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**ASSESSMENT MATTERS**

Re-imagining assessment culture and practices  
for a transformative student experience

**24–26 October 2022**

HOST:  
Division for Learning and Teaching Enhancement

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**ASSESSERING TEL**

Assesseringskultuur en -praktyke in heroënskou  
vir 'n transformerende studente-ervaring

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CASHEER  
Afdeling vir Leer- en Onderrigverryking



## SoTL Conference 2022 Abstract Book

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**Title:** 'Abstract', 'Concrete' and the Purpose of Education

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Southey, P

**Keywords:** abstract, concrete, knowledge in pieces

**Abstract:**

'Abstract' and 'concrete' are widely-used (some might say foundational) terms in educational discourse. A vast literature makes use of the abstract/concrete dichotomy to justify the merits of particular pedagogical approaches; some authors emphasise the importance of the abstract (Kaminski et al., 2008), some the importance of the concrete (Lakoff & Núñez, 2000), and some the importance of using both in specific progression (Maton, 2013). My research question pertains to the coherence and usefulness of this dichotomy. I conducted a close reading of several research papers paying particular attention to the ways in which the authors use the terms 'abstract' and 'concrete'. In this presentation, I will argue that these terms have become too ambiguous to be very useful for educational research. In particular, I will argue that there are (at least) three distinct ideas underlying the abstract/concrete distinction: (i) tangibility; (ii) familiarity; and (iii) perceptual richness. These ideas will be introduced in their separate research contexts and shown to have different underlying theoretical assumptions as well as different educational purposes. When authors uncritically cite one another's work they conflate these differences and create conceptual confusion. Finally, I will suggest that a "knowledge in pieces" framework (diSessa, 1993) provides more subtle and productive analytic tools that can replace the notions of "abstract" and "concrete", thus clarifying one possible perspective on the purpose of education.

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**Title:** "A Bootcamp for the Real World": Alumni Evaluations of Stellenbosch Journalism

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Jordaan, M

**Keywords:** programme evaluation, alumni, world of work, focus groups, journalism education

**Abstract:**

The purpose of universities is increasingly “under close scrutiny” (Swartz et al., 2019:568) – emphasising the need for evidence-based discussions on the value of higher education in society. One way of gauging the relevance of university-based learning, is to gather feedback from alumni (e.g. Johnson et al., 2014; Saunders-Smiths & De Graaff, 2012). As is the case with student evaluations of teaching, most alumni studies rely on large-scale surveys. While meaningful, such surveys do not provide for a more nuanced understanding of how graduates feel about what they learned in relation to their experiences in the so-called real world. I would argue, along with Bourne and Winstone (2021:352), that focus groups provide alumni with “opportunities to express their perspectives in a more authentic and dialogic way”.

To gather such ‘authentic’ data, this study used focus groups to explore how alumni of the Journalism honours programme at Stellenbosch University describe the alignment between their learning and the perceived requirements of the world of work. Preparing graduates for the ever-changing media ecosystem is especially challenging, necessitating regular efforts to benchmark curricula against industry expectations.

I conducted seven focus groups with altogether 38 students who completed the course between 2016 and 2020 – a response rate of around 30% since only 125 students completed this strict selection course during this period.

The findings of this study reveal a generally positive alignment between alumni’s learning experiences and industry expectations – despite many of these alumni not working as so-called professional journalists. Participant 21 called the honours programme a “bootcamp for the real world”, illustrating a consensus that graduates are prepared to be workplace-ready – with skills that transcend disciplinary boundaries. Or in the words of Participant 16, “That entire experience just gave me this resilience that I feel like I can handle the world.”

This study confirms the value of alumni research – specifically focus groups – for curriculum evaluation. Such alumni research arguably provides one solution to the “complex” task educational researchers face of researching the relationship “between work and learning” given the “conceptual ambiguity and dynamics of the external environment of universities” (Jung, 2022:92).

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**Title:** A Conceptual Map for Supervising the MEd Thesis’ Literature Review Chapter: A Student’s Perspective

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Feldman, J; Barends, Z

**Keywords:** postgraduate supervision, novice supervisors, literature review, master’s thesis work, conceptual map for research and writing, action research

**Abstract:**

This paper discusses the data from a research project that was conceptualised by two novice postgraduate supervisors to provide support to master's students in the writing of their MEd thesis' literature review chapter.

A preliminary literature search shows that while many publications discuss the literature review chapter of a thesis, offering support and advice for both the supervisor and student (Boote & Beile, 2005) not many publications discuss a developmental approach that breaks down the writing of the chapter process into phases. Thus, for our particular focus, that is, the focus of novice supervisors supervising master's students, a developmental and phased stance on the writing of the literature review chapter, has not been well-researched or discussed in the literature.

To facilitate the process, we designed a conceptual map illustrating a scaffolded, three-phased approach to structure the writing of the literature review chapter. The first phase involved the student identifying the key concepts. The second phase invited the student to research and develop three to four essays on each concept. These were submitted and discussed with the supervisor, enabling the student to develop both the research (finding the relevant articles) and writing (synthesising and presenting an argument) for each concept. The third phase involved the student drawing the three to four essays into a coherent chapter, enabling the student to build their literature review chapter around the concepts of the study whilst synthesising the literature with a clear focus from the onset.

This paper presents preliminary findings from the five students' experience of the scaffolded phased approach and discusses to what extent this approach enabled the five students to organise and write their literature review chapters. As such, this presentation aims to contribute to the conversation about the supervision of MEd thesis work.

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**Title:** A Cumulative Learning Approach to Integrating Mathematics in the Engineering Sciences

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Wolff, KE; Van Niekerk, FK

**Keywords:** engineering mathematics, cumulative learning, interdisciplinary research

**Abstract:**

The Engineering Faculty has engaged in research and innovation projects to enable a "transformative student learning experience" (SU Vision 2040). These projects have provided a wealth of data on student learning and performance challenges, particularly evident over the past two years of Emergency Remote Teaching (Hodges et al., 2020) and Augmented Remote Teaching, Learning and Assessment (ARTLA) practices. Performance in mathematics is not only the single most significant enabler of admission to

engineering studies but has emerged as the most statistically significant constraint in engineering student success.

Anecdotal evidence, lecturer observation and performance analyses reveal that mathematics in engineering is seldom contextualised or taught with cumulative learning (Maton, 2014) in mind. An inter-faculty collaborative FIRTLL (Fund for Innovation and Research into Teaching and Learning) project sought to determine engineering student mathematical gaps and to develop approaches to better integrating foundational mathematical concepts into the engineering module content.

Four key curriculum principles underpin the faculty approach: foundation provision; epistemic transition support; literacies enrichment; and enhancement aimed at the world of work in a global context. When seen collectively, these four principles can effectively be used to build cumulative learning across an entire programme (Wolff, Blaine & Lewis, 2021); i.e. the explicit connection of theory to practice in iterative waves that increase in complexity (Maton, 2014). The focus of the Engineering Mathematics project is: How can we build foundational support to ease the epistemic transition into engineering sciences?

Using a mixed-methods approach and drawing on quantitative statistical performance data as well as qualitative student feedback and lecturer observations, the project phases entailed trialling a diagnostic mathematics practice platform among 79 engineering students, from both mainstream and extended degree programmes. Parallel to the diagnostic platform implementation, the collaborating researchers (Science and Engineering faculties) have expanded the project to include identification of the key mathematical concepts that need to be more explicitly linked to the different engineering sciences knowledge domains.

Findings reveal that students demonstrate significant conceptual gaps in problem solving, patterns and algebra, and space and shape. These gaps are indicative of broader conceptual challenges related to the ability to visualise and develop holistic relational thinking practices, commonly referred to as 'critical thinking'.

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**Title:** A Decade of Chemical Engineering Graduates: Their Views on the Curriculum and the Transition to the World of Work

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** De Jager, M; Pott, R

**Keywords:** rearticulation, alumni, chemical engineering, curriculum, world of work

**Abstract:**

The aim of this work was to gather insights from our recent alumni ( $\leq 10$  years since graduation) on which aspects of their undergraduate experience were useful, what skills could have been emphasised more, which aspects could be considered for change as well as how their expectations measured up to reality in

the world of work, in light of their experiences after graduation. Using e-survey responses (110 responses, 25% response rate), a key-phrase coded analysis of written responses was thematically analysed using AtlasTI.

In the first instance, alumni strongly indicated support for, and appreciation of, the strong technical content of the curriculum, especially process design. Core chemical engineering skills are discussed as strongly grounded in the current curriculum, along with the development of professional communication skills. Further, problem solving and critical thinking, as well as personal development (working under pressure, work ethic, time management and grit) were valued. Suggestions for curriculum changes included: suggestions for stronger ties with industry, and integration of industry into technical courses, calling for real-world practical application of knowledge and skills. Finance, budget control, economic modelling, and other financial and business subject content were strongly highlighted as being useful in the world of work. Some discussion of the use of programming – both as a skill outcome, and as a teaching and learning tool – emerged. Further, respondents urged the use of a problem-based learning methodology (particularly if it could be linked with real-world engineering situations). Regarding expectations, there were several cases where alumni expectations of either their relative skill levels, or what the world of work is like were not met in reality. An emerging theme from this is that educators could do more to align expectations, to smooth the transition to industry.

These insights provide an opportunity to consider the portions of the standard engineering curriculum that might benefit from renewal or reconsideration. Although large-scale rearticulation is not always possible (or feasible), existing programmes can be modified to embed or integrate many of the suggestions put forward by alumni, diminishing the gap between the world of work and the curriculum and enhancing the programme offering.

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**Title:** A Reflection on an Institutional Peer-to-Peer Facilitation of Learning Training Course at Stellenbosch University

**Contribution type:** Reflection

**Contribution format:** Poster

**Author(s):** Ntwasa, S; Young, G; Khan, J

**Keywords:** peer facilitation, facilitation of learning, enhancement of learning and teaching, student success

#### **Abstract:**

Peer-to-Peer Facilitation of Learning is a training course developed by the Centre for Teaching and Learning for students who actively assist fellow students with learning in the context of specific modules. This training course focuses on empowering peer-to-peer facilitators of learning to encourage and facilitate students' learning while also being mindful of their own psychosocial well-being. Initially, the training course was developed for implementation during the Covid-19 period but has remained an important training instrument after SU returned to face-to-face interaction as the primary mode of

teaching. A year after implementation, a SOAR (strengths, opportunities, aspirations and results) reflection was undertaken to explore the ability of the course to respond to the training needs of peer facilitators (Stavros & Cole, 2013). This reflection was in the form of students' reflections which form part of the training course and feedback from a SoTL pre-conference workshop attended by lecturers who offer peer-to-peer facilitation learning opportunities in their modules and by us as the developers of the training course.

Based on these reflections provided by the developers, students and lecturers, this poster considers both the fitness and fitness for purpose of the training. Evaluating the fitness of training refers to the consideration of whether the training of peer facilitators can enhance teaching, learning and assessment; whereas fitness for purpose evaluates whether the training structure and content empower those enrolled to perform their functions optimally. This poster is part of a process of reviewing the training. It seeks to invite more engagement in lecturers' understanding of why training is important as well as what should be included in and excluded from training. This is an interactive poster that offers lecturers the opportunity to contribute their responses in writing on the poster.

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**Title:** A Scoping Review of the Literature on the Education of Speech-language Therapists for Service Delivery across Cultures, with a Focus on the Terminology Used

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Gerber, B; Visser, M

**Keywords:** speech-language therapy, education, training, cultural diversity, cultural competence

**Abstract:**

**Background:** Like in most healthcare encounters in South Africa, speech-language therapy often happens between a therapist and a client from a different language and cultural group. Such cross-cultural encounters are likely to contain an unequal distribution of power, favouring the therapist. It is very important to educate speech-language therapists (SLTs) to work in a respectful and effective manner with clients from diverse cultural backgrounds. Unfortunately, there is very little available literature to guide speech-language therapy educators in this regard.

**Rationale:** As a first step to inform a locally adequate and relevant curriculum to equip future SLTs to work effectively and respectfully with clients from a variety of cultural groups the international research literature was reviewed to identify the terminology and definitions that are used to refer such 'cultural capabilities'.

**Aim and methods:** A scoping review was conducted. The aim of the review was to describe the current literature on the education of cultural capabilities in speech-language therapy, with a focus on the terminology and definitions that are used to refer to the therapist's ability to work respectfully and

effectively with clients from a range of different cultural groups. Pre-service education as well as professional development activities were considered. Eight electronic databases were searched for sources of information published between 2010 and 2021. The final search was performed in May 2021.

Results: Eleven journal articles were included in the review, and all eleven originated from North America. The term that was used most frequently in the literature was 'cultural competence'. The most important aspects of the definition of cultural competence were that it includes knowledge, attitudes and skills, and develops over a lifetime of committed learning and reflection. It also includes an understanding of the socioeconomic aspects that impact the everyday lives of clients and their caregivers.

Implications: The findings provide a theoretical grounding for curriculum design aimed at equipping students to work respectfully and effectively with clients from a diversity of cultural backgrounds. A clear need exists for research on how to educate for cultural competence, including in the South African context.

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**Title:** Addressing Public Mental Health Training Needs through a Postgraduate Diploma

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** Van der Westhuizen, C; Sorsdahl, K; Roomaney, R; Kagee, A

**Keywords:** postgraduate diploma, mental health conditions, policy, research methods

**Abstract:**

Mental disorders contribute significantly to the burden of disease in African countries, but health systems are poorly resourced to address the problem. There is considerable need for capacity building, led by local public mental health researchers and practitioners, in this area in many African countries. To equip policy makers and practitioners to advocate for resources and plan for and implement cost-effective, locally relevant solutions, the Department of Psychology at Stellenbosch University and the Department of Psychiatry and Mental Health at the University of Cape Town, under the auspices of the Alan J Flisher Centre for Public Mental Health, are currently developing a postgraduate diploma in public mental health (PGDip). The diploma will have four core modules which are: Introduction to Public Mental Health; Mental Health Epidemiology; Research Methodology for Public Mental Health; and Interventions for Mental Health. The PGDip in Public Mental Health will be offered to people from various backgrounds across the African continent. The one-year programme will launch in January 2023 and will be offered to students enrolling at Stellenbosch University and the University of Cape Town.

The presentation will showcase our thinking in developing the PGDip modules with a view to addressing a specific continental need. We will provide the results of our formative work in developing the PGDip programme that proceeded through three stages, namely, exploration, preparation and implementation planning. Exploration involved interviews with stakeholders and alumni. Preparation involved interviews with course convenors and stakeholders in African countries. Implementation planning involved theory of

change workshops and managing university processes to ensure the readiness of the programme by 2023. We will discuss some of the caveats and pitfalls involved in developing this innovative diploma programme and invite feedback from audience members about how to enhance and strengthen the didactic components of the modules that will be included. The presentation will show the value of bi-institutional collaboration and a commitment to meeting a continental need in public mental health research training. Similar to other programmes (e.g. Mash et al., 2016), the postgraduate diploma is well-suited to busy professionals who seek further training in research methods, mental health policy, and epidemiology.

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**Title:** Agility in Pedagogical Praxis in Online Teaching at a Military Faculty

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Van Diemel, R

**Keywords:** pedagogic engagements; pedagogic essences; agogic accompaniment; agency

**Abstract:**

Background: Distance Education (DE) for part-time military undergraduate students was introduced in the Faculty of Military Science back in 2003. The Covid-19 pandemic changed the academic environment cataclysmically in 2020 when universities and schools suddenly had to close their doors and had to transition to whatever online learning platforms they had access to (Cranfield et al., 2022). During the Covid-19 pandemic, when most traditional universities were forced to adopt emergency remote teaching, the faculty was able to migrate to a fully online teaching mode and maintain academic success.

Described as the art of teaching, pedagogy has shaped educators' actions, judgments and other teaching strategies by taking into consideration theories of learning, and the understanding of students and their interests, needs, ways of constructing knowledge and backgrounds. The nature of the pedagogic engagements and thus the praxis is determined to a large extent by the agility of the educator and the quality of the pedagogic engagements in which the educator and the student are reciprocally involved.

The author contends that the arguments of Winter et al. (2021) on how educators' attitudes and beliefs about technology use and their skills and knowledge, as well as sufficient training, all contribute to how confident they would feel when using technology, also apply to online teaching. This speaks, inter alia, to staff's agility. The agility of university staff during the Covid-19 pandemic has been well-researched both nationally and internationally. The statement of the problem is that the impact of the agility of staff on their pedagogical praxis has not yet been researched in the Faculty of Military Science.

As coordinator of online teaching since 2011, the author is privy to the pedagogical praxis of his colleagues. His observations during the Covid-19 pandemic enabled him to find answers to three research questions:

1. What are the possible requirements for a pedagogic atmosphere to prevail in online teaching and learning?

2. Which pedagogical praxis do educators at the Faculty of Military Science embrace?
3. What was the mediating influence of agility in their pedagogical praxis?

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**Title:** An Assessment Plan for an Introductory Module in a Renewed, Integrated MBChB Undergraduate Programme

**Contribution type:** Innovation

**Contribution format:** Poster

**Author(s):** English, RG; Van Zyl, M; Geldenhuys, M; Geiger, J; Foiret, J; Blitz, J

**Keywords:** flexible assessment; formative assessment; curriculum renewal

**Abstract:**

**Background:**

The Faculty of Medicine and Health Sciences implemented the first module of a renewed MBChB curriculum for first-year medical students in 2022 called Being and Becoming in Health Care, a 60-credit, 18-week, integrated, interdisciplinary and learner-centred module delivered by a broad range of faculty from various disciplines. It aimed to transition students into higher education. An assessment plan based on Stellenbosch University's flexible assessment policy was designed.

**Focus:**

The poster focuses on the assessment plan, the theories underpinning it, and the specific assessment opportunities that were incorporated into the overall assessment plan.

**Description of work:**

The core module team developed the assessment plan, and it was structured around assessment for and of learning. It primarily comprised a combination of low-stakes activities aimed at facilitating self-directed learning and included monitoring of activity completion rates, multiple online quizzes, SCORM packages, a single test, reflection activities, and a group presentation.

**Similar work:**

The assessment builds on prior research which promotes multiple low-stakes assessments and programmes of assessment; hence, assessment for learning, as opposed to assessment of learning, is vital for driving student learning.

([https://www.ceesvandervleuten.com/application/files/4614/2867/1197/The assessment of professional competence developments resea.pdf](https://www.ceesvandervleuten.com/application/files/4614/2867/1197/The_assessment_of_professional_competence_developments_resea.pdf)

[https://www.ceesvandervleuten.com/application/files/6014/2867/1195/Assessing professional competence from methods to programmes.pdf](https://www.ceesvandervleuten.com/application/files/6014/2867/1195/Assessing_professional_competence_from_methods_to_programmes.pdf))

**Implications:**

It builds on Stellenbosch University's flexible assessment policy and enables the creation of innovative assessment plans that emphasise assessment for and of learning and which therefore align with self-directed learning.

Value to fellow practitioners:

The work provides an opportunity for others to develop similar assessment plans where multiple low-stakes assessment opportunities are used to drive learning.

Conclusions:

Our work presents a flexible assessment plan based on assessment for and of learning, in an integrated, interdisciplinary introductory module for first-year medical students.

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**Title:** An Integrative Curriculum Framework for Developing Professional Expertise

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Bester, M; Bitzer, E; Fourie-Malherbe, M

**Keywords:** professional expertise, curriculum framework, forms of knowledge

**Abstract:**

Emerging from a completed doctoral study and drawing on theoretical perspectives from sociology, psychology, philosophy and education, the aims of this paper are three-fold. Firstly, it examines four existing frameworks and models for developing professional expertise in higher education. Secondly, the paper shows that different forms of knowledge collectively interlink with socio-cognitive processes aimed at developing professional expertise; thus, suggesting that the existing frameworks and models inadequately integrate these forms of knowledge. Thirdly, it suggests an integrative curriculum framework for developing professional expertise in higher education, which has been refined through empirical research conducted using activity theory as an analytical lens in an interpretive case study.

An integrative multi-layered and multi-dimensional curriculum framework for professional expertise is proposed and outlined. The framework incorporates four contexts: disciplinary, practice-based, individual and community. These four contexts interact with different forms of knowledge: theoretical, practical, self-regulative and socio-cultural, which give rise individually and collectively to four socio-cognitive learning processes: understanding, applying, reflecting and participating. Furthermore, analytical and technological mediating tools and activities are used to intercommunicate between the different forms of knowledge to support progressive problem solving and integrative thinking.

The proposed curriculum framework supports sustainable assessment, defined in the SU Assessment Policy (2021) as assessment as learning, aimed at developing students' ability to take ownership of their lifelong learning journeys through critical reflection and continuous improvement of their practices.

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**Title:** Assessment as Learning: Using Group Work to Develop Social Impact Projects in Support of Teachers

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** Rinquest, E

**Keywords:** assessment as learning; social impact

**Abstract:**

As an early career academic in the Sociology of Education, the challenge was to creatively and innovatively approach my teaching, learning and assessment practice at Stellenbosch University (SU) in 2021. A third-year Sociology of Education module offered the opportunity and curricular context to utilise assessment as learning. This presentation reports on attempts to use assessment to support a transformative student experience. The work of McArthur (2016), Hanesworth, Bracken and Elkington (2018) on assessment and social justice, and Onyx's (2014) theoretical model based on practice theory for social impact provide background literature and theory in support of such efforts. The aim was to assess students' capabilities to work in groups and offer interventions to current educational dilemmas, such as teacher and learner well-being, inclusive education, and gender and sexuality in education. The assessment required third-year education students to work in groups to develop social impact project proposals. As a result, a proposal focused on supporting teachers' holistic well-being was selected, further developed, and registered as a social impact initiative at SU in 2022. I reflect on the various phases included in the assessment process and students' challenges with participating in group work activities; and report on the processes involved in transforming the assessment output into an operative SI initiative. I conclude by presenting opportunities for further research and innovation linked to social impact at SU and teacher wellness in education.

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**Title:** Assessment during PGCE Teaching Practice: Developing a Rubric for the Transition from ERTLA to ARTLA

**Contribution type:** Reflection

**Contribution format:** Presentation

**Author(s):** Edwards, N; America, C

**Keywords:** PGCE, productive pedagogies, lesson evaluation, rubric

**Abstract:**

A new Postgraduate Certificate in Education (PGCE) programme for the Further Education and Training Phase was introduced at Stellenbosch University in 2018. The programme is underpinned by the

Productive Pedagogies Framework (PPF), which has four dimensions, viz. intellectual quality, connectedness, a supportive classroom environment and working with and valuing difference (Hayes, 2006). The PPF stresses the importance of all students, regardless of background and perceived academic ability, being presented with intellectually challenging work and classrooms that are critical for improving academic outcomes (Mills et al., 2009).

The students complete their teaching practice (TP) over an eight-week period where lessons are assessed in terms of planning, teaching methods and strategies. These lessons are evaluated by their mentor teacher at the school as well as their subject specialisation lecturer. TP also forms part of the overall assessment in the module Practical Learning. Walvoord (2010, p.3) defined assessment as “the systematic collection of information about student learning, using the time, knowledge, expertise, and resources available, in order to inform decisions that affect student learning”.

During 2020, the PGCE students were only allowed to complete 10 days of TP at a school. They had to present two video lessons, a reflective report, and a Google Classroom assignment for evaluation to complement the 10 days. In 2021, our students could complete four weeks of TP which was augmented by two lesson presentations and a Google Classroom assignment.

In this presentation, we reflect on how we developed a rubric, couched within the PPF, to evaluate PGCE students’ lesson presentations as we transitioned from ERTLA to ARTLA in 2020 and 2021. Using Rolfe et al.’s (2001) reflective model, we describe what we were trying to achieve, what we have learned, and how we can improve our rubric. We present an example from each of our subject disciplines to show how we use the rubric in practice.

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**Title:** Audi Alteram Partem? We’ve Looked at Skills and Dispositions from Both Sides Now

**Contribution type:** Reflection

**Contribution format:** Presentation

**Author(s):** Greenhalgh, B; Coertzen, A; Swart-Jansen van Vuuren, C

**Keywords:** skills, dispositions, programme renewal, graduate attributes

**Abstract:**

Following a national review of LLB qualifications in 2018, and in line with SU’s programme renewal project starting in 2017, the Faculty of Law is in the process of rolling out its renewed LLB across all its undergraduate law programmes.

In addition to the creation of selected new modules, the comprehensive redesign and alignment of existing modules, and the overall reduction of credits across the programmes, a related project aims to ensure that the critical legal skills and dispositions as identified in the LLB Qualification Standard (Council on Higher Education [CHE], 2015), the institution’s and the Faculty of Law’s graduate attributes, are embedded within the renewed programmes. The overarching purpose of this project is to ensure the

faculty produces skilled law graduates (through longitudinal exposure, both explicitly and implicitly) “that are critical thinkers and enlightened citizens with a profound understanding of the impact of the Constitution on the development of the law and advancing the course of social justice in South Africa (CHE, 2015:7)”.

Using the Rolfe et al. (2001) reflective framework, the process of identifying, defining, plotting and scaffolding the various skills and dispositions, both in terms of horizontal (within modules and across specific year groups) and vertical (progressing from each year group to the next) alignment, is to be demonstrated.

Through continuous reflection since the inception of the project (Schön, 1983), the key role players involved, the tools utilised (and those that will not be utilised again), the methodologies underpinning the approach together with the challenges associated with the overarching execution of the project, are to be discussed and assessed. Two of the challenges to be discussed are the tremendous amount of time involved in such a project and how to cope with feeling discouraged during the process.

The sharing of:

(1) lessons learned, for example, defining each skill on each exit level of a programme as step 1;  
(2) along with highlighting areas requiring improvement such as adjusting module outcomes after implementation;

will inform our practices in future as we already identified changes for further programme renewal conversations and potentially contribute to similar projects involving skills renewal and their embedding across other programmes at SU.

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**Title:** Being and Becoming in Health Care (BBHC): Module Team Reflections

**Contribution type:** Reflection

**Contribution format:** Presentation

**Author(s):** Van Zyl, ME; English, RG; Geiger, J; Geldenhuys, M

**Keywords:** reflection, collaborative teamwork, Gibb’s reflective cycle

**Abstract:**

Background:

The Faculty of Medicine and Health Sciences at Stellenbosch University implemented medical curricula renewal of their MBChB programme in response to global calls to transform health professions education. The first module of the first-year programme was an 18-week, 60-credit module called Being and Becoming in Health Care. Post-implementation the module team made use of an adapted version of Gibb’s reflective cycle to critically reflect on the process of development and delivery of this module to inform future modifications.

What?

A core module team was assembled to coordinate the development and delivery of an innovative, highly integrated hybrid module, delivered by an interprofessional team to facilitate first-year medical students' transition into higher education. The module initiated the development of students' sense of purpose in health care by embracing both science and humanity while laying the foundation for becoming a doctor. It aimed to assist students in their personal and professional identity and role formation within the context of the self, the patient, the community, and the health system.

#### Why?

The entire module team shared the vision of transforming Health Professions Education to develop change agents who are equipped with the competencies required to address 21st-century health challenges. This first module laid the foundation for the philosophy of the renewed curriculum and the team was motivated to model the change they wanted to see.

#### Outcome?

The collective knowledge, skills and experience of the core module team and the various contributors resulted in the presentation of a well-considered, student-centred, integrated and accessible hybrid module with a 100% pass rate.

#### Feelings and lessons learned

The team experienced disorienting dilemmas during planning and delivery of the module. The workload exceeded expectations, yet stakes were too high to give up. The feeling of building a plane while in flight led to exhaustion and exhilaration when the plane landed safely. In future, we will implement dedicated planning times, communicate timeously and blueprint assessment activities.

#### Significance

This module has highlighted the importance of collaborative teamwork to deliver an integrated module that intended to promote deep learning through the application of theory in authentic contexts.

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**Title:** Bridging the Gap from an Unequal Past to a Future of Equal Opportunities: In Search of an Effective Curriculum for South Africa

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Le Cordeur, M

**Keywords:** curriculum, transform

#### **Abstract:**

The current South African curriculum is unsuccessful in its attempt to instil a value system with good habits and sound morals whilst it also fails to enable our youth to acquire the knowledge and skills needed for the 21st century – this in a time when our world is and continues to be in a state of flux. Change affects all sectors of society and will likely accelerate in the future, influencing lives in manifold ways. I argue that the current curriculum is focused so much on the acquisition of knowledge that the

happiness of learners is neglected. The aim of this study was to explore new ways to adapt the current school curriculum so that it could be aligned with the skills needed to be successful within the South African context. Data was collected from experts in the education sector by interviewing subject advisors, teachers and teacher students as well as from document analysis of the Curriculum and Assessment Policy Statement (CAPS), various articles and newspaper clips. My research was based on Aristotle's (384 – 322 BC) theory that education must promote both knowledge and happiness. Aristotle believed in the purposefulness of education: it is not only the attainment of knowledge but also the attainment of happiness in the lives of individuals. In this way, education can lead to a happy society; meaning, goodness of intellect leads to goodness of character. The former can be achieved by teaching, training and experience and the latter is the result of a healthy lifestyle and the practice of good habits.

In conjunction with William Pindar's (2012) theory that the curriculum is a strategy for self-study, enabling both individuals and groups to understand their situations by active and passionate participation in curriculum development, I will frame my recommended curriculum as a response to current challenges that require cutting-edge innovations and interventions from all sectors of society. I will elaborate on how the curriculum should be adapted to empower student teachers with the skills that will contribute to solutions for the challenges we are experiencing in our schools and the changing society as a whole.

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**Title:** Bringing Africa into the Classroom

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** Zweig, PJ

**Keywords:** risk, Africa, community engagement, collaborative teaching

**Abstract:**

The Sendai Framework for Disaster Risk Reduction calls for better understanding of the nature of risks and associated human vulnerabilities. Risks are unique to specific localities, and shaped by many factors, including the local geography, demography, cultural traditions, socioeconomic circumstances and development histories. Closer to home, the South African Disaster Management Framework insists that local communities are situated at the 'coalface' of risk and should form part of risk assessment processes to determine the nature of risk and find solutions appropriate for the local context. In answering to these imperatives, this project sought to bring Africa into the classroom by pairing the Disaster Risk Studies students from the Stellenbosch Geography Honours Programme with students from the University of Ghana in undertaking comparative community-based risk assessments of small towns in their respective countries, grappling with the real-world development problems they present. By sharing and comparing their findings during online seminar sessions, they learned firsthand about the nature of risk and development issues in their respective countries. With the explicit aim of enhancing the field research capacity and community engagement skills of the students, their course assignment tasked them to conduct a community workshop and undertake a household survey, and draft risk assessment reports for

local government stakeholders and community leaders, who helped to design the project and held meetings with the students, posing as their client. Another anticipated outcome of the project was to inform more effective risk management and risk-averse development planning, taking account of the risk assessment findings. As a service to society, the project sought to empower members of local communities too by involving them in assessing risks in their own living environment, thereby seeking solutions that might improve the quality of their lives.

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**Title:** Building Capacity in Research Supervision: A Transformative Action Learning Innovation

**Contribution type:** Innovation

**Contribution format:** Poster

**Author(s):** Geiger, M

**Keywords:** research supervision capacity development, supervisory theory, scholarship of supervision

**Abstract:**

Background, context, purpose:

The increasing numbers of admissions to the Master's in Human Rehabilitation Programme (by Coursework) require an increasing number of research supervisors for the research assignment component of the course. Apart from the challenges relating to class size and workloads of individual potential supervisors, the available supervisors were diverse in terms of own research experience, supervisory experience (including number and nature of master's students supervised to date), basic teaching and learning philosophy, and past personal experience of being supervised during own master's and/or PhD.

The purpose of this project-in-progress is thus to develop an innovative system of structured and contextualised transformative action learning opportunities for the team of supervisors regardless of (and yet sensitive to) their diverse baselines/starting points.

Description of work done:

An online forum was collaboratively developed including a discussion space for team members to share and learn from one another, a more formal Q&A space and a repository with resources or links to resources on topics related to research (including research methods, supervisory models, leadership and mentoring, and university-specific processes). Theoretical underpinnings included Mezirow's transformative learning theory (Mezirow, 1997; 2018) and the transformative value of action learning theory (Zuber-Skerritt, Wood & Kearney, 2020).

An HREC Waiver of Consent was obtained (X21/05/011). The participants were the team of six research supervisors with diverse research expertise, experiences, supervision approaches and learning cultures, who supervise or co-supervise the Master's in Human Rehabilitation Studies research assignments. They became co-constructors of the research supervision capacity development process.

Interim outcomes are that the reflective virtual workshops originally planned were aborted due to a shortage of synchronous, available times for already over-stretched team members. The online discussion forum, Q&A space and resource repository specific to this team of supervisors, however, hold promise for sustainability and effective contextualised research supervision capacity development.

In conclusion, this innovative process may be useful in other contexts with similar needs for research capacity development. A template of the structure of the discussion forum may enhance the transferability of the innovative process for application in other contexts.

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**Title:** CA2021: What? So what? Now what?

**Contribution type:** Reflection

**Contribution format:** Presentation

**Author(s):** Steenkamp, G; Von Wielligh, P

**Keywords:** CA2021, graduate attributes, change management, programme renewal, portfolio of evidence

**Abstract:**

What?

We are reflecting (Rolfe, 2001) on the impact of the CA2021 competency framework, recently issued by the South African Institute of Chartered Accountants (SAICA), on the relevant programmes offered by the School of Accountancy (SoA). The CA2021 competency framework details the competencies required by Chartered Accountants (CAs) at entry point into the profession. SAICA issued several guidance documents, including guidance for academic programmes, which determine that CAs should have thorough technical knowledge, but also deep-rooted values (ethics, citizenship and life-long learning) and enabling competencies (business, decision-making, relational and digital acumen) (SAICA, 2021).

So what?

We realised that module and programme renewal, using a proper change management process (Buller, 2015), will be required to ensure the SoA's CA-stream programmes' continued accreditation by SAICA. Although the technical competencies were mostly already adequately addressed, we had to substantially increase the development and integration of the CA2021 values and enabling competencies in the academic programme (Tsiligiris & Bowyer, 2021). We decided to employ a multi-layered approach: a top-down approach by management planning and coordinating the process; a sideways approach to upskill lecturers; a bottom-up approach whereby lecturers were encouraged to innovate and share their innovations with colleagues; designing two new modules to incorporate additional digital competencies, and placing increased responsibility on students for their own development by requiring them to create a portfolio of evidence (PoE) regarding the CA2021 values and enabling competencies to be eligible for postgraduate admission.

Now what?

We realised that the VUCA world (volatile, uncertain, complex and ambiguous) requires ongoing programme renewal (Bitzer & Constandius, 2018) and lecturers who can learn, unlearn and relearn. We are now at the stage where we can assess the preliminary effectiveness of the programme renewal we initiated (Buller, 2015) as a result of the CA2021 competency framework. We are pleased with what we have achieved and have identified the remaining focus areas (determining how the students' PoEs should be assessed and whether the postgraduate admission criteria should have an increased focus on digital acumen). We should continue to focus on producing graduates who are adequately prepared for the future world of work.

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**Title:** Clinical Empathy – A Sliding Scale rather than a Recipe?

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Archer, E; Van Schalkwyk, S; Blitz, J

**Keywords:** empathy, doctor-patient relationship, surgery registrars

### **Abstract:**

#### Introduction/Background

Clinical empathy is regarded as an essential requirement in the doctor-patient consultation; however, it is a multifaceted concept that is neither easy to define nor practice. The definition of clinical empathy has evolved from a predominantly cognitive, to a more holistic understanding (Hojat et al., 2002). Undergraduate medical curricula include empathy in consultation skills training. In postgraduate (specialist training) curricula, it is less clear how much attention is given to this topic, or how such trainees view the place and practice of empathy in patient care.

#### Purpose

We set out to explore how postgraduate surgery trainees understood clinical empathy and how they practiced it.

#### Literature review

While one would expect that senior medical students would become more empathic, results are puzzling, since most of these studies reported either an empathy decline or mixed results (Chen, 2012). This evidence has prompted most medical schools internationally to incorporate various educational interventions, varying from workshops, watching movies and reflecting on personal experiences to reading literature, among others (Archer, 2018). Authors have also suggested that the teaching and learning of empathy should not be presented as one-off interventions but should be integrated and reinforced over various years in both the classroom and clinical areas.

#### Methods and results

An interpretive, multi-case study design was followed to generate qualitative data from in-depth, semi-structured interviews. Senior postgraduate surgery trainees (n=9) from two academic institutions were approached and all who responded were interviewed. Ethics and institutional approval were given. The

interviews were recorded and transcribed verbatim, and the data thematically analysed. Four main themes were identified: history/background of the registrar, understanding of empathy, modifying factors and enactment of empathy.

#### Implications

The results highlight the complex nature of clinical empathy and how it is placed within other interactions between the doctor and patient. The practice of clinical empathy comprises skills and dispositions that extend from basic communication skills to advanced empathic responses. Educators should be careful not to teach empathy as a recipe, but rather see it as nuanced and contextual, a sliding scale that needs to be adjusted per patient and situation.

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**Title:** Creating a Purpose-built, Immersive Gaming Environment (1): Lessons Learned

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** Adendorff, HJ; Rootman-Le Grange, I; Pretorius, C

**Keywords:** game-based learning, peer facilitation

#### Abstract:

The Science learning facilitation training (LFT) courses have the purpose of equipping students for peer facilitation. An earlier analysis (Le Grange and Adendorff, 2018) revealed that these courses succeeded in achieving their cognitive, but not their affective, outcomes. Research shows that serious games can enhance learning in both these domains (Mukund et al., 2022; Oliveto et al., 2022; Zheng, 2021). One example is Bury Me My Love, a game that is used in teaching on hate speech, exclusion and refugee crises (Farber, Sharma and Chatterjee Singh; 2020).

Game-based learning (GBL), which uses immersion in a game environment, should be distinguished from gamification, the use of game mechanics in non-game learning environments. While gamification is well established at SU, game-based learning (GBL), and specifically the use of serious games, is not as familiar. We have developed the serious game, "Life Happens", as an alternative to the level one LFT online content. It is designed around challenging peer facilitation scenarios with players advising the lead character, Alex Ayo, on handling these. Players also receive in-game feedback on their choices, as well as opportunities for reflection.

The game was piloted in the LFT 1 course during the second semester of 2022. In this presentation, we will give participants the opportunity to "play" a snippet of the game. We will also expand on the following design choices, in terms of the lessons we learned: game-play elements, the game narrative and instructional content. The process of designing viable in-game choices led us to establish categories of possible peer facilitation interactions, ultimately leading to a better understanding of the real-life tutorial space as well as an improved play and learning experience in the game.

With this presentation, we hope to show that context-specific game-based learning is achievable at SU, even by inexperienced game designers. However, a development team with diverse skills and opinions as well as adaptable and flexible attitudes is essential. Although we used a self-designed serious game, which allowed for greater contextualisation, this is a time and resource-intensive endeavour, and in some cases off-the-shelf games can provide the sought outcome as well.

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**Title:** Creating a Purpose-built, Immersive Gaming Environment (2): Activity Theory Analysis

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Adendorff, HJ; Rootman-Le Grange, I; Pretorius, C

**Keywords:** game-based learning, peer facilitation, activity theory

**Abstract:**

Serious games, that is games that have been developed “for ends beyond entertainment alone” (Naul & Liu, 2019: 687), have the potential to create an immersive environment (Gee, 2005; Upton, 2017) in which “learners [can] become aware and critical of their own and others’ assumptions” and learn to recognise “frames of reference” in order to look at problems from a different perspective (Mezirow, 1997). In this first phase of a larger project, we investigated how the pedagogical goals and the entertainment goals of a purpose-built serious game, Life Happens, are connected, or to what extent the game manages to create an engaging gaming experience and an immersive learning experience.

We did this by considering the interplay between high-level game objectives and low-level game components in the narrative-styled game, Life Happens, which was designed to address the affective outcomes of the current learning facilitation training offered by the Science Faculty (Le Grange and Adendorff, 2018).

To this end, we employed the Activity Theory-Based Model of Serious Games (ATMSG) (Carvalho et al., 2015). This novel model, unlike other game analysis models, places equal emphasis on gameplay and educational goals rather than prioritising one over the other (Klopfer et al., 2019). It distinguishes between the “gaming activity”, “learning activity” and “instructional activity” (Carvalho et al., 2015) and allows analysis of the interconnection between game elements and overarching objectives, both educational and entertainment driven.

The ATMSG analysis allowed us to describe and understand the internal structure of the game as a series of info-scenario-feedback cycles. This, in turn, helped to highlight a few missed instructional and gaming opportunities, such as making some goal metrics more visible. It also allowed a distinction between in-game moments that serve a gaming purpose only and educational moments, which usually serve both purposes. Our study contributes to understanding some of the intricacies of integrating gaming, instructional and learning objectives when designing games for educational purposes. Lastly, we found

the ATMSG model useful, but difficult to use for the Visual Narrative genre since the feedback, which is central to the instructional goals, does not always follow immediately after an in-game choice.

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**Title:** Critical Digital Pedagogies as Prerequisite for Transformative Online Learning Experiences

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Strydom, S

**Keywords:** critical digital pedagogies, transformative practices, dialogue, power structures

**Abstract:**

Assessment is not limited to students and their learning. Albeit positioned as an instigator for student growth via continuous and lifelong learning, it also enables reflective teaching practices. By critically reflecting on one's own praxes, inevitably, the learning of students will be impacted. By becoming a reflective practitioner, one is better positioned to communicate the rationale of chosen teaching-learning-assessment practices. One such way is to critically reflect on the manner in which digital pedagogies are positioned as approaches to mediate transformative learning.

The Covid-19 pandemic continued to expose deeply-rooted inequalities in most of Africa's higher education institutions. Despite these numerous shortcomings, challenges and struggles, many higher education institutions continue to promote the value and necessity of adopting digital-driven practices in order to strive for inclusivity and in preparation for the Fourth Industrial Revolution. Limited reference is, however, made to the necessity of pedagogical approaches to promote transformative practices.

This conceptual paper aims to contribute to the current debates on the necessity of the adoption of critical digital pedagogies in an increasingly digitally-mediated higher education learning environment. It offers an argument for the reconsideration of such pedagogies as mediating approaches to issues of equity, diversity and inclusivity. It, furthermore, provides a critique on a 'one size fits all' approach to digitally-enabled pedagogies and argues for the continuous engagement with the unique and challenging contexts of higher education students in Southern Africa.

Drawing on the work of critical pedagogues from the Freirean school of thought, the paper raises awareness of the need for a deeper understanding of humanising pedagogies that are more sensitive and responsive to students' cultural and socio-historical needs and contexts. It also considers potential ways of moving beyond a surface approach to engaging students in the online space.

The paper suggests the consideration of critical pedagogical approaches that provide continuous opportunities for dialogue, mutual vulnerability, and a quest for addressing power structures often evident in the digital classroom.

\*Note: Conceptual contribution

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**Title:** Developing a Course in Computer Programming and Automation for Accounting Students

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** Schoonwinkel, H

**Keywords:** module development, digital acumen, programming, automation, accounting

**Abstract:**

The South African Institute of Chartered Accountants (SAICA) recently updated their competency framework to address the skills that would be required of future accountants. The competency framework issued in 2013 had limited coverage on digital competencies, while the new competency framework (issued in 2021 and referred to as the CA2021 competency framework) has an increased emphasis on digital competencies (SAICA, 2021).

As an Information Systems lecturer from Stellenbosch University, I was tasked with developing modules that address some of the newly introduced digital acumen. I drafted two new modules that teach the use of Microsoft Visual Basic for Application (VBA), which is a programming language used for spreadsheet automation, to address the computational thinking and automation competencies of the new CA2021 competency framework. Aspects that were considered when designing the modules include the choice of programming language, choice of textbook, topics to include given our limited available credits and target audience, placement of the module in the academic programme, use of assessments and method of instruction.

These new modules are set to launch in 2023 and 2024 respectively. As a test run, I launched a pilot version of these two modules (as one single course) to current accounting students, who most likely will not participate in the official modules when they launch (as they will be past the academic year that will participate in these modules by the time they launch). The pilot course was also made available to academic staff.

The objective of running the pilot course was to obtain feedback from participants, which would be used to make modifications to the official courses to be launched later. Feedback focused on the participants' perceptions of the quality and delivery mode of the course, time spent on the course, devices that were used and perceived benefits of learning computer programming for accountants.

Sharing my module development process and the preliminary feedback received from participants would be valuable to other academics planning on developing modules related to digital acumen aimed at students not intending to become information technology experts.

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**Title:** Developing Accounting Students' Graduate Attributes through a Portfolio of Evidence

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Smit, S; Steenkamp, G

**Keywords:** portfolio of evidence, graduate attributes, competency development

**Abstract:**

Employers are increasingly emphasising that accounting graduates need to have certain soft skills, or graduate attributes, to facilitate the transfer of their technical knowledge (Tsiligiris & Bowyer, 2021). In South Africa, the South African Institute of Chartered Accountants issued the CA2021 competency framework, which stipulates the competencies expected of an entry-level chartered accountant (SAICA, 2021). This competency framework placed additional emphasis on graduate attributes, which include values (ethics, citizenship and life-long learning) and enabling competencies (business, decision-making, relational and digital acumen). One option to facilitate and formalise the development of these graduate attributes in students is to require students to construct a portfolio of evidence (PoE) (Van Tartwijk et al., 2007). It was decided that accounting students would need to compile a PoE as an entrance requirement for postgraduate studies from 2024 onwards. Students received a template detailing the relevant graduate attributes (termed competencies) and were requested to reflect on their proficiency relating to each competency. Based on their reflection, students could then provide either evidence of their proficiency or a remedial plan to improve any deficiencies they identified. The guidance document accompanying the template included an explanation of what each competency entails and ideas on how it could be developed. In 2022, second-year accounting students were required to hand in a draft PoE. These PoEs were peer-reviewed, with spot-checks by lecturers. Even though the PoE was assessed, its primary goal was to stimulate student reflection (Van Tartwijk et al., 2007) as well as showcase students' proficiency and development needs relating to graduate attributes (Klenowski et al., 2006) in line with the theory of self-regulated learning (Artino et al., 2015). The aim of this action research study was to aid the development of the CA2021 graduate attributes in accounting students through the PoE, and specifically gather student perceptions on the PoE and its effectiveness. Preliminary findings indicate that students struggled to reflect on their own competency levels but found the guidance document comprehensive and helpful. Students also realised the value of constructing a PoE.

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**Title:** Development of a Renewed Introductory Module for First-year Medical Students

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** English, RG; Van Zyl, M; Geldenhuys, M; Geiger, J; Foiret, J

**Keywords:** curriculum renewal, transformational learning

**Abstract:**

**Background:**

In 2022, the Faculty of Medicine and Health Sciences implemented the first module of a renewed curriculum for first-year medical students as a 60-credit module, titled Being and Becoming in Health Care and running over 18 academic weeks. This integrated module was developed and delivered by a broad range of faculty from various disciplines, was learner-centred and promoted self-directed learning.

**Focus:**

The presentation will focus on the development approach and how the module relates to the broader vision of the renewed MBChB curriculum, and SU's Teaching and Learning policy. It will also address how transformative learning, socio-cultural learning, and situated learning theories and constructive alignment were applied throughout in terms of how assessment was designed, how technology was used, and how the module was delivered to promote self-directed learning.

**Description of work:**

The core module team met regularly with the intention of designing themes and topics that would help first-year medical students transition into higher education (and specifically medical education). The module was highly integrated and inter-professional, incorporating topics relevant to four curricular 'pillars', namely self, patient, community and health systems. An assessment plan comprising various assessment approaches, including reflections, was designed as the programme was aligned with the principles of flexible assessment, using multiple, low-stakes assessment opportunities.

**Similar work:**

Wiener, CM, et al. "Genes to society" – the logic and process of the new curriculum for the Johns Hopkins University School of Medicine. *Acad Med.* 2010 Mar; 85(3):498-506. doi: 10.1097/ACM.0b013e3181ccbebf. (<https://pubmed.ncbi.nlm.nih.gov/20182127/>)

Kumagai, AK and Lypson, ML. Beyond cultural competence: critical consciousness, social justice, and multicultural education. *Acad Med.* 2009 Jun; 84(6):782-7. doi:10.1097/ACM.0b013e3181a42398. ([https://www.researchgate.net/publication/26245903\\_Beyond\\_Cultural\\_Competence\\_Critical\\_Consciousness\\_Social\\_Justice\\_and\\_Multicultural\\_Education](https://www.researchgate.net/publication/26245903_Beyond_Cultural_Competence_Critical_Consciousness_Social_Justice_and_Multicultural_Education))

**Implications:**

Discussion of the identified gaps between the various development stages will provide opportunities for future planning. The take-home message for the audience would be that it is possible to develop a new module within a curriculum renewal process, but it requires a dedicated team, institutional support and contextual understanding.

**Value to fellow practitioners:**

The work provides an opportunity for others to learn from the approach taken and provide constructive criticism.

**Conclusions:**

Our work demonstrates that consistent, well-structured plans coupled with consideration of uncertainty do translate into an actionable module.

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**Title:** Educator and Student Experiences of an e-Learning Clinical Education Rotation

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** Solomon, P; Meyer, I; Fobian, N; Lupton-Smith, A; Du Preez, E; Hanekom, S

**Keywords:** Covid-19 pandemic, clinical education, e-learning

### **Abstract:**

#### Background

The onset of the Covid-19 pandemic in March 2020 resulted in a rapid shift to online learning for physiotherapy education in South Africa and globally. An e-learning rotation was designed as a remote learning opportunity for third-year physiotherapy students as part of their clinical education module. The aim of this study was to explore the perceptions of educators and students to gain insight into their experiences of this journey from an in-person to an online curriculum, and explore the lessons learned that could inform future physiotherapy education.

#### Methods

A mixed-methods study was conducted with qualitative and quantitative data, collected concurrently and merged during the interpretation process. Qualitative data (n=20) was gathered by means of semi-structured individual interviews and focus group discussions. A survey (n=13) was utilised for quantitative data collection.

#### Results

Analysis of the data demonstrated that this e-learning rotation was positively received. Participants agreed that the success of the e-learning rotation was due to the consideration of the pedagogical design, promotion of relationships, and logistical factors. The positive experience outlined by students within this study is contrary to some of the findings of Chesterton et al. (2022), who discuss their experiences in the United Kingdom, specifically within the field of physiotherapy.

Challenges for educators were related to the time pressure to develop this initiative, whilst students expressed feelings of disappointment at being unable to enter a clinical setting. Clear recommendations were made that this e-learning rotation should be explored further and consideration given on how it can best augment a workplace-based clinical education model, including the best position within the curriculum. Participants noted that the unique learning opportunities of the authentic clinical environment remain key, supporting authors such as Nordquist et al. (2019), who describe the management of real-life patients as incomparable.

#### Conclusion

This study concludes that an e-learning clinical rotation can add educational value to a clinical education module and its incorporation into a physiotherapy clinical module could be considered to achieve best educational outcomes.

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**Title:** Empowerment Evaluation of Respondus Monitor-Proctored Examination for Postgraduate Programmes in the School of Public Leadership, Stellenbosch University

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Rabie, B

**Keywords:** online proctoring, empowerment evaluation, online assessment

**Abstract:**

The onset of the Covid-19 pandemic required an immediate emergency shift from in-person invigilated examinations to e-assessment via SUNLearn. While the format and focus of the examination paper and assessment were adapted, it was impossible to verify the identity of the person or the degree to which the student completed the assessment without assistance. Online proctoring software presents an alternative solution to in-person invigilated assessments. Software installed on the student's device monitors the candidate while completing the assessment and flags possible 'incidents' for further review by staff after the examination. Online proctoring offers several advantages, but also raises concerns about its reliability in different contexts.

The purpose of this study was to determine whether Respondus Monitor offers a feasible alternative to in-person invigilation. The research adopted an empowerment evaluation design that involved students in the Monitoring and Evaluation module of the Master in Public Administration programme to determine the evaluation criteria, complete assessments using the Respondus Monitor software and deliberately introduce 'events' such as movement, sound and collusion to test the responsiveness of the software to these events. The research findings are informed by an anonymous questionnaire capturing students' observations on the software, in-class discussions and a review of the video recordings and flags generated by the software. Ethical clearance and institutional permission were obtained from the Stellenbosch University Research Ethics Committee for Social, Behavioural and Education Research.

The findings include reflections on the ease of installation and use of the software from a student and lecturer perspective. Students were positive on the advantages of online proctoring to enable more flexible examination schedules and spaces despite the relative unfamiliarity of a new system. The system is reliable to verify the identity of the person that completed the exam, but not sufficiently sensitive to issues that may compromise the integrity of the examination.

The overall conclusion of this limited review is that the sensitivity of the Respondus Monitor software seems too low, is inappropriate for closed-book assessments and does not offer a satisfactory alternative to in-person invigilation. The study is useful to identify criteria for a more suitable online proctoring system.

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**Title:** Enhancing Facilitation Skills – from Teaching to Learning

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** Couper, I; Blitz, J; Couper, J; De Villiers, M; Crowley, T; Brits, K

**Keywords:** interprofessional, relationships, transformation, reflection

**Abstract:**

Background

As part of an internationally funded collaborative project, a team from the Faculty of Medicine and Health Sciences was asked to develop training for facilitators, to equip them to run case-based, interactive, interprofessional workshops for health professionals. The African Forum for Research and Education in Health (AFREhealth) commissioned the training to develop a cohort of “expert facilitators” that can support courses on their Learning Management System.

Focus of presentation

How do we support health professionals with varying educational experience to become expert facilitators?

Description of work done

The team agreed that we needed a course rather than a workshop or guidelines to ensure sufficient engagement towards transforming facilitation practice. We initially mapped out the course aim, outline and content through a process of collaborative discussion, based on the need for it to be delivered online to people with varying degrees of facilitation experience in a range of different countries, for online and face-to-face learning. This was followed by workshops to build the course together. Much time was spent in discussion to place our assumptions and our understanding of facilitation in the foreground. The focus of the emerging 6-unit course is on supporting the process of learning, reflection and relationships. We are seeking to model facilitation in delivering the course.

Links to similar work

We previously developed guidelines and a set of podcasts for AFREhealth, to assist facilitators, and a module on Teamwork and Collaboration.

How did we feel and what were the lessons learned?

We were exhilarated by our developing understanding, but also daunted by the task that we had set ourselves, as we ourselves shifted from teaching to learning. We have learned the importance of role modelling – being who we want participants to become.

Value to fellow practitioners

In order to develop facilitation skills, we need to clarify our own understanding of the concept, to constantly reflect on the process of learning and to intentionally model the skills we believe are important.

Conclusions

We plan to run a pilot course that will enable us to assess the acceptability and usefulness of our approach to, and understanding of, developing facilitation skills.

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**Title:** Enhancing Online Teaching and Learning in a BEd Undergraduate Programme during Covid-19

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Esau, O

**Keywords:** online teaching, BEd Education Programme, Covid-19, action research

**Abstract:**

This paper documents the research process followed by a teacher-educator who wanted to improve his online teaching and learning in a Bachelor of Education (BEd) undergraduate programme during the Covid-19 pandemic. In 2021, in response to this situation, Stellenbosch University (SU) followed a differentiated model of learning and teaching called ARTLA (Augmented Remote Teaching, Learning and Assessment), which combines contact tuition for smaller groups of students with online elements. This approach allows for flexibility to accommodate the different circumstances of our various academic environments. In my response, I proposed to conduct an action research project to find ways to improve my digital and online skills to enhance the teaching and learning in my BEd undergraduate classroom. Critical emancipatory research was used as the theoretical framework to guide the research process. This qualitative study intended to investigate how a teacher-educator set out to improve his online teaching and learning pedagogy during Covid-19 in a BEd undergraduate programme at SU.

The main research question for this study is therefore, “How did I as a teacher-educator set out to improve my digital and online skills during Covid-19?” The objective of this study was to investigate and understand the experiences and realities of teaching and learning in a digital age with the view of improving that teaching and learning situation.

Data collection included field notes, questionnaires, interviews and a focus group session. Based on the evidence gathered, online teaching offers active and engaged learning to the students. A variety of problems and issues still surfaced in the teaching process. Added to South Africa’s loadshedding problem, not everyone has internet and computer access. However, this action research project was fruitful in

terms of generating positive impact on the teaching and learning of the module selected. It is an ongoing process in which the teacher and students should work together to enhance teaching and learning.

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**Title:** Experiences Using Videos to Complement Structured Oral Examinations in Surgery

**Contribution type:** Research

**Contribution format:** Presentation

**Authors:** Baatjes, K; Edge, J; Conradie, I; Archer, E

**Keywords:** assessment, videos, surgery, clinical

**Abstract:**

Introduction:

Surgeons require multiple skills to be considered competent. Variation of assessment strategies is vital in the overall evaluation of knowledge, analysis and technical expertise. The oral examination is the standard method to test knowledge and clinical reasoning, but reliability and validity concerns remain. Providing structure to orals may facilitate the measurement of achievement of the course outcomes, and the use of mock assessments can assist trainees in preparing for exit examinations. This study explored the experiences of surgical trainees and the examiners using a video-assisted, procedure-based, structured oral examination (SOE) in a face-to-face and virtual format.

Materials and Methods:

This descriptive study at the Division of Surgery at Stellenbosch University, Tygerberg Academic Hospital, Cape Town, South Africa, took a case-based SOE format using procedural videos. One group of registrars had face-to-face contact with the examiner, and the other group was assessed on an online platform, e.g. Microsoft Teams™, where the examiner was remote. After the SOE, a focus group interview was held with the surgery trainees and individual interviews with the examiners, generating qualitative data.

Results:

Themes were developed from the interview transcripts. These themes centre around the utility of videos in this examination format and technical issues during the SOE, e.g. the connectivity and audio-visual disturbances. Further themes revolved around the standardisation of questions and preparation of the examiners.

Conclusion:

Overall engagement by both the registrars and the examiners was high, and procedural videos as part of the mock SOE were experienced as valuable. The addition of video recordings to the online platform posed administrative and technical challenges. However, the registrars and the examiners could log in from peripheral clinical training sites. Suggestions towards improvement emphasised the importance of standardised approaches and better examiner preparation. Examiners requested training and guidelines on examination practice. Future efforts should focus on the standardisation of the examination format, optimising technical issues, and improving examiner preparation.

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**Title:** Extra Time for Students with Learning Disabilities in Time-constrained Assessment

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Ontong, JM; Rossouw, M

**Keywords:** extra time, learning difficulties, reasonable accommodations

**Abstract:**

Higher education institutions provide extra time as an accommodation to students with learning disabilities (LD) to create equitable assessment conditions. An extensive literature review revealed that limited research exists in South Africa on the effectiveness of awarding extra time to students with LD as examination accommodation, minimal research exists worldwide on the effectiveness of such accommodations beyond one year and no research exists in the accounting field of study. The South African accounting programme under review therefore provides a unique opportunity to understand the practice of awarding extra time in the context where time, in time-constrained assessments, is often perceived by all students as a constraint. The research questions therefore aimed to compare results of students with LD and their non-LD peers, on an overall level as well as per module, in order to contribute to the discussion on accessibility for all students. The approach of this study was to statistically control for each student's performance in the previous academic year; it is generally expected that, all other factors being equal, the performance of students with LD is comparable to that of students without LD. Student performance over 49 694 final-grade observations was examined by performing a cross-sectional analysis over various modules in the accounting bachelor's degree and over a 10-year period time-series. The evidence strongly suggests that the policy of providing relatively the same amount of extra time across all modules and over the course of a bachelor's degree for students with LD is inadequate and an inequitable approach. It is suggested that extra-time policies and regulations be continuously monitored for effectiveness.

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**Title:** Facilitating Transformative Learning: Medical Students' Experiences of Home Visits

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Van Zyl, ME; Archer, E

**Keywords:** transformative learning, home visits, critical reflection, experiential learning

## **Abstract:**

### Background, rationale, purpose:

Medical students participate in a 13-week primary health care clinical rotation (PHC), which is shared between the fields of Family Medicine, Public Health and Disability and Rehabilitation. During their fifth year, students are placed in rural primary healthcare settings. Here students conduct home visits to persons with disabilities. Following these, they critically reflect on their experiential learning and develop holistic management plans in collaboration with the team.

Medical students are exposed to very few home visits, and this questions the contribution thereof to facilitate transformative learning and the development of competencies that can be integrated into their general clinical practice and patient care. Thus, it is important to understand the relevance of this learning activity from the students' perspective and explore their perceptions regarding the value of this activity in their development as a doctor.

### Research Question:

How do SU FMHS fifth-year medical students experience home visits to persons with disabilities in the rural primary healthcare setting?

### Theoretical Framing and Literature Review:

The global call to transform health professions education (Frenk et al., 2010) has led to including more opportunities for transformative learning (TL) in medical curricula. Studies suggest that exposure to a variety of contexts and experiences facilitates TL, and home visits to vulnerable and disadvantaged people are included as an example (Van Schalkwyk et al., 2019). Kolb's experiential learning cycle applied in an authentic context facilitates transformation and the development of competencies when it is paired with critical reflection.

### Methods:

Qualitative data collected from medical students' written critical reflections and semi-structured interviews were thematically analysed. Drawing on a phenomenological perspective, themes describing the subjective and authentic experiences of students, including their perceptions regarding transformation in their beliefs about their clinical practice as a result of going on these home visits were identified and interpreted.

### Implications:

The study provided evidence that home visits paired with critical reflections were a transformative learning experience that contributed to the students' personal and professional development. The design of this TL opportunity can be integrated into other contexts to facilitate the development of competencies.

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**Title:** Fostering Critical Thinking among Psychology Honours Students

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Kagee, A; Botha, M

**Keywords:** scepticism, critical thinking, psychology, graduate attributes

**Abstract:**

Background, rationale, purpose

Paulo Freire suggested that liberating education consists of acts of cognition rather than transferrals of information (Freire, 2018). Thus, teaching only the content of psychology without infusing it with an epistemological component risks replicating the banking concept of education (Kagee, 2011). Research methodology is part of the psychology curriculum. Yet, there is some resistance to learning methodology among psychology students as some do not see the need for it.

Research question(s)

Using techniques such as the flipped classroom, class presentations and role play we sought to determine whether a re-curriculated module in research methodology in the psychology honours programme fostered empirical-mindedness, evidence-informed thinking and scepticism. We also wished to determine how students experienced these techniques and what ideas they had that could enhance their learning.

Methods

The Honours Research Methods module was presented from February to June 2022. The class met once a week in person and the module consisted of class discussions, voice-over PowerPoint presentations and videos posted on SUNLearn, and prescribed readings. Assessment tasks were a class assignment involving qualitative data collection, analysis and a report and group presentation. At the end of the module, we invited students to participate in individual interviews to understand how they experienced the module. Interviews were audio-recorded, transcribed and thematically analysed.

Results

The discursive environment allowed students to feel that they would not be judged for voicing their opinions. The module appeared to foster change in how students thought, especially in terms of scepticism, weighing evidence and understanding the role of collecting data to support claims. Students indicated that they would have liked a greater integration between the class discussions and PowerPoint slides that were posted on SUNlearn. They suggested regular quizzes to encourage students to complete additional readings.

Implications

Scepticism and critical thinking are not only concepts but also attitudes towards the content of psychology. While a fund of knowledge on critical thinking in research methods is necessary, practice, debate and discussion in class play an important role in adding to the richness of students' intellectual growth.

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**Title:** Gamification of Mathematics 186: A Design-based Research Approach

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Adams, S; Masuret, J

**Keywords:** gamification, design-based research, Classcraft, mathematics, STEM

**Abstract:**

Low levels of student motivation and a lack of engagement with content in and out of the classroom have a negative impact on students' learning and overall classroom experiences (Bridgeland et al., 2006). This a pertinent issue in STEM courses that requires innovative steps to minimise attrition, particularly in the South African context where there is a dire need for STEM skills. Motivated by the positive research findings on the use of gamification in STEM (Ortiz et al., 2016), game elements were applied in Mathematics 186 through a game-inspired tool called Classcraft to address the challenges mentioned.

The tool was developed and evaluated by following a design-based research (DBR) approach, which involves iterative cycles of analyses, design, evaluation and revision (Herrington et al., 2007). The presentation will describe each phase and report on the results of the experiment conducted using data gathered through a questionnaire. The descriptive statistics and mixed model repeated measures ANOVA results of the 2021 cohort will also be reported. Findings will point to the influence of game elements on student motivation and engagement and advocate for theoretically and empirically sound explorations of practices to support the student learning experience through gamification

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**Title:** Healing the Language of Feedback – #Wordsmatter

**Contribution type:** Reflection

**Contribution format:** Presentation

**Author(s):** Schmutz, AM; Lupton-Smith, A

**Keywords:** feedback, health professions education

**Abstract:**

Feedback is perhaps the cornerstone of teaching and learning (Sadler, 2010; Boud & Molloy, 2013; Ossenberg, Henderson & Mitchell, 2019). Van der Vleuten and Driessen (2014:224) wrote that "there is hardly anything that is more powerful to learning than feedback". Using Rolfe's reflective model (2001), we reflected on our own feedback practice during changing times for teaching and how our language around feedback has become muddled. We recognised the need to clarify the intended meaning of our feedback practice.

Initial emergency remote teaching sparked our rethinking to enhance our understanding of students' learning as an active process. The hybrid learning environment, which shifted between virtual and face to face, challenged us to rethink opportunities for students to reflect and engage in feedback to make sense of the learning process. On reflection on our own practice and the context wherein we practice, we noted the ambiguous meaning of feedback in our setting.

If we seek to support learning-centred learning with strong feedback processes, we need to ensure a mutual understanding of the feedback language, both spoken and unspoken. We need to take a moment to reflect and become aware of the current state of feedback and our role therein. What is our feedback language and narrative? Our message is summarised as Words Matter.

Looking ahead, we recognise that in the language of feedback the meaning of words matters if we wish to enhance learning. The feedback processes, as experienced in different learning environments, have sparked our awareness of our own feedback language and narratives, and we have become conscious and intentional in the words we use, clarifying and confirming meaning. We hope that the ripples we create by our changing narratives will lead to waves of change to restore the feedback process, engage the conversation, and support the learning for us, the students, and our environment.

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**Title:** Holistic Cognitive-Affective-Systemic Design Framework: A Case Study in Engineering Chemistry

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** De Klerk, D; Tadie, M; Van Wyk, P; Cripwell, J

**Keywords:** first-years, online quizzes, holistic learning, student well-being

**Abstract:**

Poor performance, high attrition and low throughput rates are persistent concerns in engineering programmes (Shay et al., 2016). Numerous initiatives to support first-year students have reported varying levels of success, citing factors extending beyond simply the content delivered (Scott, 2018). Several studies have shown an interconnected and symbiotic relationship between the cognitive ("knowing"), affective ("being") and systemic ("doing") domains in the holistic learning required in higher education (Korsten et al., 2021). The aim of this work is to improve understanding of the efficacy of learning interventions using the holistic Cognitive-Affective-Systemic (CAS) model (Gilmore et al., 2017). The CAS model has been effectively applied in other relevant situations, including the evaluation of the engagement and performance of undergraduate students (Gilmore et al., 2017) and the mental health of engineering students (Korsten et al., 2021).

In this work, the CAS model was intentionally incorporated in the design of Check-Your-Understanding (CYU) quizzes in a first-year Engineering Chemistry module offered to over 800 students. The quizzes were developed to focus on key threshold concepts and common misconceptions for each topic with immediate feedback provided and included everyday examples and accessible language (cognitive). A

quiz was released online covering each week's content and was a voluntary, 'no-stakes' assessment preventing increased pressure on students and the resulting negative effects on student well-being (affective). The SUNLearn quizzes could be completed at any time during the semester and included a range of different question types (systemic).

A mixed-methods approach was employed to evaluate the intervention, including quantitative analysis of student engagement and performance and the qualitative analysis of anonymous student feedback. Preliminary findings emphasise the need to intentionally consider all interrelated CAS factors when designing any intervention. For example, there was overwhelming support and appreciation for the design decisions to reduce stress, which several students reported then led to deeper learning (cognitive-affective). Interestingly, however, many recommended making the quizzes compulsory despite the affective benefits, which speaks to a need to improve self-regulated learning (cognitive-systemic).

This work demonstrates the flexibility and potential value of the CAS model for the design and/or evaluation of learning interventions for other academic programmes and contexts.

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**Title:** Increasing Postgraduate Throughput: Lessons from Supervision Management

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** Gerber, C; Meyer, M

**Keywords:** postgraduate throughput, supervision management, student success, teaching and learning, postgraduate teaching

**Abstract:**

The global demand for innovative research has compelled higher education institutions (HEIs) to produce large numbers of postgraduates (Alama, Alamb & Rasulc, 2013). However, both globally and specifically in South Africa, HEIs struggle with developing strategies to increase student throughput and minimise dropout rates (Khauoe & Fore, 2020; Mphekgwana, Mabila, Tirivangasi, & Makgopa, 2020; Amehoe, 2013). Consequently, both supervisors and students are under enormous pressure to complete postgraduate programmes within the defined timeframe (Alama, Alamb & Rasulc, 2013).

Various factors contribute to the success of postgraduate throughput, such as the availability of emotional and educational support communities for students (Botha, 2018), and research support facilities and resources (Ismail & Abiddin, 2011). Most researchers agree that the success and quality of postgraduate education depend largely on the effective and efficient supervision of postgraduate students (Alama, Alamb & Rasulc, 2013; Pearson & Kayrooz, 2004). Management of the supervision process is therefore needed so that a supportive research teaching and learning environment can be established to ensure that students complete their postgraduate degrees in the defined time (Botha, 2018; Ali, Watson & Dhingra, 2016).

In spite of research pointing to the role of the supervisor in students completing postgraduate degrees, postgraduate throughput rates remain low (Khauoe & Fore, 2020; Mphekgwana, Mabila, Tirivangasi, &

Makgopa, 2020; Amehoe, 2013). In this paper, we show how postgraduate throughput rates could be increased by actively managing supervision. Using secondary, longitudinal data, we show how the throughput rate for a master's programme increased from an average of 40% (over a five-year period) to an average of 85% (over a five-year period). The findings suggest that student throughput can improve significantly when teaching and learning processes are actively managed through creative and innovative endeavours. We recommend that by actively engaging with postgraduate students' research learning, postgraduate throughput rates can improve.

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**Title:** Integrating Technology through Digital Escape Rooms

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** Jacobs, AHM; Le Roux, E; Davids, D

**Keywords:** problem-solving skills, innovative pedagogies, technology, escape rooms

**Abstract:**

In an ever-changing and increasingly complex world, students need to develop problem-solving and critical thinking skills to rightfully take up their places in the world of work. We need to engage in sustainable assessment practices, focusing on preparing students to become lifelong learners who can judge their own performance, express their creativity and be socially proactive students (Taraldsen et al., 2020).

Teachers (and teacher-educators) must use innovative pedagogies, for example, integrating technology into classroom learning, that are more learner-centred to enable learners to develop these skills. Literature tells us that integrating technology in the subject specialisations of pre-service educators is not addressed sufficiently in the BEd programme for developing these skills. This study aims to fill this gap by exploring the process and implications of implementing a digital escape room assessment activity as an intervention in a Natural Science (NS) module. Escape room games are live-action team-based games where players discover clues, solve puzzles and accomplish tasks in one or more rooms to accomplish a specific goal in a limited time (Nicholson, 2019). It requires teamwork, communication, critical thinking skills and problem-solving.

Against this background, our research question is, "How does the experience and design of an educational escape room assist pre-service teachers in developing knowledge, skills and values to integrate technology in their Natural Science subject specialisation?"

We aim to contribute to the emerging body of research on the use of escape rooms in higher education, with an emphasis on the implications of the use of educational escape rooms as an assessment activity. We hope to offer insights on the instructional effectiveness of using educational escape rooms in a teacher education course and identify areas for possible future research on using escape rooms for educational purposes.

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**Title:** Interactive Video Lectures using Moodle SCORM Packages

**Contribution type:** Reflection

**Contribution format:** Presentation

**Author(s):** Venter, L

**Keywords:** video lectures, engagement metrics, online learning, self-paced learning

**Abstract:**

The sudden advent of ARTLA and ERTLA teaching during the pandemic lockdowns of 2020 to 2022 necessitated quick response innovation for online teaching. One solution was the use of video lectures in the form of narrated slides.

The concern arose as to how attendance of these lectures but also understanding of the content may be determined. Camtasia is a video recording software package that enables the addition of interactive quizzes to videos. Moodle has SCORM package functionality that allows for the use of interactive videos on the SUNLearn platform.

In this reflection, a summary of the technique to create and distribute interactive videos is given and some result metrics on the efficacy of this technique are discussed.

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**Title:** Intercultural Communication: 2022 Survivor Challenge with Strangers in my Class

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** Haroun, F; George, E; Basson, E; Van Zyl-Bekker, S; Beukes, V; Kondowe, Z

**Keywords:** intercultural communication, pedagogical tool, diverse groups

**Abstract:**

The Faculty of Engineering SU went through a process of programme renewal in 2019 as the “othering” of people from a different background was highlighted in the media. The faculty responded to both academic and industry needs by replacing the Professional Communication module with the Intercultural Communication module to prepare first-year students for effective interaction with “others” at university and beyond (Byram, 1997). The Language Centre was tasked with the curriculum design of the Intercultural Communication module, launched in 2021. It was developed as a means to focus on vital intercultural communication skills when communicating and exchanging knowledge in a diverse

university community and working environment (Al Taher, 2020; Guénier, 2020; Hall, 2012; Kuiper, 2017; Moeller & Nugent, 2014).

The purpose of this presentation is to display an innovative teaching methodology for the engineering environment. It will show how students were guided from being isolated survivors to a thriving community at university. First, an extract from the article “Body Rituals among the Nacirema” written by the anthropologist, Horace Miner (1956), is used as a pedagogical tool to create awareness of othering people. In addition, students are allocated to groups of six students per group. The students in these groups are selected to be diverse in language and culture. The importance of creating these groups is to encourage them to work together in their diverse groups during the weekly tutorial sessions. The group activities were completed in class where students could draw from one another’s diverse backgrounds to discuss aspects of culture and intercultural communication.

In 2020 and 2021 more than 30% of the class completed a questionnaire on SUNLearn. The purpose of the questionnaire was to allow students to reflect on their experience of the module. Their responses indicated a general appreciation for the module, an increased awareness of the richness of different cultural perspectives, and their perception that it directly impacted their individual skills in communicating effectively.

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**Title:** International Collaboration through Design Thinking: A Case Study of the Global Classroom for Democracy Innovation

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** Wingfield, MM; Adamovic, M; Von Lieres, B; Mujulizi, M

**Keywords:** global classroom, design thinking, climate change, democracy

**Abstract:**

The Global Classroom for Democracy Innovation (GCDI) brings together university students and civil society actors from around the world in a collaborative online format for cross-cultural engagement, learning and impact. We aim to deepen collaborative pathways towards global citizenship and social change, offering students professional skills development including facilitation training and design thinking, and opportunities for applied learning within curricular and co-curricular settings (Najafi et al., 2017; Starke-Meyerring & Wilson, 2008). This presentation focuses on a range of insights gained from the unique partnerships that made this work possible in terms of globally-networked learning, and the design thinking methodology (Manzo & Garzon, 2011) used to facilitate online student project development around the topics of climate change and democracy.

This presentation highlights insights from the collaborative development of the Global Classroom for Democracy Innovation (GCDI), and its month-long virtual pilot workshop, the “Climate Change Design Jam”, from a partnership between Stellenbosch University, the University of Toronto, University West, Sweden, and co-curricular partners through Hart House at the University of Toronto and Vancouver

Design Nerds. Partners bring unique skills to the GCDI, and have co-designed new processes and methods for virtual, global student engagement. GCDI hosted the “Climate Change Design Jam” over four weeks in March 2022. We employed a design thinking methodology to facilitate online student project development around the topics of climate change and democracy. Students were offered the tools to co-design concepts and prototypes that are grounded in theory, address global challenges, and have the potential for real-world impact. GCDI partners observe that fundamental principles of fostering genuine connections (both online and offline) between students can act as a useful foundation on which project development can be based. Further, we see that when faced with ‘wicked problems’, such as climate change and challenges to democracy worldwide, design thinking methods and collaborative approaches can act as a catalyst for action (Manzini, 2015). This pilot series provides insight into student engagement in an international context, and thus the development of cross-cultural and collective intelligence, which can be formative for similar projects in the future (Behari-Leak, 2020).

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**Title:** Learning in the Clinical Environment: A Balancing Act

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Archer, E; Meyer, R

**Keywords:** learning, facilitation, student-centred, curriculum renewal, faculty development

**Abstract:**

Health professions education (HPE) is the field of expertise applied to the education of healthcare providers. HPE is in a state of constant change in response to changing healthcare needs and with a focus on nurturing highly adaptable graduates (Frenk et al., 2010). The need for adaptability stems from the recognition that healthcare students need to be competent within a diversity of healthcare settings. The demands of such environments require graduates who are able to be metacognitively aware of their own learning.

This study explored how healthcare students and facilitators perceive learning and their role in learning, with the purpose of informing future strategies to improve support for students. The research question was: What are students’ and facilitators’ perceptions and experiences of learning in the clinical environment?

A qualitative methodology within an interpretive paradigm was used. Convenience sampling was undertaken, where fourth-year physiotherapy and nursing students from Stellenbosch and Sheffield University (medical only) as well as the facilitators involved with these students, were invited to participate. The purpose of including students and facilitators from different universities was to allow for an understanding of how different contexts play a role in students’ understanding of learning. Data was generated by means of focus group discussions (FGDs) and interviews. The findings from interviews with nursing facilitators will be the focus of this presentation.

Five themes were identified from the interviews with the facilitators, namely: the teacher's role is central to learning, teaching is a social process, learning is a structured process, learning is about taking ownership, and the environment plays a fundamental role in learning.

The focus of this study was on how to best support students in their learning. The way facilitators view their role in learning has implications for the quality of learning experiences and points to the reviewing of curricula so that students are encouraged to take an active role in their own learning. This study offers some recommendations for faculty development initiatives to assist facilitators in improving their skills in the facilitation of learning.

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**Title:** Learning with and from Visual Redress at Stellenbosch University

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Costandius, E; Van Rooi, L; De Villiers, G

**Keywords:** visual redress, social justice, space, decolonisation, inclusive learning spaces

**Abstract:**

The Visual Redress project informally started in 2010 with student projects on the Rooiplein, but became a strategically funded project in 2019 after the student protests of 2015/2016. Students asked for inclusive and decolonised spaces and the Visual Redress project reacted to the call by installing a new sculpture, introducing benches with welcoming messages in different languages, changing the names of buildings, and putting up boards to contextualise statues and places. Reflecting on the implementations, we were interested in determining how students and staff members experienced the Visual Redress project and to what extent this environment influenced their teaching and learning. Lefebvre (1991), in his book *The Production of Space*, argues that space is a mental and material construct, which means that what is in that space counts, but how we experience that also counts. Lefebvre (1991) says that spaces shape those who inhabit and move through them and could naturalise behaviour and privilege certain modes of being over others, and therefore they could have an influence on teaching and learning. A case study method was used and interviews were conducted with 61 students and 39 staff members from different racial and cultural groups and an anonymous online survey was distributed in which 104 students and staff took part. The results of the research included that many students noticed the changes and felt that they made a difference. However, they also indicated that visual redress does not mean that other parts of the university (staff equity and curriculum) have also transformed and that there is a risk that visual redress could become merely a symbolic gesture. The lessons learned from the investigation were that redress should become a more collaborative and integrated process and not separate from other decolonisation processes on campus (see Dei, 2022; Le Grange, 2021; Mbembe, 2021). Research on spatial environments and decolonisation is a rather new field of study and a book on visual redress in Africa that specifically focuses on spatial changes and the implications after colonialism ended in Africa will be published by Routledge in 2023.

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**Title:** Life Sciences Self-directed Learning during Emergency Remote Teaching and Assessment

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** Botha, M

**Keywords:** Life Sciences, student-teachers, self-directed learning

**Abstract:**

Postgraduate Certificates in Education (PGCE) aim to train Further Education and Training Phase (FET) students for the teaching of Grade 10 to 12 learners. This qualification requires dedication to specialist elective subjects such as Life Sciences (LSci), the scientific study of living things, and how to translate and apply acquired undergraduate knowledge to practical teaching and problem-solving activities, and to develop key skills to teach and prepare future generations of learners for careers in (life) sciences. Whether it is laboratory practice or fieldwork, practical learning experience is an integral component of the LSci curriculum.

The Covid-19 pandemic challenged educators and student-teachers in their engagement with this practical component and the execution and assessment of practical work. Re-imagining and re-thinking practical classes' curricula became inevitable (Stafford et al., 2020). Therefore, we had to find innovative ways during emergency remote teaching (ERT) (Hodges et al., 2020) to enable engagement with this crucial practical component of LSci.

Based on anecdotal evidence obtained whilst assessing LSci student-teachers' activities during ERT, this presentation aims to share innovative ideas for a LSci praxis and how student-teachers engage in planning lessons and practical activities in preparation for becoming effective LSci teachers in an ever-changing era. Relying on concepts from *Science on a Shoestring* (De Beer, 2016), student-teachers designed and developed practical lessons/activities and executed these activities at their place of residence, which was video recorded and submitted online (SUNLearn) for assessment according to pre-set criteria (rubric).

Of particular interest was the innovative initiatives of student-teachers engaging in self-directed learning, whereby students take initiative for their own learning, including activities such as selecting, managing, and assessing their own work (Mentz, De Beer & Bailey, 2019). Peers provide collaboration during the preparation and executing/recording of these activities, while educators provide support and resources to student-teachers in preparation for assessment of the practical component. Such innovative work could/will inform the rethinking of and planning for assessment in LSci teacher training as student-teachers engage in self-directed learning that strongly links to the higher-order thinking skills necessary for life-long learning in an unpredictable future. Self-directed learning initiatives could inform future research into other practical (science) disciplines to re-imagine teaching and assessment.

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**Title:** Machine Translation of Engineering Assessments: Data Collection for Pilot Study

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** Kamper, H

**Keywords:** machine translation, assessments, natural language processing

**Abstract:**

The Language Policy of Stellenbosch University (2021) aims to "... promote multilingualism and the appreciation thereof, and facilitate pedagogically sound learning and teaching ... we commit ourselves to multilingualism ...". In practice, this means that "[q]uestion papers in undergraduate modules are available in Afrikaans and English". While this is noble and there are proven benefits to mother-tongue education (Kioko et al., 2014), this places a major burden on already overloaded lecturers. Some lecturers are also not proficient in all the required languages. In the Faculty of Engineering, many lecturers therefore turn to Google Translate to provide a first-pass translation. But these automatic translations often lack the required vocabulary to cover engineering concepts.

This work has the larger goal of building an automatic machine translation system (Koehn, 2020) for translating assessments from English to Afrikaans in the engineering education domain. For a pilot study, we have collected and aligned roughly 800 parallel English-Afrikaans sentences from previous A1 and A2 assessments from three courses taught in Electrical and Electronic (E&E) Engineering. The LaTeX markup for mathematics is also retained. One example of a training sentence pair is given below:

Afr: Beskou 'n  $x[n]$ -punt diskrete-tyd sein  $x[n]$ .

Eng: Consider an  $x[n]$ -point discrete-time signal  $x[n]$ .

Using the OpenNMT system (Klein et al., 2017), we have built initial machine translation systems on the data. OpenNMT is an open-source machine learning framework that allows engineers to build machine translation systems. We pretrain machine translation models on larger sets of parallel Afrikaans-English data from outside the engineering domain, and then fine-tune the model on the collected data. Analysis shows that, while promising, the systems still struggle with words that do not occur in the training data, e.g. the translation of CPU (Eng) to SVE (Afr).

Future work will include further model improvements, a more substantial evaluation effort (which includes direct comparisons to Google Translate), extensions of the dataset itself, and possible extensions to isiXhosa. It will also be crucial to do subjective evaluations: getting feedback from students themselves. If successful, such a system could be used to easily and automatically produce accurate translations of assessments and other material in students' mother tongues.

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**Title:** Making Work-based Learning Work

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** Coetzee, F; Couper, I

**Keywords:** apprenticeship, mentoring, problem solving

**Abstract:**

Background

The Faculty of Medicine and Health Sciences initiated a rural Longitudinal Integrated Model (LIM) for training medical students in 2011 that employed work-based learning as the primary learning opportunity for final-year medical students. For the past seven years, adaptations to the curriculum have been made and we gained a better understanding of how to support medical students trained in a year-long integrated programme.

Context

Health professions education is dependent on the interplay of two complex systems, the formal learning environment of universities and the clinical environments where students learn how to put their knowledge to use. The LIM purposefully exposes medical students to rural healthcare environments to enable the development of skills for rural practice and to recruit clinicians for future practice in rural and underserved communities (Hudson, 2017). Students are immersed in a rural work environment for an entire year, affording them the opportunity to learn through meaningful participation in clinical teams.

Description of the work done

Of key importance for work-based learning to take place is the structuring of the curriculum to foster learning relationships. We changed our approach to support work-based learning by prioritising learning conversations based on patient encounters and prioritising facilitation of learning. In addition, we restructured the assessment plan to achieve constructive alignment (Biggs, 1996) of the learning opportunities and the assessment.

What this work adds

The following work-based learning innovations regarding clinical teaching in rural environments were implemented: 1) Increased use of workplace assessment instead of knowledge-based tests; 2) The use of technology to enable learning conversations with clinical experts; and 3) The implementation of an assessment tool for the graduate attributes.

Conclusion

The LIM offers final-year medical students opportunities to put into practice the theory that they were taught in previous years. It is important that the curriculum in rural work environments be structured appropriately to support work-based learning and ongoing reflection on experiences related to problems encountered within the workplace.

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**Title:** Medical Teachers Navigating their Identity in the Context of Major Curriculum Reform

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Volschenk, M; Hansen, A

**Keywords:** curriculum reform, teacher identity, landscapes of practice, critical consciousness

**Abstract:**

Global calls for 21st-century health care to be more responsive to societal health needs and inequities have catalysed new ways of thinking about teaching and learning in medical education. Increasingly, undergraduate medical curricula are transitioning towards competency-based educational models, while some are adopting critical pedagogical approaches. An underlying assumption is that medical teachers are willing and able to implement the required curricular reform. However, reconceptualising curricula at this level requires teachers to move beyond modifying their teaching syllabi towards deeper engagement with the fundamental principles shaping the curriculum reform. Ensuing epistemological and ontological tensions may influence their professional identity construction in unpredictable ways. Currently, little is known about medical teacher identity construction in the context of large-scale educational reform. This paper draws its data from a qualitative study that explored the range of understandings that health professions educators bring to teaching as they interpret the principles underpinning their curricula. We explore the implications that these understandings have for the identity construction of medical teachers involved in undergraduate curriculum reform. Qualitative data were generated using focus group discussions and interviews with twenty-six purposively selected medical teachers at a South African university. Data were coded and analysed thematically. Findings show that, although most medical teachers supported the curriculum renewal initiative, their interpretation of what these changes mean for their teaching, as well as their perceived capacity to implement the philosophy of the renewed curriculum, were influenced by identities that were formed within the boundaries of the traditional curriculum.

Drawing on landscapes of practice theory and identity learning models, this paper offers new insights into the identity tensions experienced by medical teachers as they attempt to make sense of the principles underpinning their renewed curricula while grappling with translating alternative forms of knowledge into teaching practice. Educational reform in the 21st century requires medical teachers to straddle the boundaries of epistemologically and ontologically diverse communities of practice. Institutional change management strategies to facilitate curriculum reform should include a focus on identity learning, boundary-crossing competencies, and creating spaces for dialogue and reflection to support the ongoing identity construction of medical teachers traversing the changing educational landscape.

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**Title:** Mission (Im)possible? Working towards Equitable Student Access and Success

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Mouton, M

**Keywords:** access, academic success, equity, Extended Degree Programme

**Abstract:**

Student access and success are complex, multifaceted matters in higher education. Access refers to opportunity and placement, but also to epistemological access. Success involves graduation rates, but also the quality of offerings, skills obtained during studies, preparedness for the work environment, as well as employability (Lewin and Mawoyo, 2014).

Low participation and throughput rates in South Africa draw attention to substantial equity concerns. Access to higher education for all South Africans has improved significantly since the early 1990s. However, just over half of the students who enrol in undergraduate studies eventually graduate (DHET, 2017). Lack of preparedness, socioeconomic factors, cultural differences, language challenges, underserved schooling experiences, the articulation gap, etc. are some of the contributing factors (De Klerk et al., 2006; CHE, 2013). The most meaningful systemic intervention to respond to the call for enhancing equitable access and success came with the establishment of extended curriculum programmes (Lewin and Mawoyo, 2014). The aim was to create ‘the curriculum space needed to enable talented but underprepared students to achieve sound foundations for success in higher education’ (CHE 2013). At SU, this intervention, known as the Extended Degree Programme (EDP), has offered access (to higher education) to a diverse group of students via an alternative, extended and enriched route since 1995.

This research responds to the question: How effective is the STEM EDP at SU in facilitating equitable access and success? A mixed-methods approach was employed, with this paper reporting on the quantitative part of the study, focusing on the 2010 to 2016 STEM EDP cohorts. Drawing on York et al.’s (2015) model of academic success, academic achievement was gauged using grades and grade point average, while persistence was evaluated by considering graduation rates.

Results of the quantitative research revealed some indicators of success, the contribution of the EDP towards equity and redress at SU, and the potential of the programme to enhance academic success. Moreover, the success of the EDP may serve as a model for structural curriculum reform to address the persisting articulation gap in undergraduate programmes and promote academic success for all students in South Africa.

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**Title:** Moderation of Summative Assessments: Statistically, how many Scripts are Enough?

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** MacRobert, C

**Keywords:** evaluation, assessment, moderation, second marking, relevance

## Abstract:

Two assessment moderation approaches commonly used are: 1. Double marking (or multiple marking), where all marks are the opinion of at least two individuals; and 2. Second marking, where a second opinion is sought on a sample of work for quality control (Orr, 2007; Smith, 2012; Bloxham et al., 2015; Zahra et al., 2016).

Double marking has benefit for 'fair' marking of higher-order thinking (Lucas, 1971; Dracup, 1997; Brooks, 2004; Partington, 2006; Broadbent, 2017) or when a positivist perspective on student work is difficult (Orr, 2007). Nevertheless, the practical challenges of implementing double marking prevent widespread adoption, even if implementation requires less rigour by the individuals involved (Brooks, 2004).

Consequently, second marking is common and entrenched in assessment policies. For instance, Stellenbosch University requires a moderator to remark at least 10% of exam scripts and review a further sample of at least 20% (i.e. 30% in total). The efficacy of moderating a proportion of students has been questioned (Rust, 2007; Bloxham, 2009).

If second marking intends to compare the mean and distribution of marks, then a modified Cochran (2007) statistical analysis suggests a sample of 68% for class sizes of 180 students. However, very few policies require such large second-marking samples (Bloxham, 2009), perhaps showing a tacit admission that justifying divergent marks is difficult.

Difficulties arise from different interpretations of assessment criteria (Bloxham, 2009; Broadbent, 2017), similar marks being awarded for different reasons (Rust, 2007), or marks converging due to power relationships (Partington, 2006; Smith and Coombe, 2006; Orr, 2007; Rust, 2007; Broadbent, 2017), or simply that marks are often different but 'close' (Brooks, 2004; Partington, 2006).

The value, to students especially, of post-assessment moderation is questionable, particularly if clear marking guidelines are available (Bloxham, 2009; Smith, 2012; Bloxham et al., 2015; Beutel et al., 2016; Zahra et al., 2016). Assuming then, that the purpose of second marking is to ensure no gross errors are present, a Monte Carlo simulation of marking errors shows a sample size of 12% (for a class of 180 students) is probably adequate.

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**Title:** Negotiating Collaborative Agency in an Inter-institutional PGDip Programme: Facilitators' Experiences

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Tshuma, N

**Keywords:** collaborative facilitation, agency, postgraduate, higher education studies

**Abstract:**

There is growing interest in researching educators' collaborative activities in higher education, signalling the value of collaboration for teaching and learning, research and leadership in higher education. While most collaborative teaching literature focuses on disciplinary or inter-disciplinary collaborative practices within a single institution, this research study explored the collaborative experiences of facilitators working across three diverse HE institutions in the Western Cape to facilitate one postgraduate programme. In this presentation, I draw on facilitators' experiences of negotiating facilitation in a diverse teaching, learning and assessment space – a space that was restricted by sometimes divergent institutional requirements, especially during the pandemic. I focus on how the facilitators 'engaged with difference' within the programme and the role that their individual agency played in attempting to work towards a common collaborative agency. Ten interviews were conducted with facilitators from the three institutions and the Cape Higher Education Consortium (CHEC), under whose auspices the programme runs. Archer's primary and corporate agency was employed as a lens to explore facilitators' collaborative experiences as they engaged with the rich diversity (e.g. institution, discipline, academic identity) afforded by the programme.

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**Title:** New Times, New Strategies: Rethinking Higher Education through the Lens of 'Space' and Spatial Theory

**Contribution type:** Reflection

**Contribution format:** Presentation

**Author(s):** Bernard, T; Lombard, S

**Keywords:** critical reflection, 'space', spatial theory, student experience, foundational provision

**Abstract:**

The decolonial turn in higher education has led to a body of literature in which scholars offer postcolonial critiques of many university structures and practices (see, for example, Bhambra, 2016; Kubota, 2016; Gyamera & Burke, 2018; Luckett & Naicker, 2019 and Gopal, 2021). In South Africa, these critiques have pointed out that previous governmental and institutional responses to transformation, including Extended Curricula Programmes (ECPs), have been superficial at best and problematic at worst (see Luckett, 2019). In this paper, we draw out key points from this critical scholarship in order to ask the (reflective) question, "what next?". If these are, indeed, new times, what new strategies, tools and support structures can be introduced to achieve educational justice? While we do not have all the answers, we show how attention to 'space' and spatial theory has: (1) changed the way we think about, and understand, student experiences; (2) changed the way we think about academic interventions and how we implement them; and (3) helped to shift the discourse about ECPs in different institutional contexts. We hope that, by sharing some of our research, practices and reflections along with the work of Bhabha (1994) and Soja (2010), we might, for a moment, cause our audience to (critically) reflect on 'space' – the spaces they inhabit, move between and create – and why attention to 'space' is important.

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**Title:** Opening the GG Cillie Building and the Visual Redress at Stellenbosch University (VRSU) Initiative

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Gierdien, F

**Keywords:** visual redress, decolonisation, Stellenbosch University

**Abstract:**

We do not know to what extent the inauguration of the GG Cillie Building on 22 September 1970 signalled a significant moment in the history of Stellenbosch University (SU). The event reveals salient links between politicians, academics, the building and its architecture. Attendees, for example, included BJ Vorster, while he was Prime Minister of the National Party-dominated apartheid state and chancellor of SU, his minister of national education, JP van der Spuy, and the retired SU rector, HB Thom. Based on these details, it is argued that the building's 'social logic of space' frames an 'organic solidarity' between the apartheid state structure and SU (Hillier & Hanson, 1984; Jansen, 2019; McNeill et al., 2022). Studying the building's 'social logic of space' therefore addresses a knowledge gap in the visual redress at SU (VRSU) initiative. This initiative calls for renewing the public meaning and symbolism of SU's buildings in a resolute, intentional and coordinated way. The relevant research question becomes: What are ways to 'open' the hidden social, political, educational and architectural issues that implicate the GG Cillie Building in terms of the VRSU initiative? Data sources include reports in Afrikaans in Matieland (1970), the building's architecture and architectural drawings, and photographs from SU archives. Using an overarching framework – the social logic of space – and constructs and methods adapted from architecture, architectural history, cultural theory and sociology helped in uncovering, or 'opening', the hidden and not so hidden organic solidarity present in the actual event and beyond. Analyses of the reports, for example, show how an 'educational disciplinary reason' that emphasises an apparently neutral 'norm', accompanied the building's racist educational imaginary. This can be linked to SU and the apartheid state's forced removals of Die Vlakte residents and especially SU's 'alienation' of the Luckhoff school and its displacement to Ida's Valley in 1969. The study's significance, interestingly, lies beyond considering the building as a modern architectural marvel. Future work in a similar vein can be extended to other SU buildings.

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**Title:** Photo-essays in Pre-service Teacher Education: Arts-based Assessment as Learning

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** Davids, D; Rock, C

**Keywords:** assessment as learning, reflective practice, teacher education, arts-based assessment, photo essays

**Abstract:**

The Practical Learning module in the BEd programme offers pre-service education students the opportunity to combine their theoretical and practical studies through work-integrated learning. During their four-year programme, BEd students complete twenty weeks of school-based study, blending their learning-from-practice and learning-in-practice as espoused in the Minimum Requirements For Teacher Education Qualifications (MRTEQ, 2015). This is to prepare students for teaching in the South African context, which “implies a commitment to working within, and for, the wide diversity of social and educational contexts in the country, to improve the educational (and life) chances of all” (Robinson, 2020:14).

The practical component of the programme is also tied in with the intended focus of developing students’ professional teaching standards, guided by the South African Council of Educators (SACE). The SACE professional standards provide a helpful guide to assessing students’ growth and development as teachers in the different school contexts they find themselves in throughout the practicum.

This year, the BEd third-year students used the SACE professional standards framework as a self-assessment tool to develop their reflective practices and critical lifelong skills as teachers. By self-selecting four of the ten specific SACE standards to evidence, students have actively engaged with assessment as learning by capturing their progress through photo essays. This arts-based approach deepens the reflective capabilities of the pre-service teacher as the photographs help students to relive and interpret their experiences in school as they reflect on their learning through reflective conversations about school contexts and what it means for teachers and learners in South African schools.

Similar studies on arts-based approaches to teacher development in arts education found that the “interconnection between the text and the photographs presents the practical application ... for the teacher’s professional development” (Mesías-LeMa, 2017). Whilst photo essays have been used in arts education (Mesías-LeMa, 2017; Roldán, 2010), few studies focus on the practicum element of teacher education. This study thus wishes to illuminate the potential applications and learnings for including photo essays and arts-based assessment methodologies in teacher education. These insights can be shared across the faculty and disciplines to support students’ shaping of their identities whilst demystifying assessment as learning as a valid and valuable assessment method.

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**Title:** Reflecting on Redesigning Assessment in an English Portfolio

**Contribution type:** Reflection

**Contribution format:** Presentation

**Author(s):** Bishop-Swart, S

**Keywords:** ERTLA, ARTLA, English Portfolio, reflection, assessment

**Abstract:**

In order to create a truly transformative and engaging student experience, critically reflecting on the use of assessments designed for the specific environment in which teaching and learning occur is essential. The designing and subsequent implementation of these environment-specific assessments, however, is time-consuming and can seem irrelevant or unnecessary to students, academic staff and programme coordinators unless academics engage as “reflective practitioner(s)” (Biggs, 1999:6) and adjust assessments accordingly. This reflective self-study reviews the changes made to a variety of paper-based assessments used for English language courses presented as fully contact courses by the Stellenbosch University Language Centre’s English Portfolio prior to the global pandemic. Gibbs’ (1988) reflective cycle is used as a framework to describe and explore the design changes made to assessments by the Programme Coordinator when moving programming online as a response to Emergency Remote Teaching Learning and Assessment (ERTLA) and then Augmented Remote Teaching Learning and Assessment (ARTLA). The study provides a critical reflection on the necessary changes made to the English Portfolio’s paper-based assessments during the move to ERTLA and then ARTLA, offers specific reflection questions to be asked when adjusting or redesigning assessments for a different teaching and learning environment and shares examples of how previous paper-based assessments were effectively manipulated when assessing the same content in an online environment. Ultimately, this reflective self-study hopes to motivate academic staff, programme coordinators and academic managers to use “deliberate and mindful thinking” (Hegarty, 2011: 581) to critically reflect on the changes made to specifically assessments during ERTLA and ARTLA in order to best prepare for future assessment adjustments, especially as a result of education disruptions. “We naively forget that technology is a tool, not an end; the right approach should not be learning from technology, but rather, learning with technology. If we do not learn from our mistakes during Covid-19 times, reality eventually will take its revenge when things are over.” (Coeckelbergh, 2020)

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**Title:** Reflection: A Binocular Surveillance of a Course Module

**Contribution type:** Reflection

**Contribution format:** Presentation

**Author(s):** George, E

**Keywords:** reflective practice, collaboration, constructive alignment, transformative learning

**Abstract:**

The process of programme renewal at the Faculty of Economic and Management Sciences culminated in the establishment of Professional Communication for EMS 144 alongside other new courses. The Language Centre was tasked with this responsibility and consulted with the EMS Faculty to produce a course designed around both academic and industry-specific skills for young business graduates that were presented for the first time in the second semester of 2021.

Participating in the Assessment Short Course offered by the Centre for Teaching and Learning in March 2022, provided the theoretical background and impetus for reflection, critique and the adaptation of this new offering. Shon's (1983) work was employed as a framework for a collaborative form of reflection on the course. Mezirow's (1991) transformative learning theory provided a second lens for reflection. Where Shon's model was primarily used to assess how the team of lecturers as a collective experienced the course and the insights they could offer, Mezirow's model was used as a consecutive interrogation of my own experiences of the course as the course content creator and coordinator.

The main lessons learned were centred on the constructive alignment of the course as a whole (Biggs, 2014). The most practical change that transpired from this reflective practice, is that summative assessments were re-examined by reformulating some of these as formative in nature, while maintaining the integrity of the course outcomes. The most meaningful change the reflective process inspired was the acknowledgement that as we presented the course, it indicated that we modelled what we were striving to teach in professional communication.

Looking back, I now consider that the collaboration between lecturers made evident in our course helped our students in understanding that we do not teach or learn in a vacuum, but that there is multidisciplinary expertise available in the university ecosystem (Biggs, 1993). As lecturers we want the content to become more than completed course work – a catalyst for continued professional development for our graduates on campus and in the world of work.

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**Title:** Relevance of Current Assessment Practices for a System Analysis and Design Module

**Contribution type:** Reflection

**Contribution format:** Presentation

**Author(s):** Laubscher, R

**Keywords:** deep learning, assessment, reflection, SAD module

**Abstract:**

A colleague created the online content and e-assessments for the System Analysis and Design (SAD) module at the Military Academy. The lecturing responsibility for this module was transferred to me (newly appointed) and I had my own preferences, perspectives, attitudes and values regarding learning and assessments.

This was a good opportunity for reflecting on the quality of learning facilitated by the current teaching approach and assessment practices. The reflective model of Mezirow (1990) has three types of reflection, namely content (focus on the learning content), process (focus on how learning was facilitated) and premise (focus on why the practices were chosen). Premise reflection was used to reflect and potentially change perspectives regarding constructive alignment (Biggs, 2012) of learning outcomes, teaching methods and assessments.

At the start, specific aspects were studied, namely the SUNLearn system, the developed content, and the teaching approach and assessment practices. The lecturer believes in the principle of assessments for learning, and learning deeper than the grades obtained. A literature review followed to support or change the perspectives of the lecturer.

The models and theories regarding the transformative dimensions of adult learning (Mezirow, 1991; Biggs, 1999), as well as the principle of 'assessments for learning' enabled the reflection process. Learning transforms to deeper learning when students seek to understand and seek meaning, relate concepts to existing understanding and critically evaluate concepts (Prosser and Trigwell, 1999). This theory was used to reflect if the teaching approach and assessment practices in the module will affect deeper learning.

The student-centred approach is good because students learn through doing and it is the preferred approach to bring forth deeper learning (Prosser and Trigwell, 1999). The current assessment practices were confirmed to support deeper learning. The lecturer's perspective regarding assessment practices changed to a deeper understanding of the importance of designing assessments before learning content (Fry, Ketteridge & Marshall, 2008:135). Crisp (2011:5) indicates additional ways of e-assessments other than multiple choice and short answers; this will be investigated.

A formal research project could follow based on the outcomes of this reflection.

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**Title:** Scaffolding Computer Literacy with SAM Cengage: A Reflection

**Contribution type:** Reflection

**Contribution format:** Presentation

**Author(s):** Marais, K

**Keywords:** scaffolding, multimodality, digital literacy

**Abstract:**

Learning technologies allow students to work in a fully interactive simulated environment and can assess student performance on tasks completed on a computer. This is a valuable tool that contributes to students' learning. The Skills Assessment Manager, or SAM, developed by Cengage is such a platform and is being used in multiple faculties at Stellenbosch University to aid students when learning to use Microsoft Office tools effectively. Students are able to access the platform anywhere via SUNLearn and gain access to a range of predetermined activities that allow students to observe, practice and apply operations that are typically used in Word, PowerPoint, Outlook, Access and Excel. SAM scaffolds students' learning and follows the same steps proposed by Bruner and Vygotsky to help meet students where they are at (Shaw & Nagel, 2019).

First-year BCom students enrolled for Information Systems 112 use SAM Cengage to observe and attempt tasks with immediate feedback. The use of such a platform has proven to be beneficial when the mode of provision was predominantly online with a large student cohort (600–800 students) and was

effective when supplemented with the primary course content to promote multimodality (Jewitt, Bezemer & O'Halloran, 2016).

This reflection, based on Gibbs' reflective cycle (Gibbs, 1988), considers the implementation and use of SAM Cengage in the Faculty of Economic and Management Sciences for the first time for the purposes of forming a foundation for computer literacy, and juxtaposes the extent to which this platform is used in this course with that of other faculties at Stellenbosch University also currently using SAM for similar courses. The appeal of SAM as a simulated experience of the Microsoft Office Suite was positively received by students based on module feedback but is to be weighed against the steep learning curve and setup cost, the limitations of available exercises and idiosyncrasies of the user experience (both from the perspective of students and instructors). This reflection may aid other environments currently considering the use of this particular platform in the decision on how to use SAM Cengage in developing students' computer literacy for their courses.

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**Title:** Student WhatsApp Groups – A Boon or a Burden?

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Le Roux, D; Parry, D

**Keywords:** academic instant messaging groups, WhatsApp, academic performance, academic stress, teaching effectiveness, learning community

**Abstract:**

The use of instant messaging (typically WhatsApp) groups for various academic purposes is a rising, but largely understudied, trend in higher education institutions. To advance our knowledge of the role of these groups in students' academic performance and well-being, we investigated the usage purposes and outcomes of three types of academic instant messaging groups (AIMGs) at Stellenbosch University. The first type, which we termed Formal AIMGs, includes those that are managed by teaching staff (e.g. lecturers, assistants, or tutors) and are used as part of the formal teaching and learning plan. The second type, Class AIMGs, are created by students and open to be joined by all members of a particular class group. Finally, Study AIMGs refer to smaller groups created by students that know one another personally and use the group for sharing study material or collaborating in group assignments. We posed research questions concerning the prevalence of participation in the different group types, as well as the associations between such participation and academic performance, academic stress, students' perceptions of the quality of the teaching they receive, and students' social experiences of belonging to a learning community. A survey methodology was utilised to collect data from a cross-faculty sample of undergraduate students (n=1 752).

Our findings indicate that, on average, students participate in around nine different AIMGs during a typical semester, with Class AIMGs emerging as the most frequently used group type (95% of respondents use these groups in some modules and 61% use them in all their modules). For all three group types, participation is characterised more by reading than by the posting or sharing of content.

Regression analyses revealed small but statistically significant interactions between participation in Formal and Study AIMGs and academic performance, as well as between participation in Study AIMGs and academic stress. Participation in these groups also predicts students' social experience of a learning community, as well as their perception of the quality of teaching they receive.

Given the high rates of AIMG participation among students, the present study provides a valuable first step towards understanding their role in students' performance and well-being.

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**Title:** Student-perceived Value of the Use of Clay Modelling in Undergraduate Clinical Anatomy at Stellenbosch University

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Correia, JC; Baatjes, K; Meyer, I

**Keywords:** anatomical clay models, anatomy teaching, reflective practice, collaborative learning

**Abstract:**

Clay modelling is increasingly being used as an anatomy teaching method to supplement practical dissection sessions. The use of modelling is an active, haptic learning tool used to enhance student engagement and improve students' understanding of anatomical relationships at a gross level. Furthermore, not only does clay modelling engage more senses in the learning process, but it was also found that there are educational advantages to the group interactions that are associated with the construction process to further collaborative learning.

The aim of the study was to explore the effect of building anatomical clay models on students' awareness and understanding of their own thought processes as well as to explore whether clay modelling promotes collaborative learning. This cross-sectional study entailed the use of clay modelling and reflective practice to promote metacognition in third-year BSc students (n=12), at Stellenbosch University's (SU) Division of Clinical Anatomy. The third-year BSc students were asked to build anatomical clay models (in groups) and complete a reflective assignment and evaluation form as part of their assessment in the Applied Anatomy module. The reflective assignment was based on Gibbs' reflective cycle. The inclusion of such an assignment would trigger students to reflect upon their learning experience and thus promote their metacognition.

Ten (10) BSc students volunteered to take part in the study. A mixed-method approach was followed; the reflective assignments were qualitatively analysed, while the evaluation forms were quantitatively (statistically) analysed. Data obtained from the online evaluation form indicated an agreeable response that clay modelling was a valuable learning tool; however, the participants preferred cadaveric dissection over clay modelling to learn anatomy. Furthermore, three themes became prominent from the thematic

analysis of the reflective assignments, namely 1) the advantages of clay modelling; 2) the challenges of clay modelling; and 3) suggestions for future practice.

The research suggests that inclusion of hands-on clay modelling in undergraduate clinical anatomy is a valuable learning tool. The participants perceived that it enhanced their anatomical knowledge and improved collaborative working.

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**Title:** Students Taking Responsibility for Their Own Learning: A Scoping Review

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Adendorff, H; Farmer, JL; Jacobs, AHM; Ntwasa, S; Swart-Jansen van Vuuren, C

**Keywords:** student responsibility, design for learning, self-directed learning

**Abstract:**

Student responsibility is a recurring topic of interest in the higher education context, and even more so since 2020. In literature, it manifests under headings such as self-regulated learning (Ten Cate et al., 2004) and self-directed learning (Bergamin, 2019), amongst others. It is also encapsulated in SU's institutional values and graduate attributes and has been an underlying theme in initiatives such as the flipped classroom approach. But what do we really know about how students take responsibility for their own learning (or why they don't)? And did the ERT period promote this in a lasting way, as some have speculated (Mou, 2021; Jaramillo, 2022)? In this paper, we will share the findings from a scoping review that set out to shed light on some of these questions.

Specifically, we wanted to know (1) how students take responsibility for their own learning; and (2) how lecturers create opportunities for students to take responsibility for their own learning. Following a scoping review protocol, we searched three databases, focusing on papers dealing with how students take responsibility for their own learning or how such opportunities were created. We then employed the PRISMA approach (Moher et al., 2015), looking for papers that met our criteria (post-2020, undergraduate, full-time, contact and higher education). Finally, we set out to read these for common themes, using inductive coding.

Key themes in the papers on students taking responsibility for their own learning included fear of failure and procrastination. Methods used by lecturers included project-based learning and the flipped classroom approach, combined with reflective writing.

If we are to help students take agency for their own learning, we need to first understand the concept of student responsibility. To that end, this review provides an overview of what is already known and offers a theoretically grounded starting point. The surprisingly low volume of papers specifically focusing on student responsibility, highlights the urgent need for more work in this area.

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**Title:** SurveyLab: A Virtual Environment for Teaching and Learning Survey Methods

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** Cois, A; Nkonki, L

**Keywords:** virtual population, active learning, survey methods

**Abstract:**

Engaging students in real-world data production is an important aspect of teaching survey methods. Active involvement in designing and implementing data collection strategies allows students to experience the difficulties and costs of obtaining quality data and to gain a deeper understanding of the interdependency between elements of a research project (Foster and MacGillivray, 2010; Allen and Baugman, 2016). However, students have limited possibilities in this regard. Data collection is time-consuming, involves direct costs, and requires intense supervision to ensure ethical compliance (Birrell, 2020). These aspects are hardly compatible with the short time frame and limited resources of a semester teaching module.

We built on previous experiences with simulated populations to support students' projects (Bulmer and Haladyn, 2011) and developed the SurveyLab virtual environment to overcome these limitations. The environment, accessible through a user-friendly interface (surveylab.sun.ac.za), allows students to design data collection tools, sample a simulated human population of 40 000 individuals spread across the 21 villages and 5 regions of an imaginary country and conduct virtual data collection on the selected individuals for subsequent analysis. The realistic characteristics of the individuals – including sensitivity to data collection fatigue, varying propensity to refuse participation and temporary unavailability – allows for a first-hand experience of common challenges in survey research.

The tool is implemented with non-proprietary technologies to ensure expandability, transportability and low maintenance cost. The development has been funded through the Fund for Innovation and Research into Teaching and Learning (FIRTL).

The SurveyLab is conceived as a tool to complement theoretical teaching and facilitate the development of practical competencies in designing and conducting population surveys, with the potential for a broader utilisation across other teaching modules that require access to population data for training and assessment purposes.

The tool is currently being experimented with the students enrolled in the Survey Methods module of the MPhil in Health Systems, and external evaluation by lecturers from various institutions is under way. Preliminary results from the analysis of students' feedback collected with a focus group at the end of the module and from the external evaluation will be available by the time of the Conference.

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**Title:** Teaching Identity Construction in Academic Texts through Modality and Visuals

**Contribution type:** Innovation  
**Contribution format:** Presentation  
**Author(s):** Bernard, T  
**Keywords:** identity, academic writing, modality, visuals

**Abstract:**

The complex and multifaceted concept of 'identity' is an important component of any sociolinguistic understanding of language and language use (see, for example, Holmes, 1997; Bucholtz, 1999; Omoniyi & White, 2006; Makubalo, 2007; Norton, 2010; Hornberger & McKay, 2010; Wodak, 2012; Clark, 2013; and Bristowe, Oostendorp & Anthonissen, 2014). In this paper, I elaborate on some of this sociolinguistic literature in order to establish why 'identity' should be an anchoring or prominent feature of any course designed to teach an academic variety of a language and academic literacy practices. After I have established this, I present a quick overview of the key components of a curriculum that was designed with this principle in mind. While I stop here and there to highlight something about my teaching philosophy or my assessments, I rest on the component designed to teach 'modality'. From an applied linguistic perspective, modality refers to the linguistic resources that allow speakers to express attitudes and judgments. An understanding of modality encourages people to pay closer attention to how communicators represent themselves and others in the text (see, for example, Fairclough, 2014), but it also equips students with the metalanguage to discuss how this takes place and it enables them to incorporate these features into their own texts. While this may seem complex, I illustrate how one can teach modality through visuals and why, in contemporary society, it is important to do so.

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**Title:** The Effectiveness of a First-year Module Presented to Repeating Students as an Accelerated Learning Programme for Subsequent Learning  
**Contribution type:** Research  
**Contribution format:** Presentation  
**Author(s):** Schonken, C; Ontong, J; Bruwer, A  
**Keywords:** accelerated learning programme, financial accounting, first year, subsequent learning

**Abstract:**

The use of an accelerated learning programme as an intervention to allow failing students to repeat a module in an accelerated format instead of having to redo a module over a semester or an academic year has various academic, economic and social benefits. Accelerated learning programmes are, however, often criticised in the literature for surface learning that may influence subsequent learning (Beattie, Collins & McInnes, 1997; Eames et al., 2018). Deep learning refers to learning with understanding, as opposed to surface learning, i.e. rote learning (Beattie et al., 1997). Using a quantitative approach, this

study statistically analysed the grades achieved by three distinct groups of students for a first-year financial accounting module and their subsequent second-year financial accounting module. The study found no statistical difference between students who repeated a module over the traditional academic period and those who repeated the module in an accelerated format. This study contributes to the limited research on accelerated learning programmes for repeating a module. The results provide empirical evidence that supports the questioning of the notion that accelerated learning programmes only lead to surface learning, and results are presented that advocate for the implementation of accelerated learning programmes as an effective mode for repeating students to follow to achieve academic success, given the various benefits.

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**Title:** The Ex-Cell Workshop – Teaching Business Acumen in Offender Rehabilitation

**Contribution type:** Reflection

**Contribution format:** Presentation

**Author(s):** Ontong, JM; Arendse-Fourie, S; Everts, RP

**Keywords:** community corrections, employment, higher education, juvenile justice, social impact

**Abstract:**

The roles of higher education institutions (HEIs) can be described as teaching and learning, research and community engagement, and an intersection exists between these roles where higher education can provide educational training to the community (Bender, 2008: 87-88). The study aims to explore whether higher education teaching initiatives may be adapted for and extended to social impact and community initiatives, which is an important consideration of HEIs in achieving various aspects of their mandate simultaneously. This study aims to better understand the perceptions of the participants in a programme of this nature as to whether a workshop could add tangible value to the notion of finding employment or starting a small business after incarceration. The concept of thinking is at the heart of teaching and learning and reflective thinking may inform teaching practice (Quay and McCaw, 2019: 146). This study's objective was to examine the perceptions of offenders, who attended a business acumen workshop provided by a university, on the role of higher education in providing training at correctional facilities. Participants' critical reflection on the workshop's learning outcomes was based on open and close-ended questions contained in a questionnaire. Given the positive feedback from participants, academics reflected on the workshop as an effective way of extending institutional resources to community access to an inclusive education in carrying out its teaching and learning and community engagement mandate simultaneously. Academics believe this workshop will inform and extend future teaching and learning practices in the social impact domain. Workshop participants reflected on their own lived experiences. The findings suggest that HEIs should engage with all stakeholders to promote social transformation, inclusivity and empowerment. Although offenders identified the need for vocational training for specific skills, the findings indicate successful implementation of and value derived from the business acumen workshop and suggest that HEIs are able to provide appropriate training to participants who often do not have a secondary education background. The findings further suggest that various HEIs, as part of their

social impact footprint, should consider the integration of teaching and learning with such social impact initiatives.

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**Title:** The Link between Creativity and Curriculum Renewal: A Concept Analysis

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Barnard, M

**Keywords:** curriculum renewal, creativity, concept analysis, programme renewal

**Abstract:**

The literature shows that universities must engage in curriculum renewal to work towards an academic offering that is sustainable and relevant to the student market and societal changes (Van der Merwe, Schoonwinkel & Hubball, 2017). However, curriculum renewal requires those involved to be creative while developing solutions for difficult problems, making changes that will have a true impact on the curriculum, and juggling the different societal influences on the curriculum. Creativity is a complex concept that is ill-defined in the literature (Plucker, Waitman & Hartley, 2011). In essence, it can be defined as the creation of something that is original and appropriate (Simonton, 2013). Although research has been done on teaching creatively and teaching creativity (Mi et al., 2020), little research exists on the role of creativity in curriculum development and renewal. The purpose of this paper is to explore the concept of 'curriculum renewal' and how it relates to 'creativity' in the literature through a concept analysis approach (Tähtinen & Havila, 2019).

This paper forms part of a PhD by publication ("The Role of Creativity in Curriculum Renewal in Higher Education Institutions: An Exploratory Study"). The aim of this paper is to explore creativity and curriculum renewal to develop a shared understanding that will inform the rest of the PhD. Walker and Avant's (2013) eight-step process was used for the concept analysis. This method provides a rigorous and structured process to explore the important and ambiguous concepts of a research study. The findings of this concept analysis are tentative since concepts change over time. It will, however, provide conceptual clarity at the time of the study and show how creativity relates to curriculum renewal. The findings of this study may be useful to academics and academic developers embarking on curriculum renewal (or programme renewal) and inform their practice in higher education.

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**Title:** The Potency of Social Justice Pedagogy

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Madonsela, TM

**Keywords:** social justice pedagogy, constitutional commitments, human rights, egalitarian, training of trainers

**Abstract:**

Advancing social justice, which is essentially about justice, anchored in fairness between all discernible social groups in society, requires integrating social justice considerations in all dimensions and stages of the legal system from law and policy reform to enforcement of laws. To integrate social justice considerations into the making and enforcement of lawyers requires social justice lawyering, which is impossible without a solid grounding in social justice principles.

The Centre for Social Justice at Stellenbosch University has identified the challenge of educating lawyers in a manner that recognises their central role regarding systematising a social justice anchored paradigm in the understanding and design of laws to optimise the law's transformative potency in a quest for an egalitarian world. Regarding South Africa, the work specifically seeks to give meaning to the constitutional commitment to laying the foundation for healing the divisions of the past and establishing a society that is based on social justice, democratic values, and fundamental human rights and freedoms where every citizen's life is improved and every person's potential freed. Data shows that South Africa has become the most unequal society in the world, with the majority of its people, mostly those classified as African and coloured, living in poverty despite constitutional and SDG (Sustainable Development Goals) commitments.

The paper will explore the potency of social justice pedagogy in accelerating change regarding equality by ensuring greater synergy between lawyering and the global and constitutional commitments to social justice. The Faculty Association of Community Colleges adopts Sanga Niyogi's view on social justice pedagogy, which holds that "the goal of Social Justice pedagogy is to develop consciousness of injustices while empowering students with the tools to work towards justice". One of the questions that arise regarding social justice pedagogy as a transformative pedagogy, is the extent to which assessment methods should also be changed to ensure greater democratisation and transformative impact. In this regard, the paper will draw from some pilot praxis initiatives, including serious gaming, that have been employed at Stellenbosch University in social justice and the law education, as well as the training of trainers on social justice, in the last few years.

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**Title:** The Use of Blended Learning in the Clinical Learning Environment (Has its Limitations)

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Brits, EK; Archer, E; Strydom, S

**Keywords:** blended learning, clinical learning, 21st-century learning, technology-enhanced teaching

## Abstract:

### Introduction:

Learning Technologies has been an emerging field in Health Professions Education (HPE) over the past few years and escalated even more with the disruption Covid-19 caused in higher education. However, clinical teachers do not appear to be convinced of the benefits of using digital technologies in the clinical learning environment. We often see that digital technologies are not used for the benefits they hold. This raised the question of what the different factors are that influence MBChB lecturers' integration of blended learning in their teaching.

### Aim:

The aim of this paper is to describe clinical teachers' perceptions of blended learning and how their perceptions influence them to implement blended learning in the clinical learning environment.

### Methods:

We used a qualitative exploratory design. The sample for this study consisted of eight (n=8) module coordinators (clinicians) in the third year of the MBChB programme at Stellenbosch University (SU), Faculty of Medicine and Health Sciences (FMHS). Semi-structured, individual interviews were conducted and codes were thematically analysed.

### Findings:

It was found that the learning environment plays a key role in a clinical teacher's implementation of a blended learning approach. Participants had conflicting views on the value of digital technologies in the clinical learning environment. The majority of participants implied that blended learning is not as useful in all learning environments and that they do not see the value thereof in the clinical learning environment due to the practical nature of the clinical area. However, one participant indicated that digital technologies could be useful to prepare students for the clinical learning opportunities.

### Conclusion:

These findings suggest that the learning environment plays a key role in a clinical teacher's implementation of a blended learning approach. Clinical teachers had different opinions about blended learning and some found it challenging to see the purpose of and need in the clinical learning environment. We recognise that bedside teaching can never and should never be replaced by purely online teaching. However, the impact of Covid-19 exposed clinical teachers to new possibilities on how digital technologies could be implemented in other areas of clinical teaching.

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**Title:** The Use of STACK Questions in an Engineering Module

**Contribution type:** Reflection

**Contribution format:** Presentation

**Author(s):** Smit, W; Wolff, K

**Keywords:** learning management system, online assessment, STACK questions, STEM assessment

## Abstract:

STACK is a question type on the Moodle platform [1]. It allows students to answer questions containing mathematical equations. The system checks if the student's answer is mathematically equivalent to the model answer. It can give the student hints with every incorrect answer and calculate the grade a student achieves based on the number of wrong attempts. The question type allows students to get immediate feedback and to reattempt the question. This feature creates a pleasant and effective learning opportunity for the students.

The question type was extensively used in a third-year engineering module. STACK questions were used in practice problems, tutorial problems and a major assessment. The practice problems were short and typically took five minutes to attempt. The tutorial and major assessment problems took half an hour to an hour to attempt. The solutions to these problems would be one or two pages of handwritten mathematics. Students would enter only the final answer into the system.

A group of students were interviewed at the end of the semester to get their feedback on the question type. The question type works well for practice problems and tutorial problems. Students appreciated the fact that they got immediate feedback. It forced them to work on the problem until they got it correct. The hints the system supplied usually allowed them to progress whenever they got stuck. Students found the experience interactive, exciting and rewarding. Their confidence was boosted whenever they got a question correct.

This question type did not work well in a major assessment. Students said the question type caused stress during the assessment because they immediately knew if their answer was incorrect. They then had to figure out where they had made a mistake and reattempt the question with a penalty.

We recommend that each new question be carefully and thoroughly tested. We did not always do this, which resulted in a few questions that penalised answers that were technically correct.

Overall, the STACK question is an excellent tool that encourages students to master the work.

[1] STACK Docs. [online] Available at: <https://docs.stack-assessment.org/en/> [Accessed 5 Oct. 2022].

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**Title:** Towards a Framework for the Development of Teamwork Skills in Accounting Students

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Goosen, R; Steenkamp, G

**Keywords:** graduate attributes, teamwork, framework, accounting students, learning styles

**Abstract:**

The graduate attributes of accounting students are becoming increasingly important in a technologically driven business world (Coovadia, 2019). Future employers and professional accounting bodies emphasise that accounting graduates should have excellent soft skills; for example, teamwork skills, to complement graduates' technical knowledge (De Bruyn, 2022; Tan & Laswad, 2018).

Lecturers, who are now made responsible for developing such skills (Tsiligiris & Bowyer, 2021), should structure group work activities in a way that develops teamwork skills, which differs from simply 'grouping' students together – certain factors need to be present (Katzenberg & Smith, 1993). Accounting students also often prefer to work independently, which further complicates the matter (Barac, 2009).

The study's aim was to develop a framework for lecturers to employ when designing group work activities, to ensure the optimal development of students' teamwork skills. The group work activities contained in a postgraduate research module in accounting were employed as a case study. Research question one asked whether students believed that the group work in the research module enhanced their teamwork skills, and whether this was affected by their preferred learning style(s). Dependent and participative learners reported the greatest increase in their teamwork skills, whilst independent learners reported the smallest increase. However, all participants experienced group work positively and grew in their teamwork skills to some degree.

The second research question asked how the group work in the research module fostered the development of teamwork skills. The biggest growth areas were trusting their team members, mutual respect and valuing one another's opinions, and being able to delegate and share responsibilities.

After considering the interview data through thematic analysis, the researchers developed a framework that can assist lecturers in designing group work activities that optimally develop students' teamwork skills. The framework indicates that a challenging assignment over a substantial period, with limited lecturer instructions and a small group of students selected based on some form of commonality is best suited to foster the trust that is essential in teamwork and leads to open communication and ultimately collaboration.

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**Title:** Towards Understanding the Use of Digital Anatomy Learning Platforms – Preliminary Findings

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Foiret, J; Volschenk, M

**Keywords:** anatomy, education, technology

**Abstract:**

Digital anatomy learning platforms have been available for many decades and are growing in sophistication. These platforms provide an additional tool and in some cases an alternative to traditional

anatomy teaching methods. Although these systems have existed for many decades, there is a paucity in the literature regarding the way students use these platforms in their own learning. This paucity is exacerbated when one seeks to understand the use of such platforms in low- and middle-income countries such as South Africa.

This presentation aims to present preliminary findings from my study exploring the experience of second-year medical students in the use of anatomical learning software and its impact on their learning strategies at Stellenbosch University.

Mixed methods were used to generate data and were separated into two phases. Phase one of this study employed a whole population sampling of the second-year medical student cohort (n=296) to understand the device and network limitations and self-reported platform usage. Results from this survey would be used to purposively sample participants for phase two during which focus group discussions would take place.

Phase one results showed 24% of the student cohort completed the initial survey of which 20% reported that they have average to high usage of the platform, 49% low usage and 31% no usage at all. This is in contrast to 96% of participants indicating that they find the platform useful in their learning. All participants indicated that they used the platform on their personal devices, with only a single participant indicating that their device limited their use of the platform. The majority of participants (76%) indicated that they had sufficient internet access.

These preliminary results indicate that there is a disconnect between the number of students that use the platform and find value in using the platform, and the number that reports physical limitations in using the platform. Therefore, exploring how students use the platform in their learning may illuminate how to best support the usage of this tool to aid student learning. This study seeks to inform best practice in using the platform as a teaching tool, and guide its implementation in curricula.

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**Title:** Transforming the Accounting Profession: An Outcome-based Evaluation of SU TBF

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Frans, IL; Rudman, R

**Keywords:** SU TBF, evaluation, support, Kirkpatrick Evaluation Model, impact

**Abstract:**

Transformation is not dependent on financial forces alone. A more holistic approach to transformation is required. Transformation is not easily quantifiable. According to Bitzer and Bezuidenhout, as contended in Du Preez, Simmonds and Verhoef (2016), "transformation should be regarded as an opportunity for realising the vision of quality education for individuals who are qualified thereof at our institutions".

Although there have been transformation efforts in the education sector since 1994, the South African Institute of Chartered Accountants (SAICA) realised that it will require more time to correct the imbalances of the past and consequently introduced different transformation initiatives (Barac, 2015:76). The SAICA launched the Thuthuka Bursary Fund programme aimed at the skills development of students from the designated groups in order to promote racial diversification while addressing scarce skills. The national Thuthuka Bursary Fund contributes to changing the demographic composition of chartered accountants (CAs) by having added over 1 400 CAs since the inception of the programme. Apart from funding, students receive social and emotional support while at university. The study evaluated the Stellenbosch University Thuthuka Bursary Fund (SU TBF) programme's success in supporting students, using the Kirkpatrick Evaluation Model. The model measures and reports on the impact of the programme on four different levels, namely reaction, learning, behaviour and results.

The evaluation of the SU TBF found that the overall Thuthuka Bursary Fund programme delivers a higher number of graduates from the designated groups and makes a significant impact on the lives of the students. The funding as well as academic and other support make an invaluable contribution towards the completion of their studies. The findings recommend incorporating further workshops that see to the emotional and mental well-being of students, additional academic support, and integrating more real-life application of themes into the curriculum to improve the programme. Moreover, additional support is required during the completion of professional examinations in order to maximise the success of the programme.

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**Title:** Transforming the Biomedical Sciences Postgraduate Curriculum: Establishment of a Unique BSc (Hons) Module Focusing on a Humanities-rooted Science Context and Approach

**Contribution type:** Innovation

**Contribution format:** Presentation

**Author(s):** Essop, F

**Keywords:** post-truth world, design principles, postgraduate studies, biomedical sciences, curriculum renewal

**Abstract:**

Many scientists view their disciplines as "neutral" and devoid of any socio-political and historical contexts, known as "scientific elitism". Thus, there is a gap in their instruction to be better trained to operate within the "post-truth" world. A new Features of Science module was therefore introduced as part of an existing BSc (Hons) programme in the Division of Medical Physiology (Stellenbosch University).

The following design principles were used to enable a transformative teaching and learning experience: (1) choose meaningful, real-world problems for teaching and learning (Rule, 2006); (2) employ engaging discourse in class by allowing for open-ended discussions and sharing of diverse views (Rule, 2006); (3) promote a holistic and critical understanding of the scientific process (including aspects of history and philosophy) (Nussbaum, 2006; Matthews, 2012); (4) promote self-reflection by students to enhance their synthesis and validation of knowledge, and to increase their empathetic capacities and social justice

(Boud et al., 1985); and (5) employ open-ended and self-reflective tasks together with authentic assessments (Rule, 2006).

The module content included insights into the scientific process and knowledge production, and its applications, and focused on the role of socio-politico-cultural and neoliberal economic factors in this instance. Student assessments included the completion of self-reflective journals, group presentations and an essay on a related, open-ended question. Student feedback was assessed by completion of an anonymous survey and a thematic-type analysis (anonymous) of their self-reflective journals. Pre- and post-module tests were also completed to evaluate improvements regarding the understanding of concepts discussed in classes. The study was ethically cleared by the Research Ethics Committee at Stellenbosch University.

Feedback indicated that students found the subject content interesting and relevant, and felt that the module enhanced their understanding of the complexity of the scientific process, while raising their awareness of humanity, empathy and social justice. Evaluation of pre- and post-module tests revealed an improvement in student performances. Thus, the Features of Science module can be successfully implemented within the physiology context and other STEM environments and may help to graduate science students that are well equipped and trained to handle (and lead) some of the contemporary societal challenges facing humanity.

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**Title:** Understanding Student Perspectives on the Integrative Approach in a Theory-rich Module

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Neaves, M; Blaine, D; Wolff, K

**Keywords:** integrative approach, theory-rich modules, design-based research, student perspectives

**Abstract:**

Several renewal efforts of a theory-rich module culminated in the adoption of a holistic and integrative approach to module delivery (Kipper and Rütmann, 2012). This hybrid approach uses a cumulative learning conceptual framework, which explicitly highlights connections between organised bodies of knowledge, and between abstract concepts (with weak semantic gravity [SG]) and real-life contexts (with strong SG) with the aid of the Legitimation Code Theory Semantics analytical tool (Maton, 2013). Following this intervention in the post-Covid context, however, the pass rate (75.7%, 2021) did not significantly improve compared to the average pass rate for 10 years prior in the pre-Covid context (84.9 ± 2.3 %, 2011-2019). Some students repeat the module more than once (≈9% repeated over the past 10 years).

This study aims to explore students' perspectives on the integrative approach in the context of an introductory materials science module for second-year engineering students in order to answer the

question: How does the integrative approach assist or complicate students' learning? This work adopts design-based research (DBR) to analyse the integrative approach, which involves understanding students' perspectives on the "continuum of integration" including bands of application of ideas to new contexts, comparisons between facts and concepts, understanding context on the semantic wave continuum (weak to strong SG) and synthesis of a whole greater than the sum of its parts (Leonard, 2012). A combination of top performers (final marks > 75%), average performers (50-60%) and repeating students were anonymously surveyed in this study. Reflective survey questions were structured to explore students' perceptions of how various module activities address various bands of the continuum of integration, if at all. Qualitative feedback will be thematically analysed. This study aids in gaining insight into the module activities that students felt best embodied integrative elements. Implications for theory surrounding integrative approaches, resulting from these DBR observations, can be fed into subsequent re-designs of the module. By leveraging the activities that are perceived to improve performance and the development of graduate attributes, and adapting the elements that are not as beneficial, pass rates can be improved and repeater numbers reduced while simultaneously developing the students' professional competency.

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**Title:** What Knowledge Matters in Health Professions Education?

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Van Schalkwyk, S; Jacobs, C

**Keywords:** knowledge, curriculum, critical consciousness, legitimation code theory, health professions education

**Abstract:**

What knowledge matters in Health Professions Education (HPE) is an issue of debate in the literature with calls for medical education to move beyond a biomedical model. Further work argues that educating future healthcare professionals should involve developing a critical consciousness of global health inequality in addition to being clinically competent (Kumagai & Lypson 2009). Our paper builds on this work, asking: What knowledge is valued or legitimated by educators responsible for the development of future healthcare professionals?

Thirty-four educators from two undergraduate programmes (MBChB and Physiotherapy) participated in 11 interviews and 11 focus group sessions. The first iteration of analysis suggested that participants understood the need to develop students who were both clinically competent and critically conscious, but there was a tension regarding what knowledge was valued. This led to further analysis to uncover what kinds of knowledge were legitimated by respondents using Legitimation Code Theory (LCT) as analytical framework (Maton, 2014). The dimension of specialisation was chosen as it is premised on the claim that every knowledge practice is about or oriented towards something (epistemic relations – ER) and by someone (social relations – SR).

Data were coded as participants understanding the development of future healthcare professionals in relation to either biomedical knowledge (ER), or their social dispositions and attributes (SR). The ER/SR

analysis differentiated between what knowledge participants valued (biomedical knowledge – theory; clinical competence – practice; and ‘non-clinical’ – tools/skills) and the social dispositions and attributes that participants valued (critical consciousness – being; characteristics and attitudes – attributes; and acting on the world to change it – behaviours). Strong and weak forms were identified.

Biomedical knowledge and clinical competence mattered more than knowledge informing the being and becoming of critically conscious healthcare practitioners. Social dispositions and attributes relating to the development of critical consciousness were often not considered knowledge at all. Following on calls for a change in the content that is taught in HPE, with a shift in focus from biomedical knowledge towards knowledge from the ‘social sciences’, we contend that both knowledge bases are important and need to be interwoven throughout HPE curricula.

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**Title:** Who is the Leader?  
**Contribution type:** Reflection  
**Contribution format:** Presentation  
**Author(s):** Lupton-Smith, A; Schmutz, A  
**Keywords:** educational leadership, holism, followership

**Abstract:**

As we find ourselves in an ambivalence of positions, roles and journeys, we reflect on educational leadership within our experience in a postgraduate student-supervisor journey. Using Rolfe’s reflective model (Rolfe et al., 2021), we will share some of our experiences.

Leadership in Health Professions Education (HPE) is often perceived as hierarchical and Vroom and Jaago (2007) call for a move away from these traditional views of leadership as a position (e.g. managerial leadership) and propose a definition that highlights co-creation and collaboration as underpinning leadership. “We see leadership as a process of motivating people to work together collaboratively to accomplish great things.” (Vroom & Jaago, 2007, p.18). There are calls for the dissolution of these leadership hierarchies in order to more effectively deal with the complexity in which leaders in HPE find themselves (Carlopio, 1994; Scott et al., 2018; Sandhu, 2019).

In the student-supervisor relationship we find ourselves in a positional imbalance. We have found holism useful to rethink this imbalance. Holism provides a lens through which one can view this dissolution, whereby each ‘unit’ functions autonomously and uniquely as part of the whole (Carlopio, 1994; Van Diggele et al., 2020). We see the levelling of the imbalance through holism. Furthermore, we recognise the importance of followership in the relationship and that leadership and followership are inextricably linked (Sandhu, 2019).

Through changing how we view leadership in our student-supervisor relationship, we have come to realise that leadership is co-created and emerges from the interactions of follower and leader (Fairhurst & Grant, 2010; Uhl-Bien et al., 2014; Scott et al., 2018; Sandhu, 2019; James, Connolly & Hawkins, 2020).

Through this co-creation and emergence, we have uncovered opportunities for growth and development for both follower and leader, moments to pause and rethink our thinking, of which this reflection is one.

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**Title:** Words Create Reality: Conceptual Rethinking of Teaching-learning-assessment @SU\*

**Contribution type:** Research

**Contribution format:** Presentation

**Author(s):** Bester, M; George, E; Herman, N; Strydom, S; Van der Merwe, A; Swart-Jansen van Vuuren, C

**Keywords:** teaching-learning-assessment

**Abstract:**

\*This is a conceptual presentation, and it therefore does not address all the criteria stipulated in the SoTL abstract submission criteria for research papers.

Much has been written about the status and sequential order of teaching, learning and assessment in higher education. Many scholars argue for the prioritisation of teaching (i.e. teaching, learning, assessment) whilst the contrary is also suggested with learning becoming the core focus when referring to these three practices.

Our choice of words creates reality. It is also known that the way in which we refer to constructs often shapes the way in which they are understood, experienced and written about. For instance, when words relate to each other with a hyphen, it suggests that these words form a unit of meaning (Fine, 1994). When we refer to teaching-learning-assessment in a 'hyphenated' way, the conceptual thinking is different from when separating the constructs by using 'and' between the words.

The purpose of this conceptual presentation is firstly, to pave the way for conversations about and the promotion of a learning-centred orientation at Stellenbosch University based on scholarly literature and our collective knowledge and experience. Secondly, we envision that it will act as a catalyst for the promotion of a learning-centred orientation at Stellenbosch University.

This presentation argues for a movement away from viewing teaching, learning and assessment as independent activities, but rather to regard them as different facets of an integrated process involving both teaching academics and students (Ashwin, 2012:2; Dann, 2014: 149). Such a perspective challenges the assumption that teaching is only embodied by "someone who teaches", and learning is only embodied in "someone who learns" while sharing the same space. Rather, learning is transformative as it manifests during the whole lifespan of all individuals (i.e. lifelong learning) that represents a range of different types of learning opportunities (i.e. life-wide learning) and different levels of learning (i.e. life-deep learning).

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**Title:** Active-Constructive-Interactive learning: Differentiating the learning activities and their effectiveness in the Engineering programme

**Author(s):** Devince, C; Croukamp, L; Dhansay, N; Du Plessis, A; Gill, A; Goosen, E; Indermun, I; Naidoo, P; Nickerson, B; Tai, S; Ter Haar, G; Van Staden, C

**Faculty:** Faculty of Engineering

**Contribution type:** Reflection

**Contribution format:** Poster

**Abstract:**

Active, constructive and interactive learning activities that engage learners with the learning content, whether in the classroom or in external environments, improve knowledge retention and aid in reinforcing concepts [1, 2, 3]. These exercises can be performed by the individual or as group activities and can be applied to some simple demonstrations of concepts, the learning processes or learning outcomes. In the Engineering curriculum, throughout the different programmes of Chemical, Civil, Electrical, Electronic, Industrial and Mechanical engineering, the Engineering academics applied varying learning activities to specific topics in their modules or in the module delivery. Throughout the four study years of each programme, beginning with the foundational, on to design and application, and through the epistemic levels, the linkages between the fundamentals and real-life examples and scenarios, and their impact on the learning opportunities are presented and discussed. Several common themes are observed in connecting theory to practice.

Some of these activities included peer-to-peer or group-based learning in both biomechanics and engineering drawing, with the latter involving visualisation and spatial thinking using Lego blocks. Interactive software and the use of online resources also make for active learning with quick access to relevant, topical data and information. The concept inventory tool was applied at the third level in the study of vibrating mechanical systems, and a mechanical spring mass damper system was designed and compared to an electric circuit as a practical. The comparison between these two systems was used to reinforce the concept of displacement very well for each system.

While the Engineering curriculum is strongly directed at the mastery of technical skills and knowledge, individual wellness has been identified as a crucial enhancement to a tertiary qualification. The inclusion of mindful moments, such as meditation, breathing techniques, the promotion of happiness, making effective choices and overall well-being, during classwork is an example of linking the conscious and subconsciousness. The use of self-reflection surveys and the encouragement of independent learning showed improved productivity, focus and student performance. This differentiated style of learning and teaching via an interactive flow of information, aids contextualisation and comprehension by involving and stimulating the learner.

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**Title:** An action-based study of student reflective practices

**Author(s):** Antulay, A; Botha, C; De Waal, T; Henney, L; Jacobs-Gwebu, K; Nchake, M; Smit, C; Vajat, N; Van Schalkwyk, O

**Faculty:** Faculty of Economic and Management Sciences

**Contribution type:** Reflection

**Contribution format:** Poster

**Abstract:**

Reflective practices entail thinking about what was done, how it was done and why a certain approach was followed (Vos, H. and Cowan, J., 2009). The concept of reflective practices has become the focal point of research (Van Beveren et al., 2018), particularly in a pedagogical setting (Mikalayeva, L., 2018).

Although researchers concur that reflection is a valuable skill to possess, the current lack of implementation of reflective practices constitutes an impediment to concluding on its efficacy in a pedagogical context (Vos, H. and Cowan, J., 2009). There is consequently an urgent need for more expansive engagement in and empirical research regarding reflective practices amongst students (Van Beveren et al., 2018).

The study sought to address this problem through the implementation of a learning opportunity predicated on reflective practices. The study comprised three stages which were carried out in the context of first-year accounting students. Stage one involved the compilation of two reflective questionnaires, each based on the Gibbs model and containing a predetermined set of multi-choice and open-ended type questions (Gibbs, 1988). In stage two, students completed the first questionnaire, the questions of which introduced students to the notion of reflection, sought to ascertain the current extent of their reflective practices and to develop said practices by requiring them to reflect on their financial accounting module performance to date. The second questionnaire, encouraged students to reflect on their experience of the reflective practices as exercised during the first questionnaire, thereby providing us with insight into its efficacy. Stage three concluded the study with the analysis of data using statistical and manual content analysis.

The study answered the call for further engagement in reflective practices in a pedagogical setting. The results of the study reaffirmed claims by earlier research that reflection can serve as an effective learning tool. It is our hope that the study will encourage similar studies in a South African setting. This could pave the way for addressing reflective practice challenges amongst South African students. In doing so, we ultimately secure safer passage for the future professionals of South Africa.

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**Title:** Back translation as an alternative exercise in translator training

**Author(s):** Foster, L

**Faculty:** Faculty of Arts and Social Sciences

**Contribution type:** Reflection

**Contribution format:** Poster

**Abstract:**

Back translation – the retranslation of a target text into the source language – has a number of applications, including validating questionnaires for cross-cultural research purposes, facilitating language learning, and preventing plagiarism (cf. Stander 2020). However, as Ozolins (2009) and Bundgaard and Nisbeth Brøgger (2019) argue, the one field in which back translation has not been a research focus is Translation Studies itself. This may, in part, be due to concerns about the utility of back translation as a means of validating translations. Although Sousa and Rojjanasrirat described the back-translation process in detail as recently as 2010, Son (2018:90) considers it “obsolete” and various other scholars such as Griffin (2004), Douglas and Craig (2007), Davies (2010) and Colina et al. (2017) have expressed their doubts about the utility of the linguistic focus that tends to predominate when back translation is used.

Back translation’s potential as a training and assessment tool has not received a great deal of attention in translator training – even though it has been employed in interpreter training (where relay interpreting can be used to similar effect).

This study, in which an assessment has been redesigned to use back translation rather than the normal ‘forward’ translation, links with work done by Galán-Mañás and Hurtado Albir (2015) and Pardo-Ballester (2022) and is an attempt to respond to the challenge put forward by Huertas Barros and Vine (2019:273) that translation trainers “have a clear understanding of the principles governing assessment and can incorporate these principles into their own teaching”. It draws on the detailed discussion of procedures for assessing competence in trainee translators as presented by Galán-Mañás and Hurtado Albir and argues that the scaffolding functions summarised by Pardo-Ballester (2022:897) can be utilised in approaching both ‘normal’ and back translation exercises in postgraduate translator training. Using both types of exercises should make it possible, or, at least, easier, for trainee translators to view basic translation principles from different angles, in effect allowing them to consider their own work more critically while reviewing key concepts in a different way.

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**Title:** “Better, together” – An interactive approach to Geographical Information Technology 341

**Author(s):** Bailey, C

**Faculty:** Faculty of Arts and Social Sciences

**Contribution type:** Reflection

**Contribution format:** Poster

**Abstract:**

Geographical Information Technology 341 (GIT 341) is a compulsory third-year science module offered to students who follow the Geoinformatics programme and elective to those who follow the Earth and Computer Sciences programmes. The module, also referred to as ‘Spatial Modelling’, covers a variety of topics that are salient to the understanding of statistical modelling in a geographical environment. It is a novice module in that students seldom have prior knowledge of the concepts or terms they are introduced to here. For this module, classes are small – seldom surpassing 30 learners. Despite the small class size, the module suffers from a lack of student interaction. The limited interaction amongst students may be because a) practical sessions are allowed to be completed at home on their personal computers; b) students follow different streams and therefore form cliques causing dissociation; and c) at third-year level students often choose to work independently.

Irrespective of the causation, this lack of interaction is problematic as the novel topics introduced often require information exchange between and amongst students to foster an environment where learning becomes fun, mutual, and not only about remembering but also comprehending. Thus, to improve interaction between students, I examined a novel approach to this module to improve learning and information interchange.

Specifically, I created an assignment that was fun and entailed verbal information exchange and the use of multimedia to improve understanding of technical terms and concepts. To check the efficiency of this approach, I compared the academic scores attained on the new assignment to the previous scores and surveyed students and staff on whether they found this new method interesting and helpful.

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**Title:** Creating opportunities for practice and boosting confidence through active learning

**Author(s):** Nel, E

**Faculty:** Faculty of AgriSciences

**Contribution type:** Reflection

**Contribution format:** Poster

**Abstract:**

After the first year of lecturing Agricultural Engineering to second-year students (ENG 243), I found myself reflecting on my teaching (Schön, 1983) – specifically my approach to teaching calibration calculations. Based on this reflection, I realised that my approach must improve and I planned a way forward (Reid, 2004).

The purpose was to increase understanding of the calculation section and give students an opportunity to gain confidence in executing the calculations. I designed a new learning activity specifically focused on the calculations that consisted of a group presentation of a calibration example including all calculations, followed by questions from classmates and a short test, including optional reflection questions.

I have experienced that students in this module learn well by *doing*. Active learning (Bonwell and Eison, 1991) has proven an effective tool to help students engage with learning. Preparing a presentation in group format, participating in questions and answers, writing a short test and reflecting on the assignment tie well into the active learning strategy in that students gain knowledge and experience “through talking and listening, writing, reading, and reflecting” (Meyers & Jones, 1993).

During the presentations, students came across as well prepared and enthusiastic and there was good peer interaction. I felt excited, as it seemed students were speaking from a place of understanding and enjoyed applying their knowledge in a more active way. The average for the short test was 62% and I believe students’ confidence to attempt this type of question in a test situation has increased. Reflecting on student feedback has also helped me in planning the way forward once again (Reid, 2004).

The students were more invested in the process than I had anticipated, and next time I would like to give them a problem instead of an example including all the answers. This may give them the opportunity to rise to the challenge, figure it out with their group and potentially learn even more in the process. Overall, seeing the students’ reaction to this learning activity has motivated me to include similar *active learning* activities in other modules.

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**Title:** Critical reflection to humanise the pedagogy in postgraduate biomedical education

**Author(s):** Du Plessis, A; Kellermann, T; Leibbrandt, D; Swart-Filies, S; Vundle, Z

**Faculty:** Faculty of Medicine and Health Sciences

**Contribution type:** Reflection

**Contribution format:** Poster

**Abstract:**

**Background:** ‘Hard’ science postgraduate (PG) students in STEM (Science, Technology, Engineering, Math) are seldom requested to reflect on their learning journeys. Furthermore, reflections are limited to particular modules as opposed to reflection on the challenges and growth of the student throughout their PG studies.

**Methods:** PG students at BSc Honours, MSc and PhD levels within the Division of Clinical Pharmacology (Stellenbosch University) were asked to reflect on their challenges, obstacles, soft-skills needs and growth during their PG studies using nine (9) prompts guided by Kolb’s experiential cycle (1984), the framework for critical reflection provided by Fook (2002), Sandars’ thoughts on reflection in the context of medical science education (2009) and the multi-dimensional framework for meaningful student engagement described by Olszewska et al. (2021).

**Results:** A total of 18 PG students (9 BSc Honours, 7 MSc and 2 PhD) provided reflections. In reflection on the soft skills gained during the module, verbal communication (25%), interpersonal skills (18%) and critical thinking skills (14%) were the most frequently cited, followed by conflict resolution, time management, teamwork, written communication and networking. Ninety-four per cent (17/18) of the students indicated that PG environments facilitated and encouraged self-regulated learning. When asked about ‘transformative’ experiences that changed their view of self or of the world during their PG studies, all students responded affirmatively. Eighty-three per cent (15/18) indicated that their PG studies had provided more clarity on future career paths. Most acknowledged that they had been so focused on their research that they had not reflected on their journey of personal growth during this time.

**Conclusion and significance:** Participants at all PG levels felt that this reflection was useful in guiding them to evaluate their personal growth and enhanced their understanding of those around them. Based on these insights, regular opportunities for reflection will be incorporated into PG learning in the Division of Clinical Pharmacology as a means of enabling educators to understand student challenges, needs and personal growth journeys with a view to embracing the whole student in humanising the pedagogy of engagement.

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**Title:** Improving exam readiness: attempts toward the consolidation of learning

**Author(s):** Naidoo, S and Thumbiran, K

**Faculty:** Faculty of Arts and Social Sciences

**Contribution type:** Reflection

**Contribution format:** Poster

**Abstract:**

The majority of first-year psychology students performed poorly in the first semester of 2022, in comparison to previous years. Potential contributory factors that have been considered are the knock-on effects of Covid, and the return to in-person modes of teaching and learning. Traditionally, the first (PSY114) and second (PSY144) semester modules included weekly lectures (whether in-person or online) and tutorials. Assessments included an assignment as the formative assessment, and a test and final exam as summative assessments.

The lack of more formative assessment opportunities was identified as a potential gap in the second-semester module (PSY144), and thus weekly quizzes on SUNLearn were introduced. The aim was to move students toward actively engaging with weekly material rather than leaving it until needed for tests and exams. Quizzes were structured to ensure that students achieved the learning outcomes for each thematic section of the course. They were allocated sufficient time and a second opportunity should they fail the first attempt. They were also shown the correct answers upon completion so that they could learn from their mistakes. In addition, the quizzes allowed them the opportunity to familiarise themselves with the way questions would be asked in the test and exam.

Qualitative feedback from staff and students indicated that students indeed found it beneficial in terms of test and exam readiness. This entire process – before, during and after inclusion of the formative assessment opportunity – will be reflected on using Schön’s model (1983).

Findings have implications for further student support and module planning, ultimately with the aim of improving the student pass rate and performance on the course.

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**Title:** Public Policy and Management – PDM144

**Author(s):** Botha, M; Kekana, K; Matthee, S

**Faculty:** Faculty of Economic and Management Sciences

**Contribution type:** Reflection

**Contribution format:** Poster

**Abstract:**

In assessing student performance in the module, Public Policy and Management (PDM 144), the following interventions were formulated on the basis of assisting students with challenges pertaining to (1) the lack of sufficient time for the preparation of module content before assessment submission and (2) the display of poor time management skills that lead to the submission of poor quality assessments. The central question for this research project addresses how the lecturer can provide alternative/supplementary support to students on the aforementioned challenges, ultimately resulting in an improved throughput rate and promoting their learning experience.

A semi-structured questionnaire was disseminated to students electronically and as hard copy. A total of 34 out of 158 students enrolled for the module participated in the questionnaire, which is a 22% response rate. Content analysis was utilised to analyse the data from the questionnaires in terms of the frequency with which the themes appeared in the data.

The findings show that 53% of PDM 144 learners do not have a problem with time management; however, 47% of learners state that they only start preparing for assessments less than a week before the assessments are due. It could be deduced that the 124 students who did not participate in the feedback process might be those that are experiencing challenges in the module. In addition, 35% of the learners expressed that they rarely engage with the module leader in class while 44% stated that they sometimes or often engage with the module leader in class.

The findings suggest a need to employ more versatile learning assessments in class which could be done by breaking down assessments into smaller components and allowing students to take front and centre position in being their own teacher while introducing further peer-reviewed assessments.

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**Title:** Reflections on the challenges of teaching the competence of speaking in second language acquisition

**Author(s):** Moropane, B and Ncube, G

**Faculty:** Faculty of Arts and Social Sciences

**Contribution type:** Reflection

**Contribution format:** Poster

**Abstract:**

Speaking is one of the most important, yet difficult, skills to learn when acquiring a second language. Pronunciation, intonation, prosody and accent are all central to how learners acquire the skill of speaking. This reflective poster focuses on the challenges that we have faced as teachers of languages. In the face of a situation where learners have a command of the grammatical structures of a language but are unable to communicate verbally, we consider in this poster pedagogical tasks that can assist learners in constructing phrases and expressing themselves orally. This poster presentation is based on our experiences as new lecturers of two languages: isiXhosa (African Languages Department) and French (Modern Foreign Languages Department). This reflective poster considers initial informal feedback from students in the first year on the difficulties that they face in speaking in a second language and also their feedback after the introduction of pedagogical tasks that were designed to compel them to speak in the second language.

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**Title:** Scaffolding critical skills in the Department of Sociology and Social Anthropology

**Author(s):** Eigelaar-Meets, I; Lester, C; Walters, H

**Faculty:** Faculty of Arts and Social Sciences

**Contribution type:** Reflection

**Contribution format:** Poster

**Abstract:**

PREDAC provides newly appointed staff members at Stellenbosch University with the opportunity to reflect on how they approach teaching and learning aimed at the holistic development of students. This holistic development is framed by the desired attributes of a graduate as defined by the University; that is, developing students as individuals who have enquiring minds, are engaged citizens, and are dynamic and well-rounded professionals and individuals. It is with the view of attaining these goals that PREDAC challenges staff members to critically reflect on their modes of teaching and modes of assessment in their respective modules. Staff are encouraged to reconsider their teaching philosophy and implement changes in their modules in discussion with peers. We took the opportunity to engage teaching in our department – the Department of Sociology and Social Anthropology – to reflect on our own contributions to the skills development pipeline of our students. A key shift is to conceptualise each module as contributing to a layer of scaffolding aimed at streamlining the holistic development of our graduates. We draw on our collective experience of teaching at first-, second- and third-year levels to reflect on each module's contribution as an essential building block in the support of both content and skills learning.

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**Title:** Stating the obvious!

**Author(s):** Adams, G; Butler, K; Parker, R; Roskell, G

**Faculty:** Faculty of Law

**Contribution type:** Reflection

**Contribution format:** Poster

**Abstract:**

This action research project aimed to understand the reason(s) why students do not participate in and engage with teaching academics and peers during learning opportunities. Students are mostly reserved, do not answer questions, and rely on those students who usually answer questions to respond.

Using the Rolfe et al. (2001) reflective framework, the teaching academics involved reflected on the project described below to determine lessons learnt that could enhance future practices.

Smith et al. (2005) suggest that students should be actively and cooperatively involved when studying complex and content-dense material. Following this advice, two different cooperative learning opportunities (Johnson, Johnson and Smith, 1991) were created for two separate groups of students. Both aimed to promote active learning and student engagement with peers. The first group received the instructions in class, and the second group prior to class (in other words the flipped class model). The first group had to discuss a problem question with their peers, compare their answers and provide feedback to the rest of the class. The second group had to prepare for a class debate (before class) based on a problem question received prior to class.

Teaching academics wanted to create these learning opportunities for students to build confidence to talk to and in front of peers. By building their confidence, hopefully students would feel more comfortable participating and engaging in class.

Teaching academics involved in this project felt a strong sense of achievement because of the positive feedback received from students. Students reflected on how they now have the confidence to participate during class discussions. These class discussions promote active learning and student engagement by providing students with the opportunity to interrogate learning material, make sense and meaning thereof and then share that with others. This results not only in achieving the outcomes of the learning opportunity but also allowing for students to develop valuable graduate attributes.

Going forward, we will continue designing learning opportunities to promote active learning and student engagement among peers and with teaching academics.

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**Title:** Studying the reflective practice of third-year, pre-service education students: a reflexive approach

**Author(s):** Bishop-Swart, S & Rock, C

**Faculty:** Faculty of Education

**Contribution type:** Reflection

**Contribution format:** Poster

**Abstract:**

As the lines between traditional, in-person and online teaching become increasingly blurred, using teacher reflections as a tool to inform assessment practices in pre-service teacher training seems more important than ever. In order to create a truly transformative and engaging student experience, the use of assessments designed for the specific environment in which teaching and learning occur is essential. This poster highlights the use of the collaborative reflexive practice of the researchers by studying a cohort of third-year pre-service student teachers at a South African tertiary institution reflecting on their own teaching practice. The researchers envisaged that this would encourage continuous reflection as a way for subject specialists and programme coordinators to enhance teaching practice by providing opportunities for pre-service teachers to rethink philosophies in order to remain relevant to today's ever-growing and diverse student population and to be better prepared for future education disruptions. The researchers, as subject specialists for 'Practical Learning' and 'English Language and Literature', are aware of both the university's assessment policy and the aims of the university's Education Faculty Language Implementation Plan, specifically to promote academic language proficiency and to ensure quality education opportunities by cultivating a critical awareness of the centrality of language in effective learning and teaching. Gibbs' (1988) Reflective Feedback Cycle was chosen as the most effective reflective tool for this group of pre-service teachers as it afforded students the opportunity to follow a systematic, six-step reflective process. The process offers a framework for examining experiences, and given its cyclical nature, lends itself particularly well to repeated experiences, allowing students to learn and plan from things that either went well or did not go well. In addition, the researchers, as subject specialists, employed a collaborative approach using subject-specific rubrics to assess the final student reflections. Ultimately, an intended outcome is to further demonstrate the importance of collaboration and co-design of assessments by subject specialists as researchers in teacher education. The results of this research could offer practical suggestions on how to continue to support pre-service teachers in the iterative process of learning in practice and learning from practice.

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**Title:** Teaching complex theory in undergraduate biology: from huh? to aha!

**Author(s):** Shaik, Z

**Faculty:** Faculty of Science

**Contribution type:** Reflection

**Contribution format:** Poster

**Abstract:**

The third-year course BDE324: Angiosperm Evolution and Diversification is required as part of an undergraduate education in Biodiversity and Ecology at Stellenbosch University. The content I teach in BDE324 covers conceptually straightforward content around the origin and diversification of flowering plants, but also includes complex speciation and phylogenetic theory that students will not have encountered in other courses. The more challenging concepts include how phylogenies (species trees) are inferred from molecular data, and how the speciation process generates plant species richness. These lectures will be particularly useful for students who will go on to pursue postgraduate degrees in evolutionary biology and phylogenetics, but the conceptual difficulty of the material means students are often quietly confused and fail to fully grasp what are really very interesting topics in biology. This poster outlines approaches to the improved teaching of the more challenging topics in BDE324, including (1) avoiding the use of complicated language where simple terms will do; (2) using a full lecture period to cover challenging material; (3) removing extraneous content that may confuse students; (4) integrating short video content in the lecture to refresh interest; (5) lecturing with simplified slides and only posting the full annotated slides online; and (6) posting recommended readings online at the end of each week. These improvements will be implemented in the next offering of BDE324 in the first semester of 2023, ideally minimising student “*huhs?*” and maximising “*ahas!*”.

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**Title:** Teaching physiology during the Covid-19 pandemic: reflections of newly appointed lecturers

**Author(s):** Joseph, D and Rambharose, S

**Faculty:** Faculty of Science

**Contribution type:** Reflection

**Contribution format:** Poster

**Abstract:**

Department of Physiological Sciences, Faculty of Science, Stellenbosch University

The rapid onset of the Covid-19 pandemic had far-reaching consequences for all sectors globally, necessitating drastic adaptations at short notice to survive. The same is true for the higher education sector where teaching, learning and assessment underwent drastic transformation overnight. The mode of teaching and learning had to be adapted in several ways at different institutions internationally.

Stellenbosch University (SU) adopted the Emergency Remote Teaching, Learning and Assessment (ERTLA), followed by the Augmented Remote Teaching, Learning and Assessment (ARTLA) approaches to ensure continuity of its academic offering within the confines of governmental Covid-19 health and safety regulations. This situation was novel to all academic staff at different stages of their careers. It also presented unique challenges to the way in which physiology teaching, learning and assessment had to be adapted. It is inherently a discipline that requires hands-on activities and personal interaction for both theoretical and practical teaching. Here we present our views and reflections as newly appointed lecturers in the Department of Physiological Sciences at SU (appointed in 2021).

We teach various but similar topics in physiology to diverse cohorts of first-, second- and third-year physiology students enrolled in different degree programmes within the Faculty of Science. We also serve as module coordinators to the first- and second-year modules, respectively. Student feedback, reflective discussions, assessment results and our respective experiences highlighted certain bottleneck areas within the first- and second-year modules.

We further gained valuable insight from both the ERTLA and ARTLA approaches in 2021 and incorporated teaching and learning approaches to address the bottleneck areas during the second semester of 2022 when full face-to-face teaching returned. This was associated with improved student participation and assessment results compared to the first semester. We propose incorporation of some of the pedagogical approaches, which were employed as an emergency measure during the pandemic, in a balanced manner with the techniques employed for medium and large physiology cohorts.

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**Title:** Tolle, Lege  
**Author(s):** Joubert, L & Thyssen, A  
**Faculty:** Faculty of Theology  
**Contribution type:** Reflection  
**Contribution format:** Poster

**Abstract:**

One of the outcomes for Ecclesiology 143 is “acquire the necessary knowledge of the leading historical figures and thought streams of the early church and the Middle Ages”. This outcome, however, presupposes a certain knowledge of ancient and modern geography. This presupposed knowledge assumes that students are aware of important towns, cities, regions and geographical phenomena; especially in the ancient Mediterranean world. Experience, however, taught that this knowledge is not necessarily present in most students. In this poster, a learning opportunity will be presented that will offer students the opportunity to enhance their geographical knowledge, in order to ensure that the outcome previously highlighted will be optimally realised.

The proposed learning opportunity consists of a scenario in which students will interact with a map, in an informal and constructive manner. Foundational to this proposal is the view that learning is staggered and that specific building blocks of knowledge have to be ascertained before students are introduced to a new knowledge field – to be more specific, people and ideas are geographically situated and therefore the student needs to have a geographical imagination in order to understand the persons and thoughts of previous ages.

The poster will introduce an interactive methodology to assist students with the threshold concepts of geographical situatedness in order to enhance historical knowledge. The benefit of this learning opportunity plays into achieving the other outcomes of the module; which include being able to link historical figures, events and locations to their theological significance. Following this approach, the intention is to contribute to learning the basics of the discourses on Early Christianity up to the Late Middle Ages.

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**Title:** Transforming troublesome 'legacy' modules

**Author(s):** Beyers, C; Caleb, O; De Lange, W; Ngqulana, A;

**Faculty:** Faculty of AgriSciences

**Contribution type:** Reflection

**Contribution format:** Poster

**Abstract:**

Newly appointed lecturers often inherit 'legacy' modules with a reputation or a perception among students as 'difficult or too abstractive'. This perception by students subsequently results in unacceptably high failure rates. Transforming such troublesome modules can be a burden on a new academic and even provoke tension between the 'old' and 'new' academics involved.

We took one such undergraduate module as a test case, and reflected on the changes using Rolfe's reflective model "What? So what? Now what?". This helped us to evaluate the shared student experience and the recent high failing rate so that we could identify ways to influence future outcomes. Our aim was to consider ways of transforming the module's negative perceptions among students and to significantly improve their teaching and learning experience.

To achieve the aim of this reflection, the following objectives were set: (i) we identified critically needed changes in the module content (based on a broad-based survey of graduated students' experience of the module); (ii) we characterised the needs/challenges of the learners (e.g. mode of instruction, and volume of prescribed literature); and (iii) we proposed and implemented suggested remedies in line with the identified needs and desired outcomes. One of the remedies was an intensive re-evaluation of the teaching content, to allow for a more reflective thinking, teaching and learning approach.

Preliminary results showed that anxiety was lower amongst the students once they were engaged to discuss/identify their challenges with the module. Feedback from students showed that they felt encouraged that the lecturer was mindful of their struggles with the module. The decision to re-evaluate the module content allowed for a more reflective teaching and learning that encouraged more active participation by students. Redesigning the assessment strategy for the students as a continuous process was found to improve their overall performance. This was evident in the increase in class marks, and we anticipate a significant improvement in terms of pass rate. In conclusion, a troublesome 'legacy' module that had led to unnecessary anxiety, was progressively transformed by actively engaging the students, and modifying its historic teaching content and instruction format.

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