thrive in this new environment.

The core teaching approach in this developmental course is reflection. Students are encouraged to be active participants in their learning, as well as in their own personal lives. Thus, fostering a developmental approach that will enhance their personal growth beyond graduation.

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Gachago, Daniela
Cheng-Wen Huang; Shanali Govender; Glenda Cox;
Tefo Mosienyane; and Mashudu Raudzingana

Designing in the times of AI: Co-creation as a strategy towards emergent learning design

20min + 10min

This presentation explores co-creation as a strategy for emergent learning design in the context of developing a new postgraduate diploma in blended and online learning at a large South African university. In this conceptual paper, grounded both in theory and critical collaborative autoethnography, we examine how co-creation functions as an epistemological, ontological, and political project in learning design.

The design process of the course "Designing with AI" serves to illustrate the complexities and uncertainties inherent in emergent learning design. Our reflections reveal that co-creation challenges traditional notions of expertise, disrupts established roles and processes, and serves as a means to address issues of social justice and equity in education. We propose a set of principles for co-creation in emergent learning design, including the affirmation of multiple knowledges, embracing entangled processes, and recognizing the importance of affect and power dynamics. The paper highlights the potential of co-creation to navigate the uncertainties of rapidly evolving fields like AI in education, while acknowledging the challenges and tensions inherent in this approach.

We argue that co-creation, when applied thoughtfully, can lead to more flexible, inclusive, and responsive learning designs. However, we also recognise that the ability to engage in such emergent practices may be influenced by institutional contexts and individual positionalities within higher education.

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Henry, Michelle

Sleep, mental health and academic performance in undergraduate students

20min + 10min

Introduction: Sleep is a vital process involved in physical restoration, emotion regulation and cognitive functioning. Hence, disrupted or poor-quality sleep may be associated with mental health difficulties and poor academic performance.

Methods: To investigate this, undergraduate students at UCT were invited to participate in the study, and completed self-report questionnaires relating to their sleep, depression and anxiety. In addition, they were asked to give permission for the researcher to access their matric and university course results as a proxy for academic performance.

Results: 420 undergraduate students completed the questionnaires at the start of semester 1. One-third had moderate-severe depression, and almost half had moderate-severe anxiety, indicating a high prevalence of mental health difficulties. One-quarter were classified as having clinical insomnia, and a further 42% being on the threshold for clinical insomnia. According to the Pittsburgh Sleep Quality Index, 75% of students were bad sleepers, struggling most with sleep duration, falling asleep, sleep disturbances and daytime dysfunction. Two-thirds had moderate-severe fatigue, which could be explained by students disturbed and poor-quality sleep. Academic performance was negatively correlated with depression, anxiety, and several measures of sleep (efficiency, duration, latency, disturbances, quality, daytime dysfunction, fatigue and insomnia).

Conclusions: Undergraduate students struggle with mental health difficulties alongside disrupted and poor-quality sleep. Academic performance is worse in students with these struggles. The university should consider targeted sleep interventions to help improve students' mental health and academic performance.

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Jacobs, David

Searching for Thales and Euclid: Decolonizing the history and philosophy of science

20min + 10min

Science denial is on the rise globally. Part of the reason for this is that science, falsely portrayed as a solely European invention, alienates most of the world. I trace the historical development of science and show how its history and philosophy were shaped by Europe's colonial agenda.

Racial and gendered prejudices were converted into scientific concepts and the history of human civilization was repurposed to portray science as a European invention. In the process, it was ancient Greek scholars, like Thales and Euclid, who were credited with the invention of modern science. In support of this narrative, abstract theorizing became a defining characteristic of science and human experience became non-essential.

Biodiversity, including human diversity, was viewed as consisting of discrete non-overlapping types. As a consequence, humanity was divided into a hierarchy of 'races' and genders. This view of the world is divorced from reality and the reason why modern science struggles to explain humanity, intelligence and life.

Using a more realistic historical perspective, I argue that racial and gendered identities are not relevant to science or any other sphere of human endeavour. Instead, I advocate for realism that will make science logically consistent, inclusive, humane and relevant.

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Jappie, Dr Dalielah; Dr Roxanne Mohunlal; Claire Lawrence-Naidoo; and Laa-iqa Rylands

A Chemistry Perspective: Building practical skills from 1st-year to 3rd-year

20min + 10min

An outline of the Chemistry Department's approach to designing a practical curriculum that equips students with the skills needed for both academic research and the chemical industry will be presented. In the first year, students arrive with varying levels of preparation. This issue is addressed by prioritising the foundational laboratory techniques and upskilling the students. These include health and safety protocols, basic glassware handling, and performing simple reactions, providing a solid grounding in laboratory practice.

In the second year, these foundational skills are improved by introducing students to more advanced techniques that will be critical in their third year and beyond. For example, the analytical chemistry practicals include hands-on training with sophisticated instrumentation, where students are guided through experiments such as the quantification of active ingredients in commercial products. These exercises allow students to directly interact with analytical instruments, such as chromatographs, adjusting parameters to separate mixtures into individual compounds. This interactive, hands-on approach not only reinforces theoretical knowledge but also fosters confidence in instrument operation and data interpretation.

The ultimate objective is to ensure that practicals are meticulously aligned with the curriculum and timed to complement lecture topics, resulting in a cohesive and integrated learning experience. The improvement of the practical curriculum is always a focus point, making it more effective in building critical skills and preparing students for the demands of both academic research and industry positions.

Additionally, this presentation will address the growing integration of online learning in the practical components. While online platforms offer flexible learning opportunities and can enhance theoretical understanding, there are limitations in developing hands-on laboratory skills. Striking the right balance between virtual learning and physical lab experience is essential to ensuring that students graduate with the best possible training and skill set.

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Ie Roux, Kate

Languages and Literacies in and for (de)coloniality in STEM: Conceptual tools for collaborative, reflexive curriculum (re)design

20min + 10min

Languages and literacies are central for accessing, learning, communicating, and transforming knowledges. Hence, they have been and are put to work as the 'root' of global coloniality, (re)producing the slow violence of inclusion/exclusion through related linguistic, ontological, epistemic, and social injustices. Yet, languages and literacies are also pivotal to decoloniality, in (re)designing what knowledges, and ways of knowing, being and valuing have legitimacy in higher education towards justices. These are some of the ideas, from decolonial thought (e.g. Christie, Glissant, Mbembe, Ndlovu-Gatsheni) and its place-based use in languages and literacies scholarship in South Africa (e.g. Janks, Kell, Makoe, McKinney), that I bring to my collaborative curriculum development with STEM lecturers at the University of Cape Town.

Pervading our work are questions of what knowledges, for whom (student, society, the Earth; in South Africa, Africa, in a globally connected world), how it is taught, and using what languages and literacies. In this presentation I talk as someone raised, educated and working in spaces structured by an Anglonormative global coloniality. I share key concepts, grounded in the above-mentioned decolonial thought, that I bring to these collaborations. Using these conceptions as tools for thinking and talking about our curriculum design and pedagogies, we experience taking our practice as educators beyond reflection to a more systemic, critical, reflexive praxis.

Drawing on examples of my ongoing collaborations in mechanical engineering and mathematics, I describe and offer some explanations for both the possibilities and challenges of using languages and literacies as pivots for decoloniality.

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Maasdorp, Liani
Reina-Marie Loader, Bournemouth Univiersity

Impact production in Higher Education: Shaping future change makers through film education

20min + 10min

This paper is based on recently published research that considers impact production (using film and other forms of storytelling as the core of a social change strategy) as an important component of well-rounded film education programmes that seek to shape a new generation of socially and environmentally conscious film-makers.

Through desk research, interviews and a survey, we found that opportunities to learn about impact production at higher education institutions are limited and expensive, while open-access resources are numerous, but can be overwhelming for those new to the field. We also found that most existing resources were generated by and for the West. We interviewed practitioners who specialise in: (1) raising awareness about what impact production entails; (2) practically implementing impact production strategies; and (3) educating film-makers in how to design impact campaigns. We analysed two case studies from Majority World countries to demonstrate strengths and weaknesses of existing impact teaching and training.

The data gathered inform a theorisation of how impact production can be incorporated into formal educational practices worldwide. The research conceptualises what 'impact production film education' entails in a higher education context. This includes unpacking the interdisciplinary and practice-based nature of impact production. The intention is to shine a light on the pedagogical value of impact production for shaping a new generation of film-makers who are technically equipped to tell compelling stories, and intellectually committed to using film as a tool for change.

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Masehela, Mary

Laying the groundwork: Setting up a structured staff mentoring programme at a research intensive university

20min + 10min

This paper aims to share how a structured mentoring program for nGAP (New Generation of Academics Programme) and other early career staff was established at a research-intensive university. Nancy Fraser's normative framework on social justice served as a guiding lens in designing a program that would benefit both early career academics and academic support staff, promoting a socially just work environment and encouraging participatory parity.

The study addresses the question: "How was a structured mentoring program for early career staff established at a research-intensive university?" It claims that the adopted approach aims to bridge the gap in professional growth between early career academics and academic support personnel. The program brings together three groups of permanent employees at the institution, who have unequal access to material resources. The most privileged group, Group 1, consists of lecturers in the New Generation of Academics Programme (nGAP). The second group includes early career academic staff, while the third group comprises early career academic support personnel, often referred to as professional administrators, support and service (PASS).

Although the institution has historically valued mentoring, the process has never been formalized. Departments and faculties were left to address mentoring on their own, resulting in an organic but uneven process. This led to unintended disparities, with some staff receiving quality mentoring and others receiving little to none, which created unequal career progression opportunities for individuals who may have joined the institution at the same time.

To secure the buy-in of senior staff for the structured program, a phased build-up process was developed. The first phase focused on recruiting potential mentors, which was seen as the most challenging step. In the second phase, 2024 was designated as the "Year of Mentoring" for the nGAP, running concurrently with the third phase, which involved recruiting mentees outside the nGAP. The process culminated in a mentoring colloquium, where all participants gathered to discuss the value of structured mentoring.

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Moodley, Deshen
Michelle Kuttel; and Patrick Marais

Reshaping the Computer Science curriculum in the era of Artificial Intelligence

20min + 10min

As a result of the recent rapid developments in Artificial Intelligence, not only has the Computer Science curriculum undergone significant change recently, but curricula across a range of disciplines now require fundamental readjustment.

Our presentation will reflect on: the changes over the last five years in the Computer Science programme and enrolments in the Science Faculty as well as enrolments for joint offerings with Commerce and Engineering; the development and positioning of our new major in Artificial Intelligence commencing in 2025; and how Computer Science has responded to generative AI tools. We will also provide some thoughts, from a Computer Science perspective, on how AI will impact teaching and research in the future.

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Mutheiwana, Pertunia
Siddiqah George; and Nicola Mulder

Enhancing inclusivity in Bioinformatics Education through Multilingual Training Materials

20min + 10min

Accessibility to training is often one of the main challenges encountered in the field of bioinformatics and computational biology. A plethora of resources, ranging from documents to presentations and datasets, are generated as training materials during training initiatives. While these materials are invaluable to students, they are frequently generated in a hegemonic language which consequently places other language speakers at a disadvantage.

The H3ABioNet's blended learning approach that has been used, in the Computational Biology Division (CBIO) at the University of Cape Town (UCT), to deliver training over the past 12 years highlights the necessity of inclusivity in the context of training models alike. While the medium of instruction is primarily English, the model seeks to engage diverse groups of students across Africa. To foster an inclusive learning environment in Africa, it is essential to provide training materials in languages that resonate with the intended audience, including languages that are widely spoken on the continent such as Arabic and French.

This presentation outlines a comprehensive strategy that has been developed within CBIO for the transcription and translation of training materials from English to these target languages. The strategy leverages advanced Artificial Intelligence (AI) transcription and translation tools and it aims to facilitate the conversion of English lecture slides, lecture videos, and live session content into accessible formats for multilingual audiences; consequently increasing the reach and effectiveness of the training.

This presentation also seeks to contribute to the ongoing discourse around the role of language and technology in education and to provide actionable insights for enhancing the inclusivity and accessibility of training materials in rapidly evolving fields, such as bioinformatics and computational biology. Ultimately, the goal is to create a more equitable educational landscape that empowers diverse learners and fosters a global community of practice.

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Noveld, Tony
Jaisubash Jayakumar

Redefining curriculum and equity: Near peer tutoring as a pathway to social justice in medical education

20min + 10min

Globally, medical students encounter a variety of academic challenges due to the demanding and complex nature of the field. It is crucial for universities and educators to provide effective academic support to help students navigate these challenges. At the UCT Faculty of Health Sciences (FHS), the Near Peer Tutoring Program was introduced in the Department of Pathology to support students facing academic difficulties in the MBChB Year 3 Integrated Health Systems (IHS) course.

In this program, five tutors from the 3rd-year MBChB class were selected and paired with students identified as being at academic risk by FHS. These tutors focused on addressing specific problem areas highlighted by the tutees and provided feedback to the course convenors on their progress. Surveys conducted at the end of the semester revealed that the program positively impacted both academic performance and the overall experience of both tutors and tutees.

Tutees reported significant benefits, including enhanced understanding of the material and improved academic performance. They also noted feeling more supported and connected within the class. This illustrates how the program not only addresses academic challenges but also contributes to social justice by bridging gaps in student support.

The Near Peer Tutoring Program at FHS, UCT has proven that peer-based tutoring can effectively complement traditional faculty-led academic support. By utilizing the strengths and insights of academically strong students, the program addresses immediate academic needs and fosters a supportive learning environment. This initiative underscores the potential of peer support to enhance educational outcomes. The success of this program highlights the transformative potential of student-led initiatives in educational settings. It promotes a more inclusive and responsive curriculum and suggests that similar approaches could be beneficial in other educational contexts. Future iterations of the program could explore additional methods for tutor training and support to further enhance its effectiveness.

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Park-Ross, Jo
Prof Romy Parker

Understanding pain: Lessons from writing a person-centred, collaborative and contextual open-access textbook

20min + 10min

“Understanding Pain: Unravelling the Physiology, Assessment, and Management of Pain through South African Stories” is an open-access comprehensive textbook published collaboratively in 2024 by an interdisciplinary group of health professionals and persons with a lived experience of pain. The book integrates essential evidence-based knowledge of pain with contextual and poignant narratives from South Africans who have experienced pain firsthand. The editors share the experiences and lessons learnt of a two-year project completing the book, and share tips for educators to create similar resources.

Understanding Pain places the perspective of the person who has suffered pain at its core, enriching the exploration of pain physiology, assessment techniques, and therapeutic strategies through case studies in primary healthcare, chronic pain, emergency and perioperative medicine. By intertwining scientific rigor with authentic South African stories, the book offers a unique perspective that enhances understanding and empathy in pain management. Essential reading for healthcare professionals and students—including doctors, nurses, physiotherapists, occupational therapists, psychologists, social workers, and paramedics—the text illuminates the complex landscape of pain, fostering compassionate and effective care tailored to diverse African cultural and clinical contexts. Understanding Pain is written in accessible language with an engaging format and vibrant age design and illustrations– this deliberate strategy aims to engage the reader.

The creation of decolonised and relevant learning resources, including open textbooks, is both vital for healthcare workers who are trained with contextually relevant materials and challenging to create with limited resources. The editors reflect on the experience of writing the book, budgeting and planning, overcoming discomfort experienced by authors in the inclusion of patient voices and writing in accessible language, ethical collaboration with patients as authors, collaboration with designers and vital aspects to consider in a dissemination plan.

Understanding Pain aims to improve the understanding of physiology, assessment and treatment of pain through case studies centred around the voice of the person with the lived experience of pain married with an interdisciplinary voice describing the best evidence for

The editors present a roadmap and lessons learnt to empower academics and clinicians to create open access educational resources for African healthcare providers.

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Pillay, Sayuran
Sayuran Pillay; Danika Govender; and Dina-Ruth Lulua

Establishing a progressively engaged student body - The Student Curriculum Lekgotla

20min + 10min

In response to the growing need for socially responsive curriculum reform, the University of Cape Town (UCT) established the Student Curriculum Lekgotla (SCL). This student-driven body aims to reimagine medical education by fostering inclusive and dynamic transformations that reflect the diverse realities of South African society. The SCL goes beyond traditional consultation models, embodying Paulo Freire's (1970) principles of student agency and dialogue in shaping educational experiences.

The Lekgotla's core objective is to disrupt entrenched systems of knowledge production that historically marginalized voices, encouraging active student participation in curriculum co-creation. Studies by Bovill et al. (2011) and Healey, Flint, and Harrington (2014) underscore the value of such partnerships, which enhance learning environments and cultivate more equitable educational practices.

Cultural relevance is central to the SCL, as its name draws from Southern African traditions of inclusive decision-making spaces. Inspired by these indigenous governance structures, the Lekgotla emphasizes equality, shared responsibility, and collective wisdom in its approach to curriculum transformation.

Beyond short-term reform efforts, the SCL is a permanent structure within UCT's Faculty of Health Sciences, ensuring continuous student engagement and long-term curriculum adaptability. Operating alongside faculty governance bodies, the Lekgotla offers pragmatic, actionable solutions, prioritizing innovation, equity, and social responsiveness in health education. Through selective membership, the Lekgotla ensures that participants possess both leadership and operational competence, creating a body of student leaders committed to driving meaningful change.

The Lekgotla's formation reflects the broader significance of student involvement in educational reform—positioning students not as passive recipients but as active, critical partners in creating a just, equitable, and socially responsive curriculum.

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Reddy, Esai
Tefo Mosienyane; Joe-dean Roberts; and Daniela Gachago

Designing for socially just partnerships: Student-staff collaborations at UCT

20min + 10min

The South African student protests of 2015-2017 highlighted a demand for transformation, emphasizing the need for transformative and collaborative curriculum development (Morreira et al, 2022). In an effort to respond to these needs we have established a student-staff partnership project, Designing for Social Justice Partnerships. The project involves three diverse South African higher education institutions in the Western Cape – CPUT, UWC & UCT– each with designated student-staff teams. These teams are tasked with redesigning various aspects of academic life, including formal and informal teaching and learning, research, administration, student support, and extracurricular activities such as student leadership programs. The project draws inspiration from recent literature on student-staff engagement with a particular focus on equity and social justice (De Bie, 2022).

This presentation panel opens a discussion on the process of forming and maintaining student-staff partnerships in the UCT context. **The following projects will be part of the discussion:**

1. **Building Care initiative:** This project is about building care and compassion and cultivating a different way of being within the UCT planning programme in the School of Architecture, Planning and Geomatics.

2. **Bridging the Gap:** Where teaching meets learning in undergraduate preclinical medical education: This project aims to enhance the quality of teaching and learning in the MBChB program through a co-designed pedagogical framework.

3. **Student Leadership Starter Pack:** This is a codesigned intervention to assist student leaders with the challenges of being both good leaders and good students.

4. **Towards guidelines for AI use – Facilitating co-design process for SSP:** This project team aims to facilitate discussions between students and staff on the gains and losses of using generative AI within a given context. The goal is to adopt a co-creative approach to developing guidelines and politics for appropriate and ethical AI use within a course.

5. **DOT4D fellowship programme:** The fellowship programme will allow students to learn more about and participate in open education and open textbook development that addressse social justice imperatives in higher education and promotes inclusivity, equity and student voice.

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6. **Perceptions of community engagement:** This project explores how diversity impacts the sense of belonging and wellness among first-year undergraduate students. It aims to provide a framework for the university to enhance support systems for these students.

The panellists will reflect on their partnership journey so far, including participation in the DSJP online short course (7th April - 22nd May 2024) which provided the foundation for partnership, the co-design and co-creation of their project, and current experiences with running their partnership projects. Emerging themes cover the importance of emotional grounding, the ethics of partnerships across strong power differentials and socially just frameworks for partnership.

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Reddy, Mishka
Diann Selman; Janet Small; Lara Karassellos;
Lauren Butler; Lovejoy Marozhe; and Nadine Hamman

Exploring and enabling Accessible Blended Learning for Equity

20min + 10min

Join CILT learning designers to find out how to apply the Enabling Accessible Blended Learning for Equity (ENABLE) Framework, a homegrown approach to embed equity into educational design processes. It foregrounds the principles of Universal Design for Learning (UDL) in curriculum and learning design for in-person and online learning.

Developed from a review of literature and blended learning good practices at UCT, the framework has seven elements that include both conceptual framing and practical strategies:

1. Deliberative course planning;
2. Student-centred learning;
3. Responsive teaching and online engagement design;
4. Flexible assessment and feedback;
5. Expansive evaluation and reflection; and
6. Accessible course materials and technologies; and 6) Unambiguous communication.

Using examples from our UCT context, we'll illustrate how lecturers are implementing some of these strategies to tackle challenges in their classes, and explore what could work for you.

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Ronchetti, Chiara

Teaching and learning languages within the framework of the Universal Design for Learning: The need to “reflect”

20min + 10min

In recent years, the terms ‘accessibility’ and ‘inclusion’ have become increasingly important in the field of education and language teaching. The application of guidelines such as those from the Universal Design for Learning (UDL) helps to remove barriers to learning difficulties in the language classroom by designing inclusive and glocal educational interventions, based on the linguistic and cognitive profiles of the students in our courses. To do that, special attention should be given to the reflective practice (Dewey, 1933; Schön, 1983; Wallace, 1991; Farrell, 2022), including its emotional affective aspects.

The practice of reflection is a primary tool for the creation of the content to be used in class, and secondly to observe the interaction between the learners and the new inputs that are gradually experimented. It is therefore an educational device oriented to future action: an action that is new, effective, justified, and motivating.

Guaranteeing inclusion and accessibility can, in addition to preventing loss of motivation, stimulate greater interest in the new language and, in the long term, produce lasting transformations for the individuals, the community, and their society.

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Shaw, Corrinne; Malebogo Ngoepe; Kate le Roux and Brandon Collier-Reed

Languages and literacies towards (re)visioning curriculum: A case of collaborative, iterative change in first-year mechanical engineering

20min + 10min

In recent decades, undergraduate professional engineering degree programmes have expanded from a focus on technical and practical engineering content to include issues of sustainability, ethics, teamwork, professional identity, and 'communication'. At UCT, the first-year course Introduction to Mechanical Engineering (MEC1005W) integrates all these areas, each of which is then variously developed in senior courses of the programme. In our eight-year collaboration, to which we each bring particular disciplinary, education, and language expertise, we recognise that the meaning of and professional education for these named areas are not neutral. And since languages and literacies are central to accessing, learning, communicating and transforming knowledges, they are pivotal in (re)producing practices of inclusion/exclusion, but also (re)visioning what knowledges, identities and values have legitimacy in professional engineering education.

Centring languages and literacies, we pursue an iterative curriculum change process in which we navigate tensions between working with dominant discourses for socialisation, and thinking critically about what is seen as legitimate for contemporary local and global conditions. This involves working intensively on certain aspects of the MEC1005W curriculum, viewed broadly to include knowledge, module design, learning resources and activities, assessment strategy, pedagogy, and tutor support. Initially, we focused on two projects (human-centred engineering design; energy and sustainability), an ethics module, a technical content module, and most recently a sustainability module. Together we work between the literature, our research, our classroom practice, as well as engaging with senior students in the programme, and our colleagues in the Multilingualism Education Project and the Centre for Innovation in Teaching and Learning, to develop conceptual tools to utilise in our reflexive practice.

In this presentation we share our conceptual tools and offer the reflexive thinking of our four-member team on the recently completed, first implementation of the sustainability module, enabled by a UCT Curriculum Transformation Grant.

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Shock, Jonathan; Ruach Slayen; le Roux, Kate and Mashudu Mokhithi

Innovating relevant curriculum within the undergraduate ecosystem: A collaborative journey in mathematics

20min + 10min

Transitions from school into and through undergraduate mathematics requires that students navigate similarities and differences that are simultaneously epistemic, ontological, social, linguistic, and pedagogical, with implications for a student's journey as a science student. This demands of us the design and use of relevant, innovative and agile curriculum practices, and an active, growing community of lecturers and tutors to sustain and develop these practices. Prompted by the 2019 UCT Courses Impeding Graduation Project, in 2020 we embarked on a multi-level curriculum project that attends to micro-level classroom pedagogy and learning resources, located in an ecosystem of science degree programme structures, course models, student advising, and data analytics.

The central organising principle of this innovation is mathematics thinking practices relevant for learning and using previously learned, or yet to be learned mathematical knowledge in a course. These practices include metacognition (e.g. sitting with discomfort, risk-taking, posing questions, accountability); literacies (e.g. reading, writing, drawing, using manual and electronic technologies); mathematical discourse practices such as proving, defining, and problem-solving; and working individually and collaboratively. With faculty support, and University Capacity Development Grant funding, in 2024 we have added to our journey: lecturer and tutor capacity development, and learning materials development aimed at flexibly infusing and adapting, as relevant, the approach in other formal mathematics learning spaces (e.g. tutorials and lectures) and courses.

In this presentation, we share with colleagues the iterative, reflexive, multi-person, multi-disciplinary journey that we have taken, discussing the enablements and constraints, and lessons learned.

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Taylor, Dale
Mohammed Kajee; and Naseera Moosa

Mentor perspectives on the curriculum of the BSc first-year mentoring programme

20min + 10min

We've grappled this year with what to include in the curriculum of our mentoring programme, in which a senior student meets weekly with a group of first-year students, to discuss the topic of the week. In 2024, the material has been chapters of the openly-licensed digital book (Science is Tough (But So Are You!)) that we have been developing over the past eighteen months. The challenge is not only WHAT to include in the curriculum but also WHEN a topic is most pertinent. In 2024, we've provided chapters with the following titles, in this order: Next-level time management for succeeding at UCT; How to succeed in your first BSc tests; Culture shock at UCT; Metacognition - your key to success; The shape of your well-being; So, how does your brain work?; Acing exam season; Make the most of your vac; Discrimination and science; Science and decolonisation; Neurodiversity; and Your future in science.

In this presentation, we first flip through the 'Science and decolonisation' chapter, in order to convey the look and feel of the book, and the elements used, such as short pieces written by students and specialists. We then explore our mentors' perspectives on the mentoring curriculum. From survey results, we share which topics they saw as essential; which topics they found uncomfortable; and which topics the mentees resonated with. Discussions with the mentors surfaced the tension between content coverage and sufficient time to discuss aspects of the content in depth, as well as the role of the mentor in mediating the content, and the need for them to be flexible and adaptable in their mentoring discussions.

We are deeply grateful to CHED's DOT4D initiative for their assistance with this project, funded by a University Capacity Development Grant. The chapters are available at: https://zivahub.uct.ac.za/projects/Science_is_Tough_But_So_Are_You_/198274.

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Thomson, David
Rene Krause; and Ivan Joubert

Integrating Organ and Tissue Donation Education into curriculums In South Africa

20min + 10min

Please join us for a panel discussion on “Education around Organ and Tissue Donation in South Africa”.

Historically organ donation in South Africa has been taught by transplant professionals and not holistically as part of end of life care.

This has led to structural imbalances in medical education driven by socioeconomic disparities whereby only well resourced transplant centres (and the universities linked to them) have offered education related to donation.

The level of counselling in end of life care needed to get to the point of offering donation is a marker of end of life support to our patients and families that translates into better family engagements at the end of life. We should relegate the health care system cost benefits of transplantation to being a secondary downstream benefit.

It is often claimed we are hindered by our legislation, the need for a better registry, or perceived cultural resistance to donation. All these arguments remove focus from the fact that you will always be supporting a grieving family in a period of acute loss.

We need to do better in our curriculums in empowering our nurses and doctors and allied health professionals to work in this space. It is our educational challenge to address this.

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Torrao, Maya-Rose
Tafadzwa Dzingwe; and Yonela Mlambo

Decolonising academic reading and writing: Centering student experience over value on an academic literacy course

20min + 10min

We write as Blog Respondents, in the role of providing written feedback to students in the ASL1203S Writing Across Borders course located in the African Studies and Linguistics department at the University of Cape Town (UCT). Guided by Dr Moeain Arend and Dr Aditi Hunma's development of this innovative course which encourages students to engage with ideas of identity and the crossing of borders in order to strengthen their critical reading and writing, we illuminate classroom innovation by way of our experiences throughout the course as Blog Respondents.

Inspired by bell hooks' notion of the classroom as a "location of possibility," as prompted by this conference, we focus on Humanities writing curriculum design and implementation through our experiences of responding to student blogs.

Assumptions exist around how knowledge is produced in academic classroom spaces, and many students wanting to deepen their critical reading and writing may become alienated through the embedded colonial processes that still linger within tertiary institutions. These assumptions around critical reading and writing in the academic space can be destabilised through practices that refuse to distance students from their own contexts, their identity formation, and their value as co-producers of knowledge. The use of identity as a theme running through the course allows a 'closeness' to the students' own writing that humanises the process and links to decolonial ideas around autoethnography. In addition, not ascribing marks for student blogs is a decolonial move that centres experience over 'value' dictated by a number. This teaching and evaluation technique is unorthodox because it is not following the classic grading criteria geared towards "rewarding" students who are able to regurgitate what the teacher gave them and what was exclusively preserved for the student through what Foucault categorised as panopticon education. Focucault categorising modern education as panopticon utilised the phenomenon of class and grades that subject students/learners to not actual learning, however, nudging them to impress the teacher that they can vividly remember what their educator had transmitted to them. However, ASL1203S is concerned with transcending a world as a place of experience to school as the world is treated as an object of thought in an intersectional manner through having relatable case studies for all students across socio-economic backgrounds, fundamental to students' phenomenology.

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Our experiences are diverse as blog respondents, however, we can pinpoint several ways in which the innovative design of the Writing Across Borders curriculum has subverted and questioned colonial ways of knowledge production:

- Use of texts that foreground identity, specifically in African contexts
- Allocating detailed and encouraging feedback to students for blogs, and not assigning number percentages for this section of the course
- Engaging students in conversations around AI in a way that rejects a punitive approach.

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Wilks, Tammy
Shannon Morreira; Shari Daya; and Nicole Isaacs

Umthombo Centre for Student Success: Institutional journeys in education development at UCT

20min + 10min

The Rhodes Must Fall and Fees Must Fall Movements compelled different stakeholders in South African Higher Education to confront important epistemic questions about what a decolonial curriculum might look like, who it should serve, and how it might best facilitate student success. In the Humanities Faculty at UCT, this moment also prompted a review of the Extended Degree Programme. That review, several years later, resulted in the merger of the Humanities EDU and the Humanities Student Support and Engagement Unit. Named the Umthombo Centre for Student Success, the merged unit leads teaching and learning initiatives, curriculum design and capacity development in the Faculty of Humanities, and provides psycho-social support and student engagement activities.

As we navigate our new institutional identity and function, we also, necessarily, explore what student success is or could look like in the context of a decolonised, Africa-centred curriculum and campus. In this presentation, we share experiences of institutional change from four different perspectives within Umthombo.

Our work includes teaching, tutor training, strategic management, curriculum change, postgraduate support and more. Through these diverse aspects of education development, we offer an emerging, multi-faceted understanding of what student success could look like in the UCT context.

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Masuku, Bianca, Michelle Willmers and Mohammed Kajee

Open textbooks and the empowerment of students as partners in curriculum change

20min + 10min

Student co-creation has been lauded as an important practice in higher education learning and teaching (Cook-Sather, 2014). Within it, students are invited into a broad range of activities within their learning environments in which they are presented with opportunities to participate in the development and creation of resources and curriculum.

Work done with open textbook creators at UCT since 2018 has enabled the Digital Open Textbooks for Development (DOT4D) initiative to collaboratively explore and articulate socially just strategies for including students in the co-creation of open textbooks that address curriculum change at UCT.

This presentation will highlight preliminary research findings from interviews with UCT students who have participated in open textbook development activities designed to support curriculum change. It will also share insights gained from The Science is Tough (But So Are You!) open textbook initiative in the Science Faculty at UCT, which aims to bring student voices and lived experiences into a textbook designed to support curriculum change in the faculty. It will also highlight student perspectives on the role of open textbooks in addressing power dynamics and curriculum change.

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Witbooi, Simthandile

Critically reviewing a 21st century South African clinical psychology curriculum: Looking back to move forward

20min + 10min

Globally, mental illness is increasingly a leading cause of disease burden and is most pervasive in low and middle-income countries (LMICs). However, individualistic, Euro-American, and biomedical mental health approaches cannot be solely and uncritically utilised in LMICs without engaging the socioeconomic, cultural, and historical contexts integral to an understanding of the causes and development of mental illness – as well as its meaningful and sustainable intervention.

The "relevance debate" in South Africa questions psychology's equitable social, cultural, and practical responsiveness to the population's mental health needs, raising critical questions about what role the profession can play in addressing these human difficulties and what the clinical psychology training curriculum should entail to assist in doing so. The training curriculum of clinical psychologists at higher education institutions acts as a potential vehicle through which the profession can construct, reproduce, express, and transform itself, providing an opportunity to stimulate an increasingly equitable and responsive clinical psychology practice in South Africa. This instrumental case study includes a content analysis of teaching summaries from 2001 to 2023 and qualitative interviews with directors and lecturers of the UCT clinical psychology training programme since 2001 to critically review the evolution of a South African clinical training curriculum over the 21st century thus far. In doing so, the study provides a detailed excavation of the curriculum content and processes over this period – including reflections on a hidden and null curriculum – and the factors and rationales that have driven and influenced 21st-century developments in the training of clinical psychologists.

The study takes these as departure points to explore the hindrances and potentialities of a transforming clinical psychology curriculum increasingly responsive to the South African population moving forward.

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Begg, Kerrin
Lakshini McNamee; Kirsten Reichmuth;
and Philip Dambisya

Curriculum transformation in the Faculty of Health Sciences – shifting organisational culture

45 min

Compelling reasons exist for curriculum change in health professions education at the University of Cape Town (UCT), nationally, and internationally (Frenk et al, 2010; ASSAf, 2018; CCWG, 2018). Socially responsive curricula are required to generate socially accountable graduates to meet the health needs of our country and advocate for a health system that addresses the burden of disease. Given that curriculum change has not been undertaken at the Faculty of Health Sciences at UCT for decades, we recognised a need to develop educational leaders who are better equipped to plan and deliver curriculum revision. Leadership is a key element in processes of envisioning, developing and implementing the change. As part of the faculty's curriculum transformation process, we developed a UCDP-funded Educational Leadership Fellowship (ELF) programme.

Faculty efforts have ensured alignment to UCT Vision 2030, Senate Principles for curriculum change and Faculty priorities developed during consultations, as well as coherence with national health and education policies.

This Panel discussion reflects on the contextual factors, the process of consultation and faculty development towards a landscape receptive for organisational culture change that would enable the co-creation of transformed curricula across all health professions programmes through collaborative and engaged educational leadership.

We discuss interventions at macro-, meso- and micro-levels in the faculty, with specific reference to faculty-wide consultation processes, design of a framework to guide curriculum renewal efforts, and the ELF programme. ELF Fellows reflect on their experiences of being capacitated to conceptualize and effect curriculum change in a collaborative and interprofessional manner. We share lessons on the change management process, including tensions and dilemmas encountered in shifting organisational culture.

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Goodman, Suki
Panel Members: The HoDs of all Faculty of Commerce departments OR their representatives

Taking it off the page: Reflections on departmental-level experiences of a faculty-wide curriculum review process

45 min

The HoDs will be responding to a series of questions unpacking their departmental level experiences of implementing a faculty-wide curriculum review process.

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Goodman, Suki
Prof Ulrike Rivett; Jaamia Galant; Goolam Modack; Kende Kefale; and Kathy Luckett
Discussant: Ursula Hoadley

The balancing act – Reflection on change management in a faculty wide curriculum review

45 min

This panel discussion will include reflections by the project team on the design and implementation of the ongoing multi-year curriculum review, credit right-sizing and student success project in the Faculty of Commerce.

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Padayachee, Pragashni; Shanali Govender & Hella Ilongar

A tiered framework: Evolving as a tutor, a learner and beyond

45 min

In this session, we will engage in a collaborative re-view of a proposal for a new tutor training pro-gramme at the University of Cape Town (UCT) This interactive session will focus on examining the role of tutor development in addressing key challenges in South African higher education, including the achievement gap and the need for more effective peer support systems.

Participants will explore the proposed programme of study, which is designed to equip tutors with the necessary theoretical knowledge and practical skills to support diverse student populations The pro-gramme aims to foster academic, quantitative, and digital literacies among students, while also ad-dressing tutors' professional development needs through a well-structured training approach

During the session, attendees will reflect on the fol-lowing:
- What models of tutoring exist at UCT/ in your context?
- What is the role of tutors in the contempo-rary context? Do class sizes, resourcing, a fo-cus on social justice etc impact tutoring and the tutor role?
- The three-tier tutor development curriculum
- Tier 1

Through these discussions, we hope to collectively explore the potential of this programme to better support tutors and students, ensuring that tutoring continues to play a key role in delivering high-quality education at UCT

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Budree, Adheesh

AI Prompt Engineering in the classroom

55 min

We are delighted to invite you to a special workshop at the upcoming University of Cape Town (UCT) Teaching and Learning Conference focusing on innovative approaches to education, and we are excited to offer a dedicated session on Teaching AI Prompt Engineering in the Classroom.

As artificial intelligence (AI) becomes increasingly integrated into educational practices, understanding how to teach AI prompt engineering is vital for preparing the next generation of learners. This workshop will provide you with the knowledge and tools necessary to effectively teach AI prompt engineering, enabling your students to engage critically and creatively with AI technologies.

Key Takeaways:

- Introduction to AI Prompt Engineering: Gain a foundational understanding of AI prompt engineering and its significance in educational contexts.
- Curriculum Integration: Learn practical strategies for incorporating AI prompt engineering into your curriculum, tailored to various subjects and levels of expertise.
- Interactive Teaching Methods: Explore dynamic teaching approaches and hands-on activities that make learning AI prompt engineering accessible and engaging for students.
- Ethical and Pedagogical Considerations: Discuss the ethical challenges and pedagogical implications of teaching AI in a classroom setting.

This workshop is designed for educators, academics, and curriculum developers interested in integrating AI prompt engineering into their teaching practices. Whether you are a seasoned AI enthusiast or new to the concept, this session will provide valuable insights and practical applications.

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Marquard, Stephen
Riashna Sithaldeen; Kende Kefale; and Deepti Charitar

Exploring the UCT student experience through insights from the South African Survey of Student Engagement (SASSE)

55 min

In 2023, UCT participated in the South African Survey of Student Engagement (SASSE) which gathers feedback from students about their involvement in different types of teaching and learning practices, co-curricular activities, experience of campus culture and life, the quality of interaction with other people on campus, how supported and engaged they feel within the UCT environment and what change would most improve their educational experience at the institution. A total of 2004 unique students completed the SASSE survey.

This workshop will empower you to gain insights into the student experience through a guided tour and discussion of the SASSE survey report and the interactive UCT SASSE Dashboard which allows you to explore the SASSE survey results in detail and analyze and compare results at a granular level for your context (bring a laptop or tablet).

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The UCT Open Textbook Award

The UCT Open Textbook Award is an initiative of the Deputy Vice-Chancellor Teaching and Learning in collaboration with the Centre for Innovation in Learning and Teaching. The award aims to support innovative open education activity that addresses challenges related to the cost and accessibility of teaching and learning materials, as well as curriculum change and multilingualism at UCT.

Open textbooks are freely available, openly licensed educational resources with affordances for dynamic, collaborative approaches to textbook authorship, quality assurance and publishing. In addition to the cost-saving aspect, open textbooks provide a means through which to engage students as co-creators and share teaching and learning materials beyond the institution.

The UCT Open Textbook Award is positioned with an explicit social justice agenda and recognises activities that support the university's transformation efforts. In line with this approach, the award recognises open textbook development efforts which address opportunities for inclusion of student voice.

The 2024 UCT Open Textbook Award

The winner of the 2024 UCT Open Textbook Award is: Disability Studies in Inclusive Education. edited by Judith McKenzie, Kofi Nseibo, Chantal Samuels & Amani Karisa, from the Department of Health and Rehabilitation Sciences in the Faculty of Health Sciences.

This work focuses on the needs of learners with disabilities and helps educate and upskill teachers with expert recommendations and practical solutions on how to include learners with disabilities in their classrooms. Its design exemplifies principles of Universal Design for Learning in terms of accessibility and its central theme of student support through building community and inclusivity embody the core principles of UCT's Vision 2030.

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Celebrating 30 years of the UCT Writing Centre

Arlene Archer

The Writing Centre was formed in 1994 in the Academic Development Programme under the leadership of Suellen Shay and Rob Moore. In 1999, the current coordinator Arlene Archer took over the helms. From its humble beginnings in the Robert Leslie building, the Centre has moved four times across campus, to its current location on Level 5 of the Steve Biko Building. For the past 30 years, the Writing Centre has provided a service to undergraduate and postgraduate students, as well as staff, through individual consultations and workshops on academic writing. Based on trends and patterns observed in these spaces, curriculum needs are identified and fed back to departments, frequently leading to further language development work based in disciplines and curricula. The Centre thus contributes to research into the nature of academic writing and assists academic staff to teach writing within the discipline. In this way, a dynamic interaction is set up between teaching and reflection, which we also use in the training of the tutors.

Over the last 30 years, the Writing Centre has grown from strength to strength, servicing more and more students each year. We see over 2000 students in one-on-one consultations and reach more than 5000 students in workshops. This year we ran 78 workshops across levels and faculties. The steady increase in numbers over the years can be partly attributed to the offering of flexible consultations (online/face-face), extended consultant hours during periods of demand, staying open throughout vacation periods, working closely with departments in embedding workshops into the curriculum, as well as strengthening our postgraduate support through the Office of Postgraduate Studies (OPGS) workshop series and Graduate School of Business (GSB) satellite campus. We have developed a substantial number of online resources and videos for students which cover various aspects of the writing process, from unpacking the question to issues of style and formatting. See https://uctthewritingcentr.wixsite.com/mysite.

The Writing Centre is uniquely placed to inform faculty-based work through research-led practice, contributing to, for example, plagiarism policy, readmissions, departmental reviews, research seminars. Because of its successes, the Centre has attracted external funding for the duration of our existence. One of the amazing spin-offs of the Centre has been the large number of young academics we have nurtured and launched into academic careers, highly skilled in the writing practices of their disciplines. The Writing Centre is a unique space which suspends daily life in order to engage with ideas, prompt new ways of seeing and provide opportunities for reflection. An underlying premise of our work is that a critical way of being develops through discussion. This is the heart of the academic project – engaging in ideas, argument and debate. We believe that all students can improve their writing, whether they are highly experienced writers or complete novices. The Centre plays an important role in helping students navigate academic discourse and the conventions of the different disciplinary discourses. We believe in working with what students bring and building student confidence in terms of writer identity and 'voice'. The Writing Centre thus plays a central role in enabling access to academia as well as contributing to student throughput.

Location: Room 5.19, Level 5, Steve Biko building, Upper Campus
E-mail: writingcentre.@uct.ac.za
Online Booking System: https://uct.mywconline.com/

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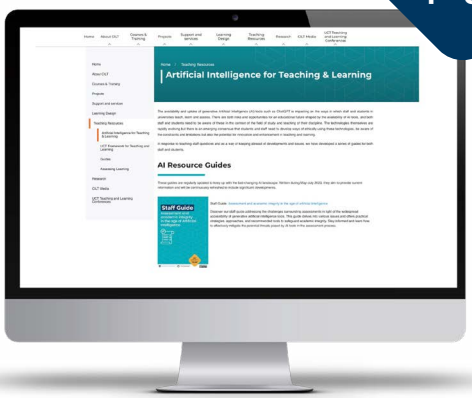
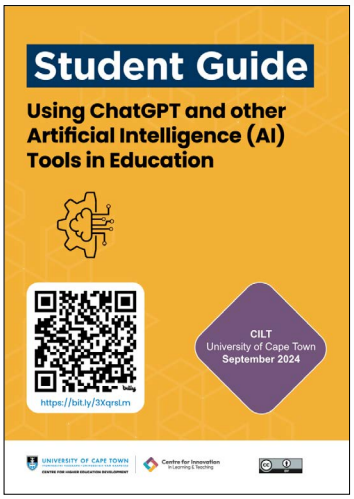
RESOURCES ON GENERATIVE AI IN TEACHING, LEARNING AND ASSESSMENT

Having insights into how Artificial Intelligence (AI) impacts activities and practices at universities has become essential. The Centre for Innovation in Learning and Teaching (CILT) has developed resource guides and hosted discussions on the implications of AI for teaching, learning, and assessment.

Visit our website page

The guides draw on experiences globally covering the ethical use, risks, and opportunities for generative in a university context. Our series of panel discussions, accessible on our YouTube channel, explore experiences and perspectives of the UCT community. We encourage everyone to investigate how AI tools may have an impact. The implications, limitations, and challenges are being widely debated, and we invite contributions to shape how the university responds.





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