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Joint UCDP Send-Off Colloquium Report

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EXECUTIVE SUMMARY

The colloquium, a key gathering for the NESP, nGAP, and USDP scholars, provided a platform for robust discussions on the transformation of higher education in South Africa. The event underlined the critical role that emerging academics play in reshaping the landscape of academia, with a focus on innovation, capacity building, and inclusive growth within universities. The session saw participation from a diverse group of scholars, experts, and policymakers, who engaged in insightful discussions on pressing issues such as systemic exclusion, the role of mentorship, curriculum reform, and the need for adaptive graduates in response to global challenges.

Keynote addresses from distinguished experts highlighted the importance of addressing systemic barriers within higher education, with an emphasis on race, gender, and broader socio-economic factors. Prof Msibi, Prof Fikeni, and Mr Patel contributed to these discussions by challenging traditional approaches and advocating for more agile, evidence-based strategies that promote inclusive academic environments. They stressed that transformation should not be an isolated task but an ongoing, collaborative effort across institutions.

Throughout the day, participants explored the evolving nature of higher education, with particular focus on creating adaptive curricula that equip graduates with the skills needed for a rapidly changing world. There was consensus that curricula should go beyond traditional, discipline-specific knowledge to incorporate skills such as critical thinking, creativity, and problem-solving. The necessity of integrating African perspectives and value-based education into curricula was also highlighted as a key aspect of fostering inclusive knowledge production and addressing societal challenges.

The colloquium also featured presentations from NESP, nGAP, and USDP scholars, who showcased their research and contributions to their fields. This session provided valuable insights into the impact of these programmes, with the scholars presenting innovative solutions to societal issues and academic challenges. The success of these programmes was evident in the diverse and meaningful research being conducted by the participants.

The event culminated in the recognition of scholars who successfully completed the NESP, nGAP, and USDP. Their achievements were celebrated as a testament to the impact of these transformative programmes. The DHET reaffirmed its commitment to continue supporting these initiatives, ensuring that their transformative goals are sustained and expanded. A list of the graduates who completed the programme is included in Annexure A.

In conclusion, the colloquium reaffirmed the importance of a systemic approach to transformation in higher education, focusing on innovation, inclusivity, and collaboration. It was an affirmation of the DHET's continued commitment to fostering emerging academics who will lead and inspire change in the higher education sector and beyond. The event not only marked a significant milestone for the participants

but also reinforced the need for ongoing, concerted efforts to drive sustainable transformation in the academic landscape.

1. WELCOMING SPEECH

Delivered by Professor Azwinndini Muronga, Deputy Vice-Chancellor: Research, Innovation and Internationalisation, Nelson Mandela University

Professor Azwinndini Muronga, Deputy Vice-Chancellor: Research, Innovation, and Internationalisation at Nelson Mandela University, opened the colloquium by welcoming all attendees and speakers to the inaugural Joint-UCDP Send-Off Colloquium. He described the event as a celebration of the transformative academic journeys of its participants, emphasising its significance as a milestone in the development of higher education in South Africa.

Prof Muronga highlighted the event as an opportunity to reflect on the achievements of graduates and the vision of the Department of Higher Education and Training (DHET), which seeks to create an inclusive and equitable higher education system. Central to this vision, he noted, was the New Generation of Academics Programme (nGAP), which identifies and nurtures young academic talent to sustain vibrant, diverse, and responsive universities. He emphasised that nGAP graduates exemplify this vision by enriching the academic community and driving transformation within the higher education landscape.

Acknowledging the broader support framework, Prof Muronga celebrated the role of the University Capacity Development Programme (UCDP) in enhancing research capacity and intellectual progress through initiatives like the University Staff Development Programme (USDP). He commended those who had completed their doctoral studies under the USDP, pointing out their contributions to the growing body of knowledge that will shape future generations.

Prof Muronga also recognised the Nurturing Emerging Scholars Programme (NESP) as another vital DHET initiative aimed at empowering emerging scholars through skill refinement in teaching, research, and community engagement. He characterised these programmes as examples of DHET's commitment to academic excellence, equity, and transformation.

Reflecting on the importance of transformation in higher education, Prof Muronga described it as essential for addressing historical inequalities and fostering diversity, innovation, and opportunity. He emphasised that transformation extends beyond academia, driving societal progress and inclusivity.

Prof Muronga concluded by commending the graduates of the nGAP, USDP, and NESP for their perseverance and contributions. He encouraged them to view the colloquium as both an ending and a beginning, urging them to continue their work as leaders, scholars, and changemakers in higher education. He ended his address with gratitude

to DHET, university leadership, and all stakeholders for their unwavering support in driving transformation and excellence in academia.

2. PURPOSE OF THE DAY

Delivered by Ms Mandisa Cakwe, Director of the University Capacity Development Directorate, DHET

Ms Mandisa Cakwe outlined the purpose of the colloquium, framing it as a celebration of academic resilience and achievement. She acknowledged the dedication of academics who persevered despite challenges such as the COVID-19 pandemic, congratulating them on their hard-earned milestones.

The event was dedicated to honouring participants who successfully completed subprogrammes under the UCDP, including the nGAP, NESP, and USDP. These programmes, developed in collaboration with all 26 public universities in South Africa, aimed to transform teaching, learning, research, and leadership within the higher education sector. By supporting university staff development, these initiatives play a critical role in fostering systemic transformation and advancing the DHET's vision of equity and excellence. The specific contributions of leading universities in implementing the programmes:

- Nelson Mandela University leads the implementation of nGAP, focusing on recruiting new academics and building a future academic pipeline.
- Rhodes University oversees the NESP, which refines the skills of emerging scholars for academia.
- The University of Pretoria coordinates the USDP, enabling university staff to pursue postgraduate qualifications and enhance their professional competencies.

These programmes, target both aspiring academics and employed university staff, ensuring a balance between recruitment and capacity development. Their success has been made possible through the collaborative efforts of universities, DHET, and other stakeholders, underscoring the importance of partnerships in transforming the higher education system.

The colloquium also provided a platform for celebrating and showcasing the research outputs of participants. Scheduled presentations of their findings symbolised the culmination of their journeys and their contributions to the academic landscape.

In closing, Ms Cakwe commended the collective achievements of the graduates, emphasising that their success reflected the strength of collaboration within the higher education system. She expressed pride in their accomplishments and highlighted the event as a milestone not only for the individuals involved but also for the nation's broader higher education transformation efforts.

3. KEYNOTE ADDRESS

Delivered by Mr Phillip Tshabalala, Chief Director for Teaching, Learning, and Research Development, DHET

Mr Phillip Tshabalala, Chief Director for Teaching, Learning, and Research Development at the DHET, delivered an inspiring keynote address that set the tone for the Send-Off Colloquium. His speech reflected on the transformative potential of higher education in addressing South Africa's persistent challenges of inequality, poverty, and unemployment. He framed higher education as central to national priorities, aligning its goals with those of the government, and called for a united effort to harness the power of academic work to uplift society.

He noted the significance of the achievements celebrated at the colloquium, highlighting how participants of the nGAP, NESP, and USDP have contributed to transforming the higher education system. He emphasised that the participants' accomplishments, achieved amidst demanding personal and professional circumstances, are a testament to their dedication and resilience.

Reflecting on the government's priorities: job creation, reducing poverty, and building a capable state, he drew attention to the critical role universities play in achieving these objectives. He acknowledged the immense pressure on academics due to increased teaching loads, resource constraints, and the demands of research and publishing, compounded by the rapid expansion of student enrolments. These pressures, he noted, make the UCDP and its subprogrammes crucial for building a sustainable and inclusive academic profession.

Mr Tshabalala lauded the contributions of these initiatives in creating opportunities for academic development. He noted how the UCDP has effectively addressed some systemic gaps by promoting staff development, providing opportunities for international exposure, and fostering collaborations among universities. He stressed the importance of maintaining and strengthening partnerships between universities and other stakeholders to optimise resource use and achieve shared objectives.

He concluded his Day 1 keynote by reaffirming the DHET's commitment to achieving transformation in higher education. He urged participants to embrace their roles as agents of social justice and change, emphasising the importance of mentorship and the responsibility to contribute to their universities, particularly historically disadvantaged institutions (HDIs). Transformation, he stated, is non-negotiable and requires a collective effort to rethink educational practices and create a higher education system that is inclusive, responsive, and globally competitive.

On the second day of the colloquium, Mr Tshabalala continued his keynote address by expanding on the broader context of transformation in higher education. He revisited the challenges facing the academic profession, including the corporatisation of universities, the increasing reliance on technology, and the growing need for graduates with interdisciplinary and digital competencies.

He elaborated on how the DHET's strategic goals align with the National Development Plan's objectives to produce high-level skills for the labour market, drive innovation, and build a socially just society. He highlighted the transformative role of universities in addressing historical inequalities and fostering democratic values.

The focus on transformation extended to graduate attributes that universities should cultivate in their students. These attributes include critical thinking, intercultural competence, ethical awareness, and a sense of uBuntu, the African philosophy of interconnectedness and humanity. He linked these qualities to the overarching goals of social and economic development in South Africa.

Mr Tshabalala praised the integration of an international component in the UCDP, which not only exposes South African academics to global best practices but also provides opportunities to showcase African innovations. He expressed confidence in the growing contributions of UCDP beneficiaries, particularly in the areas of research productivity, postgraduate supervision, and academic leadership.

In closing, Mr Tshabalala reiterated the importance of building partnerships and fostering mentorship within and across institutions. He acknowledged the progress made under the UCDP but emphasised that more remains to be done to achieve the transformation imperatives outlined in the Higher Education Act of 1997. He encouraged academics to reinvest in the institutions that have supported their development, particularly HDIs, to create a more equitable and representative higher education landscape.

Both addresses served as a call to action for academics to lead the transformation agenda with dedication, innovation, and a commitment to excellence. Mr Tshabalala's messages resonated as a powerful reminder of the shared responsibility to uplift the higher education sector and its critical role in shaping the future of South Africa.

4. TESTIMONIALS OF THE UCDP SUBPROGRAMMES

The Nurturing Emerging Scholars Programme (NESP), the New Generation of Academics Programme (nGAP), and the University Staff Development Programme (USDP) are pivotal initiatives aimed at advancing the academic landscape in South Africa. These programmes are designed to develop and support scholars, particularly in underrepresented academic fields, by offering a comprehensive range of opportunities and resources that foster academic growth, research excellence, and professional development.

NESP focuses on nurturing emerging scholars by providing mentorship, academic support, and international mobility opportunities to enhance their research and teaching capabilities. Its goal is to ensure that promising students are equipped to pursue careers in academia, contributing to the transformation of South Africa's academic institutions.

nGAP targets early-career academics, offering them the resources to build a strong foundation for their academic careers. By providing funding, professional development, and mentoring, the programme aims to address the shortage of qualified staff at South African universities and equip these scholars to make significant contributions to teaching, research, and community engagement.

The USDP is centred on strengthening the doctoral pipeline within South African universities, supporting both academic and professional staff in their pursuit of doctoral studies. With a focus on developing supervisory capacity and fostering international collaborations, the programme ensures that South Africa's higher education institutions remain competitive on a global scale while promoting sustainable academic careers for its scholars.

Together, these programmes play a crucial role in the development of South Africa's academic workforce, ensuring the continued growth and diversification of knowledge and expertise across the nation's universities.

“You are the outcome of transformative initiatives.”

- Dr Phumeza Kota-Nyati -

4.1 Nurturing Emerging Scholars Programme (NESP)

The NESP is a transformative initiative that seeks to attract and develop emerging scholars by actively promoting academia as a viable and rewarding career path. It targets high-performing students in their final year of undergraduate studies, as well as Honours and Master's students or graduates, who exhibit strong academic potential. The programme offers structured opportunities to foster academic growth and prepare participants for meaningful careers in higher education. Through a combination of mentorship, financial support, and international exposure, the NESP aims to address the growing need for highly skilled academics and contribute to the transformation and sustainability of the academic profession in South Africa.

The testimonials presented below provide compelling evidence of the transformative impact of the NESP. These personal accounts showcase how the programme has supported emerging scholars in their academic journeys, enabling them to realise their potential and contribute meaningfully to higher education.

4.1.1 Ms Nosipho Dlamini – University of KwaZulu-Natal (UKZN)

The Ms Nosipho Dlamini shared her inspiring experience as a NESP scholar, highlighting how the programme has profoundly shaped her academic and professional journey. She recalled being introduced to the NESP by her supervisor, who recognised her potential and encouraged her to apply. This marked the beginning of a transformative journey that included teaching young engineers and participating in an international mobility opportunity in Spain.

Ms Dlamini shared that lecturing a group of engineering students initially seemed daunting but ultimately reinforced her passion for academia. She also recounted the significance of her time in Spain, where she delved into system dynamic modelling and embraced a new culture. Both experiences enriched her technical expertise and personal growth.

She emphasised the unique value of NESP's mentoring component, which she found distinct from traditional supervision. This mentorship provided long-term career guidance and eased her transition into academia. Expressing her gratitude to DHET, Ms Dlamini credited the programme for enabling her to obtain her MSc degree while acquiring the skills needed for academic success. She concluded her testimonial by encouraging undergraduates with a passion for academia to consider the NESP as a stepping stone to a fulfilling career.

4.1.2 Mr Faranani Gethe - University of Witwatersrand (Wits)

Mr Faranani Gethe reflected on his journey from a rural upbringing near Thohoyandou to his current position in academia, describing how the NESP has been instrumental in his success. After completing his undergraduate degree in Construction Management in 2013 and working in industry, Mr Gethe returned to pursue further studies in 2018. It was during this period that he discovered the NESP, which provided him with a pathway to transition into academia.

He recounted how he joined the NESP shortly after losing his father to COVID-19, a deeply challenging time that strengthened his resolve to succeed. The Programme allowed him to engage in academic conferences, present research, and supervise students, experiences that broadened his professional horizons. He was later appointed as a sessional lecturer and ultimately secured a full-time lecturer position, achieving his master's degree with distinction in 2023.

Mr Gethe expressed profound gratitude for the mentorship and support he received throughout his NESP journey, which enabled him to grow as a teacher, researcher, and community leader. He emphasised the vital role of DHET's initiatives, like the NESP, in fostering academic excellence and supporting public education. He urged for continued investment in such programmes to benefit future generations.

Both testimonials highlighted the transformative impact of the NESP in nurturing scholars and preparing them for impactful careers in academia.

4.2 The New Generation of Academics Programme (nGAP)

The nGAP is a flagship initiative by the DHET aimed at addressing the need for a new cohort of academic professionals in South Africa. By targeting talented and promising individuals at the early stages of their academic careers, the programme seeks to bolster capacity within the higher education sector. The nGAP provides structured development opportunities, including mentorship, funding for research and international exposure, and professional training. This initiative plays a critical role in supporting the transformation of the higher education landscape, ensuring

sustainability and inclusivity in the academic workforce.

The testimonials shared during the colloquium offer a glimpse into the profound impact of the nGAP on its participants, who have gone on to achieve remarkable milestones in their careers.

4.2.1 Dr Lerato Mdaka – North-West University

Dr Lerato Mdaka, a Senior Lecturer in the School of Management Sciences at North-West University (NWU), shared a powerful narrative of her journey through the nGAP. Her testimonial illuminated the transformative role that the programme played in shaping her academic career, providing her with unique opportunities to grow both professionally and personally.

A pivotal moment in Dr Mdaka's journey was her participation in the Open Innovation and Open Business Model international course held in Barcelona, Spain. Being immersed in a global academic environment and engaging with some of the world's most cited scholars was a profoundly humbling and inspiring experience. She noted that this opportunity allowed her to bring South African and African perspectives into international academic discussions. It also deepened her sense of responsibility to integrate African narratives into global research paradigms, challenging conventional theories with insights rooted in the lived experiences of African scholars.

Dr Mdaka highlighted one of the nGAP's key objectives: enriching global academic narratives with African contexts. Her research was bolstered by the National Research Foundation (NRF) Research Development Grant, which she received during her first two years in the Programme. This grant allowed her to collaborate with leading supervisors in her field, significantly enhancing her research trajectory.

The programme also provided international teaching mobility opportunities, enabling Dr Mdaka to engage with institutions and academics in various countries. These experiences not only broadened her academic perspective but also influenced her teaching methods. By incorporating global insights, she has fostered an inclusive, internationally relevant learning environment for her students.

Dr Mdaka reflected on the immense recognition and rewards she has received throughout her career, including the Excellence Award in Community Engagement and the Excellence Award in Teaching and Learning from NWU. She attributed these accolades to the supportive environment created by nGAP, which prioritised the professional and personal growth of emerging academics, a particularly meaningful part of her journey was the mentorship she received early in her academic career. Her mentor, who identified her potential during her undergraduate studies, played a critical role in guiding her towards success. She described the nGAP as a cornerstone of her academic development, equipping her with the skills, resilience, and adaptability needed to navigate the complexities of academia.

Dr Mdaka concluded her testimonial by expressing her gratitude for the opportunities afforded by nGAP. She acknowledged the programme's role in fostering her passion for

academic excellence and her commitment to transforming higher education. As she continues to advance in her career, she remains deeply appreciative of the experiences and lessons gained through nGAP.

4.2.2 Dr Siyabonga Dlamini - University of KwaZulu Natal

Dr Siyabonga Dlamini, a lecturer at the University of KwaZulu-Natal (UKZN), offered a heartfelt reflection on his academic journey through nGAP. He began by expressing his gratitude to the DHET for their unwavering support, which he credited with shaping his career and fostering his growth as a researcher and academic.

Dr Dlamini's journey began in 2016 while working with the local Department of Health on HIV/AIDS-related initiatives. Initially focused on addressing public health challenges, he later transitioned to lung cancer research through a multinational collaborative project. Despite the shift in focus, he found that the administrative and institutional support offered by nGAP facilitated a seamless alignment of his personal research goals with the university's strategic objectives.

Through the programme, Dr Dlamini was afforded funding for essential research equipment, participation in international summer schools, and opportunities to collaborate with world-class supervisors. These experiences enabled him to develop advanced research skills and enhance his academic capabilities. He described the HRD division's support as instrumental in his journey, noting their effective allocation of nGAP resources to support his professional growth.

One of the programme's standout features for Dr Dlamini was its flexibility, which allowed participants to craft their own developmental plans. This adaptability enabled him to align his goals with the Programme's objectives and pursue opportunities such as international collaborations and mobility initiatives. He emphasised the importance of institutional commitment to ensuring the longevity of nGAP, particularly during leadership transitions, to safeguard its impact for future generations.

Dr Dlamini's achievements extended beyond his personal milestones. He shared that his research inspired his students, with some advancing their own academic pursuits as a result of his guidance. His work also had a profound personal impact, motivating his daughter to aspire to pursue a PhD after witnessing his dedication and success. Reflecting on his broader influence, Dr Dlamini cited instances where his research on lung cancer reached wider audiences, including an interview on Ukhozi FM. He recognised the significance of such moments as a testament to the importance of Programmes like nGAP in promoting meaningful research with societal relevance. Despite encountering challenges, such as ethical delays that set his research back by a year, Dr Dlamini remained steadfast in his commitment to academic excellence. He encouraged institutions to provide environments that retain talented academics and reduce the risk of staff being poached by other organisations.

Dr Dlamini concluded by urging continued collaboration between institutions, staff, and policymakers to ensure the ongoing success of nGAP. He expressed his gratitude for the programme's role in his academic journey and reaffirmed his commitment to using his

experiences to inspire others and contribute to the transformation of higher education in South Africa.

4.3 The University Staff Development Programme – USDP

The University Staff Development Programme (USDP) aims to strengthen the doctoral pipeline at South African universities by supporting academic and professional staff in completing their doctoral studies within four years. The programme focuses on developing the research and supervisory capacities within universities, while also promoting collaborations between South African institutions and international universities. By providing resources, funding, and global exposure, the USDP plays a crucial role in advancing academic development and fostering a skilled, globally competitive higher education sector in South Africa.

The following testimonials from USDP scholars reflect the transformative impact of the programme on their academic journeys. These accounts highlight the opportunities for growth, collaboration, and international exposure that have shaped their research careers, underscoring the value of the programme in nurturing future leaders in academia.

4.3.1 Dr Mpho Magwalivha – University of Venda (Univen)

Dr Mpho Magwalivha, a scholar at the University of Venda (Univen), shared his inspiring journey as a participant in the University Staff Development Programme (USDP). His testimonial highlighted how the programme played a pivotal role in overcoming challenges and creating opportunities that transformed his academic career.

At the start of his PhD journey, Dr Magwalivha faced significant obstacles, particularly in securing adequate funding for his research. Despite his efforts to obtain external funding, he was only able to secure a minimal amount from Univen, which covered a few essential items but left many gaps. Feeling stranded, he met a professor who introduced him to the USDP and encouraged him to apply. Upon successfully securing USDP funding, his research trajectory changed dramatically.

The programme's support proved invaluable, enabling him to access resources that were critical for conducting thorough analyses. With the funding, Dr Magwalivha gathered sufficient data and advanced his research to produce articles for publication. This progress, which would have been otherwise hindered, underscored the importance of the USDP in facilitating academic success.

One of the most rewarding aspects of the USDP was the international exposure it provided. Dr Magwalivha travelled to the University of Virginia, where he engaged with leading researchers, presented his ideas, and formed meaningful collaborations. The mentorship he received during this time was instrumental in his professional growth and significantly shaped his approach to research.

Reflecting on his journey, Dr Magwalivha expressed profound gratitude to the USDP, noting that without its support, his research might have stagnated, and he may not

have completed his PhD on time. With the programme's assistance, he successfully completed his doctoral studies and published three international journal articles. He credited the USDP with making these achievements possible and expressed his deep appreciation for the opportunities it afforded him.

4.3.2 Dr Makhaya Malema – University of the Western Cape

Dr Makhaya Malema, a scholar at the University of the Western Cape (UWC), provided a heartfelt account of his transformative experience as a participant in the USDP. He began by acknowledging the inherent challenges of pursuing a PhD, describing it as a rigorous and often isolating process. However, being part of the USDP provided a starkly different experience one characterised by community, support, and shared purpose.

Dr Malema highlighted the programme's funding instruments as a critical component of his success, particularly during the data collection phase of his research. This financial support alleviated common frustrations faced by researchers, allowing him to focus on producing quality work. Additionally, the programme opened doors to collaboration opportunities that he described as both meaningful and career-defining.

The international exposure facilitated by the USDP had a profound impact on Dr Malema's career trajectory. Through interactions with colleagues abroad, he expanded his professional networks, fostered long-term collaborations, and joined a global community of practice that continues to influence his work.

Dr Malema shared key milestones from his journey. Joining the USDP in 2019, he successfully graduated with his PhD by 2022, a year he described as a landmark in his academic career. That same year, he secured a promotion to Senior Lecturer and Deputy Head of Department at his institution, reflecting the Programme's influence on his professional growth.

The partnerships and networks Dr Malema established through the USDP also yielded significant achievements. A collaboration with a colleague from the University of Zululand, whom he met through the programme, resulted in securing international funding. He proudly shared additional accomplishments, including receiving a strategic grant from the World Health Organization and an Erasmus+ grant. Dr Malema also highlighted that he is in his second year of NRF funding, illustrating the continued momentum in his research career.

In conclusion, Dr Malema expressed his heartfelt gratitude to the DHET for its dedication to empowering academics and strengthening South Africa's higher education system. He also commended the USDP coordinators for their tireless efforts in ensuring a smooth and accessible process. Dr Malema's journey is a testament to the transformative potential of the USDP, and he looks forward to making further contributions to academia on both local and global stages.

4.4 Testimonials – Conclusionary Remarks

The testimonials from the NESP, nGAP, and USDP participants highlight the transformative influence these programmes have had on the academic journeys of emerging and established scholars. NESP continues to play a key role in nurturing young scholars, offering mentorship, international mobility, and opportunities for academic growth, all contributing to the broader transformation of the academic landscape.

nGAP has proven equally impactful, providing crucial support to early-career academics. Through funding, mentorship, and international exposure, the programme equips scholars with the tools to build strong academic careers while contributing to research, teaching, and community engagement.

USDP further strengthens South African universities by supporting doctoral studies and enhancing research capacity. By providing funding, fostering international collaborations, and developing supervisory skills, the programme enables scholars to reach their full potential and contributes to building a skilled academic workforce.

Together, these programmes are vital to advancing higher education in South Africa. They create an environment of continuous development, collaboration, and international engagement, ensuring South African universities remain at the forefront of global academic excellence. The experiences shared by participants reflect both personal growth and the collective impact these initiatives have on transforming higher education.

5. RECOGNITION OF NESP, NGAP, AND USDP GRADUATES

A significant highlight of the colloquium was the formal recognition of scholars who successfully completed the NESP, nGAP, and USDP. The recognition ceremony served as an acknowledgment of the scholars' contributions to their respective disciplines and their role in advancing the academic and developmental goals of South Africa. The graduates represent the embodiment of what these programmes aim to achieve: developing skilled, empowered, and socially responsive academics who are equipped to lead and inspire change within the higher education sector.

In her remarks, Dr Phumeza Kota-Nyati congratulated the graduates on their significant accomplishments, acknowledging the challenges they faced and overcame throughout their academic journeys. She highlighted the importance of their contributions to the transformation of higher education and expressed confidence in their ability to continue driving impactful research and innovation in their institutions and beyond.

The graduates' achievements are a testament to the success of NESP, nGAP, and USDP in creating pathways for emerging scholars to thrive within academia. The programmes have provided essential support, mentorship, and resources, enabling participants to realise their potential and contribute meaningfully to the higher education landscape.

The list of graduates who were recognised for completing the programme can be found in Annexure A, showcasing the breadth of talent and academic excellence fostered by these initiatives. Their success reflects not only their hard work but also the value and effectiveness of the transformative vision these programmes uphold.

6. EXPERIENCES OF UCDP MENTORSHIP

Mentorship plays a pivotal role in the success of academic development programmes, such as nGAP, NESP, and USDP. It provides young academics with the guidance, support, and expertise they need to navigate the often-challenging academic landscape. Through mentorship, experienced scholars share their knowledge, offer career advice, and help mentees develop the skills necessary to thrive in academia. These relationships foster a sense of belonging and motivation, enabling mentees to grow not only professionally but personally as well. In the context of the programmes, mentorship is crucial in ensuring that the next generation of academics is well-equipped to meet the demands of teaching, research, and engagement, while also supporting their holistic well-being. By investing in mentorship, these programmes contribute to the transformation of South Africa's higher education sector, empowering emerging scholars to become leaders in their fields and mentors themselves in the future.

“Academia is extreme knowledge work, and it demands not just intellectual growth but emotional resilience. As mentors, it is our responsibility to guide not only the academic progress of our mentees but also to support them as whole individuals, helping them balance their personal and professional lives, and nurturing their confidence and capacity to thrive in this challenging environment.”

- Prof De Lange -

6.1 Mentoring for the nGAP - Professor De Lange

Professor De Lange shared her journey as a mentor at Nelson Mandela University, highlighting her role in guiding young academics through the nGAP. She began by sharing a story of a young man who, far from home, struggled with loneliness but found comfort in his mother's daily question, “do you hear the birds?” Initially dismissed, this question came to symbolise the support and care that helped him persevere through difficult times.

As a professor emeritus, Prof De Lange mentored approximately 15 academics at a time, offering guidance in teaching, research, and engagement while focusing on the well-being of her mentees. Her approach was shaped by the diversity of the cohort, with participants from various disciplines, backgrounds, and age groups. She stressed the importance of building trust and creating a safe space where mentees felt comfortable sharing challenges, both academic and personal.

Her mentoring philosophy emphasised care and humanity, encouraging her mentees to adopt an ethic of care in their teaching. She offered advice on career planning, urging them to set realistic goals and establish supportive professional networks. She also fostered a sense of community among academics by organizing informal gatherings, such as writing retreats and coffee sessions, where mentees could exchange ideas and address challenges. She worked with department heads to negotiate reduced workloads for her mentees, helping them balance academic responsibilities and personal well-being.

In conclusion, she reflected on the joy and fulfilment she derived from mentoring. Drawing from the story of the young man who eventually found solace in hearing birds, she symbolised the mentorship journey as one filled with challenges, but ultimately leading to success, connection, and personal growth. She ended with a testimony from a mentee who excitedly called to say, “Prof, I hear the birds!”, a reminder of the powerful impact mentorship can have on an individual’s development.

6.2 Mentoring scholars – Dr Prisca Simbanegavi

Dr Prisca Simbanegavi, NESP mentor from the University of Witwatersrand, began her address by expressing gratitude for the opportunity to speak about her experiences in both academia and mentorship. She shared how her academic career, which began at the University of Witwatersrand in 2012, had shaped her approach to mentoring. Initially, Dr Simbanegavi found mentoring daunting, questioning her own qualifications to guide others. However, over time, she realised that mentorship had been a natural part of her career, as students often sought her out for advice. This recognition led her to embrace her role as a mentor, recognising the importance of sharing the lessons she had learned through her own experiences.

Dr Simbanegavi spoke passionately about the transformative power of education, often telling her students that it is education that allows one to “fly” while others remain grounded. She also shared her philosophy of mentoring, which included an open-door policy for her students and a focus on reciprocal learning. She believed that mentoring was not just about guiding others but also about learning from the fresh perspectives that students brought to the table. Her mentoring approach encouraged critical thinking, especially when it came to identifying and addressing real-world societal issues through research.

Throughout her address, Dr Simbanegavi reflected on her own evolution as a mentor, from initially seeing her role as one of supervision to realising it was more about empowering students to navigate the academic landscape. She acknowledged the challenges of balancing professional boundaries with the personal connection needed for effective mentoring. Despite the pressures of academic success, she took immense pride in seeing her mentees thrive, emphasising the importance of preparation, resilience, and professional development.

Dr Simbanegavi also shared how her mentorship philosophy was shaped by her African identity, which informed her commitment to creating knowledge relevant to African contexts. She highlighted the importance of creativity and problem-solving in research,

encouraging her mentees to think innovatively when addressing societal challenges like poverty and housing. Her approach underscored her dedication to nurturing independent thinkers who would contribute meaningfully to both academia and society.

In her closing remarks, Dr Simbanegavi expressed immense pride in her role as a mentor, noting the joy she found in seeing her mentees succeed. She encouraged them to take initiative, communicate their ideas confidently, and actively engage with both the academic community and broader societal issues. Through her reflections, Dr Simbanegavi underscored the transformative power of mentorship in shaping not only the academic journeys of individuals but also the broader academic landscape.

In conclusion, mentorship stands as a cornerstone in the academic journey, particularly within programmes such as nGAP, NESP, and USDP. It is through mentorship that young academics are provided with the necessary tools to excel in their careers, face challenges with resilience, and ultimately contribute to the broader academic community. The guidance, encouragement, and expertise shared by mentors not only shape the professional growth of mentees but also foster a culture of collaboration, empathy, and continuous learning. As these mentees advance in their careers, many will go on to become mentors themselves, perpetuating a cycle of support and development that strengthens the entire academic ecosystem. The commitment to mentorship in these programmes is vital for the long-term success and transformation of higher education, ensuring that South Africa's academic future remains vibrant, inclusive, and forward-thinking.

7. CRAFTING A CAREER AS AN ACADEMIC AFTER YOUR M/PHD

A fundamental aspect of building a successful academic career lies in the ability to conduct meaningful research and publish findings that contribute to the advancement of knowledge. For emerging academics, the journey from completing a Master's or PhD to establishing themselves in academia requires a strategic focus on both research and publication. In this section, Professor Kerti Menon, from the University of Johannesburg, offers valuable insights on navigating this transition and crafting a career that is both fulfilling and impactful. Drawing from her extensive experience in the field, Prof Menon outlines practical advice for emerging scholars on how to carve out their academic niche, develop a robust research profile, and engage with the broader academic community.

Professor Kerti Menon, from the University of Johannesburg, delivered an engaging and thought-provoking address to emerging academics, sharing invaluable insights and advice on navigating a fulfilling academic career. Drawing from her 40 years of experience, she humorously described academia as an addictive field, one that entices its participants for life. Despite its challenges, she acknowledged that the academic journey is incredibly rewarding and fulfilling.

Prof Menon stressed the importance of understanding the academic environment and

university-specific policies, noting that these can vary across South Africa's institutions. She encouraged new academics to familiarise themselves with promotion criteria, funding bodies, and the broader higher education landscape. A key piece of advice she offered was the necessity of self-awareness and strategic planning, including conducting a personal SWOT analysis to better understand strengths, weaknesses, and opportunities for growth. In addition, she emphasised the significance of finding a unique research niche that could set academics apart and have a meaningful societal impact.

Self-advocacy was another crucial point in her address. Prof Menon stressed the importance of building an online presence through platforms like Google Scholar, ResearchGate, and LinkedIn, which can increase visibility and foster professional connections. Networking, attending conferences, and engaging with peers were identified as key elements for career advancement.

Addressing the complexities of academic work, Prof Menon highlighted the balance between teaching, research, and administrative duties, advising emerging scholars to approach teaching as a collaborative process that contributes to students' growth. She also encouraged academics to take leadership and administrative roles in stride, viewing these responsibilities as opportunities to shape the future of higher education.

In closing, Prof Menon shared the concept of becoming a "T-shaped academic," balancing both breadth and depth in one's expertise. She reminded the audience to engage with their communities and contribute to societal challenges, amplifying the impact of their research beyond the university walls. She concluded by reinforcing that an academic career is a lifelong journey, one that requires continuous learning, growth, and an enthusiasm for the process.

Prof Menon's speech served as a powerful reminder that a successful academic career is shaped by strategic planning, self-advocacy, a commitment to lifelong learning, and a genuine passion for both teaching and research.

8. PANEL DISCUSSION: TRANSFORMING POST-SCHOOL EDUCATION AND TRAINING THROUGH CAPACITY DEVELOPMENT

The second day of the colloquium featured a robust panel discussion that delved into the complexities of transforming South Africa's post-school education and training (PSET) system. Moderated by Prof Lethiwe Nzama-Sithole, an Associate Professor and Deputy Head in the Department of Commercial Accounting at the University of Johannesburg, the panel brought together prominent voices to explore the challenges, opportunities, and strategies for fostering systemic change. The panellists included:

- Mr Imraan Patel, Deputy Director-General: Research Development and Support, Department of Science and Technology
- Prof Thabo Msibi, Deputy Vice-Chancellor for Teaching and Learning and Professor of Curriculum Studies at the University of KwaZulu-Natal

- Dr Andrew Kaniki, former Executive Director: Knowledge Advancement and Support at the National Research Foundation (NRF) and current Temporary Manager for Special Projects Division at the University of Johannesburg
- Prof Somadoda Fikeni, visiting professor at Nelson Mandela University and Chairperson of the Public Service Commission of South Africa

The discussion revolved around key questions of transformation, touching on the reimagining of educational structures, the centrality of knowledge production, systemic exclusion, and capacity development.

“To truly transform the world, we must first transform ourselves. Universities cannot be catalysts for societal change without introspection and the courage to unlearn and relearn.”

- Prof Somadoda Fikeni -

8.1 Expanding the Scope of Transformation

Prof Nzama-Sithole opened the session by seeking the panellists’ thoughts on transforming the post-school education and training through capacity development the need to view transformation beyond the lens of race and gender, focusing instead on systemic enablers and mechanisms to bring about substantive change:

- Prof Somadoda Fikeni began his address by challenging the traditional discourse of transformation, which often centres on demographic representation. While acknowledging the importance of addressing racial and gender disparities, he argued that true transformation extends beyond these metrics. Prof Fikeni highlighted that universities must equip students with skills to navigate societal challenges, addressing issues such as climate change, inequality, and technological disruption.

Prof Fikeni introduced the idea of self-mastery as a cornerstone of transformation. He contended that those within the academic system must themselves undergo transformation to become effective agents of change. This requires an openness to unlearning outdated knowledge and relearning skills and attitudes that align with contemporary needs. He stressed that expecting universities to drive societal change without first reflecting on internal reforms would yield limited results. “Transformation,” he concluded, “starts with individuals and institutions looking inward before seeking to change the world.”

- Prof Thabo Msibi expanded on the theme of personal and institutional transformation, advocating for a deeper understanding of the concept of “becoming” in higher education. Drawing on the philosophy of Maxine Greene, Prof Msibi argued that becoming is a lifelong process of growth and evolution, one that challenges individuals to continuously adapt and redefine themselves. He observed that for many academics, achieving a PhD is often seen as the pinnacle of their journey. However, he asserted that

academic success must be viewed as an ongoing process rather than a final destination.

Prof Msibi also discussed the transformative potential of representation in academic leadership. As a young academic who rose to the position of Deputy Vice-Chancellor, he noted that his presence in such a role disrupts entrenched hierarchies and challenges colonial legacies in higher education. Transformation, he explained, is not only about creating opportunities for previously excluded groups but also about reimagining the knowledge project. He urged academics to critically examine how Western epistemologies dominate the discourse and to seek ways to elevate African knowledge systems, ensuring their integration into global conversations.

- Mr Patel emphasised the importance of viewing transformation in post-school education and training through a systemic lens that goes beyond race and gender. He noted that while these elements remain important, transformation should also address curriculum relevance, institutional practices, and structural dynamics. Patel argued that capacity development must dismantle systemic barriers, focusing on evidence-based management to create inclusive, adaptable educational environments.

He further stressed the importance of linking education to societal and economic demands, proposing that transformation efforts create ecosystems supporting lifelong learning and innovation. Patel highlighted that merely meeting demographic targets without addressing systemic inequities is insufficient. A holistic approach, he argued, would enable post-school education to drive equitable development and foster resilience across the system.

- Dr Kaniki urged stakeholders to expand their understanding of transformation, moving beyond demographic representation to include institutional culture and academic quality. He advocated for rethinking teaching and research practices to ensure they address real-world challenges. Kaniki proposed tracking UCDP-funded participants' career trajectories to assess the long-term impacts of transformation initiatives and identify gaps.

He also emphasised the need for collaboration among universities, government, and other partners to achieve systemic change. Kaniki called for a shift from compliance-driven approaches to empowerment-focused strategies that enhance knowledge production and innovation. Transformation, he concluded, must align with societal goals, including reducing unemployment and bridging the gap between academia and industry.

8.2 Knowledge Production and Capacity Development

The panel turned to the intersection of knowledge production and capacity development, focusing on how these elements underpin transformation in the PSET sector.

- Dr Andrew Kaniki addressed the political nature of knowledge production, noting that issues of ownership and access are central to the transformation debate. He pointed out that the South African higher education system must grapple with who produces knowledge, how it is produced, and whose interests it serves. While he praised the growing number of PhD candidates in the country, he warned against neglecting established researchers. He argued that transformation must balance nurturing young talent with supporting experienced academics to ensure a robust and sustainable research ecosystem.

Dr Kaniki shared insights from his engagement with Professor Ndzendze at the University of Johannesburg, where the political dimensions of knowledge were a focal point. He stressed that for transformation to be meaningful, it must involve redefining the paradigms of knowledge creation. This, he argued, would require collaboration among universities, government agencies, and international partners to address systemic inequalities and foster innovation.

- Prof Fikeni highlighted the critical need to rethink knowledge production in a way that prioritises inclusivity and addresses South Africa's historical and systemic inequalities. He emphasised that higher education must move beyond reproducing Western-dominated frameworks and instead integrate African perspectives into research and teaching. This approach, he argued, would not only enrich academic content but also make knowledge production more relevant to local contexts and challenges.

He also pointed out that capacity development requires tackling institutional barriers that hinder transformation, such as entrenched hierarchies and limited mentorship opportunities. Prof Fikeni called for a shift toward value-based education, particularly to instil ethical practices among graduates and academics. This, he argued, would contribute to addressing broader societal issues, such as corruption and inequality, and ensure that knowledge production aligns with the country's developmental goals.

- Prof Msibi emphasised the need for universities to adopt deliberate strategies for capacity development that are aligned with transformative knowledge production. He highlighted the role of DHET initiatives, such as nGAP, in creating pathways for emerging scholars to contribute meaningfully to research and innovation. However, he noted that transformation efforts are unevenly implemented across institutions, with some focusing only on compliance rather than fostering genuine academic growth.

He also highlighted the importance of rethinking teaching and research approaches to address contemporary challenges. Prof Msibi argued that knowledge production should be agile and interdisciplinary, allowing universities to produce graduates capable of driving innovation and solving real-world problems. He further stressed that capacity development programmes must go beyond individual benefits to create systemic change within institutions and across the higher education sector.

- Mr Imraan Patel provided a broader perspective on capacity development, advocating for the reimagination of the PSET system in the context of the fourth

industrial revolution. He highlighted that traditional higher education institutions are often slow to adapt to societal changes, creating a mismatch between academic outputs and real-world demands. Mr Patel called for a diversified approach to education, balancing academic streams with technical and vocational training to meet the needs of the broader population. Drawing from his involvement with the Atlantic Indian Ocean Research Alliance (AIORA), Mr Patel outlined three critical capabilities for capacity development:

- o Futures orientation: Preparing for emerging challenges by fostering a forward-looking mindset.
- o Systems thinking: Understanding the interconnectedness of institutions and addressing problems in a holistic manner.
- o Design thinking: Crafting innovative solutions that respond to complex societal issues.

8.3 Addressing Systemic Exclusion

The discussion shifted to the enduring challenges of systemic exclusion in South African higher education, with panellists offering diverse perspectives.

- Mr Patel focused on evidence-based management to tackle exclusion. He argued that traditional monitoring and evaluation methods often fall short in addressing deep-rooted inequalities. By adopting adaptive and dynamic approaches, institutions can implement effective measures before exclusionary practices become entrenched.
- Prof Fikeni provided a historical lens, tracing the legacy of colonialism and apartheid in shaping systemic exclusion. He observed that while some universities have made strides in addressing racial disparities, new forms of exclusion have emerged, particularly in historically Black institutions. He cited examples of South African academics feeling sidelined in favour of international faculty, creating tensions within institutions. Prof Fikeni also questioned the efficacy of merging universities and vocational colleges, suggesting that these mergers may have diluted the focus on specialised training.
- Prof Msibi called for more deliberate and sustained efforts to mainstream transformation. He noted that while some universities treat transformation as a priority, others approach it as a compliance exercise. He stressed the need for active monitoring and support to ensure that transformation goals are met and that emerging academics feel supported in their journeys.

The panel discussion provided a thought-provoking exploration of the complexities of transforming South Africa's PSET system. The panellists emphasised that transformation is not a one-dimensional process but a multifaceted journey that requires systemic reform, personal introspection, and a reimagining of knowledge production. By fostering collaboration across sectors and addressing both historic and emerging challenges, South Africa's higher education system can become a powerful engine for societal change and innovation.

“Transformation is not a destination but a journey of becoming a continuous process of challenging entrenched systems and elevating voices and knowledge long silenced.”

- Prof Thabo Msibi -

8.4 Questions and Discussion from the Floor

The question-and-answer session following the panel discussion offered attendees an opportunity to engage with critical issues related to the transformation of higher education. The dialogue was dynamic and enriched with insights from both the panellists and participants, reflecting on systemic challenges, curriculum design, and the need for adaptive approaches in academia.

Question 1:

When we talk about transformation in universities, are we being deliberate enough in ensuring that graduates are relevant to the demands of society?

- Prof Msibi emphasised that as society evolves, higher education must also adapt, particularly in teaching modalities and practices. He highlighted the necessity of embedding agility within academic systems to better equip graduates for the demands of a rapidly changing world.
- Dr Kaniki proposed treating the transformation agenda as a field of study itself. He suggested tracking the post-PhD career trajectories of UCDP-funded scholars across universities to provide deeper insights into how transformation manifests in the academic careers of emerging researchers. This longitudinal data, he argued, could assess the long-term impacts of these initiatives and guide future interventions.

Question 2:

What is being done to address systemic exclusion in the university system, particularly regarding the exclusion of Black graduates entering higher education? What is the role of DHET and current transformation programmes in addressing these issues?

- Mr Patel highlighted the application of systems thinking to address entrenched exclusion. He pointed out that systems often create unintended consequences when left unchecked. Strengthening evidence-based management, he argued, is essential to addressing systemic exclusion quickly and effectively, rather than relying solely on traditional monitoring and evaluation frameworks.

- Prof Fikeni provided a historical perspective, noting that the legacies of colonialism and apartheid continue to influence patterns of exclusion. He discussed how these patterns vary across institutions, citing examples of emerging challenges, such as the marginalisation of South African academics in institutions with high numbers of foreign staff. Additionally, he called for a focus on normative, value-based education to instil ethics and combat corruption among graduates. He questioned whether the mergers of universities into comprehensive institutions truly advanced transformation have, suggesting that the assumption that universities could absorb the roles of vocational colleges might have overburdened the system.
- Prof Msibi reflected on how transformation efforts differ across institutions. While some universities actively monitor and mainstream transformation goals, others focus merely on administrative compliance. He called for deliberate and systematic efforts to enhance transformation experiences for emerging academics, particularly in institutions where transformation goals remain superficial.

Question 3:

How do we address systemic exclusion that has persisted for decades, without solely focusing on race, but instead addressing broader issues within the education system?

- Mr Patel proposed “learning by doing” as a solution to systemic exclusion, citing the importance of fostering alternative practices, or “niches,” within entrenched systems. He stressed the need to nurture these innovative practices as they have the potential to disrupt outdated systems and enable transformative change.
- Prof Msibi addressed the need for a paradigm shift in teaching methods. He observed that many academics replicate the teaching styles they experienced, which may no longer align with how modern students learn. He advocated for focusing on the science of learning and integrating interdisciplinary, adaptive strategies that prepare students for a future shaped by rapid technological and societal shifts.
- Prof Fikeni highlighted the importance of equipping students with skills for self-sufficiency. He argued that universities should prioritise creativity and adaptability over narrowly preparing students for specific careers. Additionally, he highlighted the need for multidisciplinary education and the inclusion of basic skills like digital literacy, social media literacy, and financial literacy to foster well-rounded, employable graduates.

Question 4:

As we face high graduate unemployment, how do we design curricula that produce adaptive graduates? What attributes should we embed in our curriculum to prepare students for the challenges of the future?

- Mr Patel emphasised the importance of pragmatic, hands-on learning approaches to prepare graduates for the challenges of the modern world. He advocated for transformative innovation policies grounded in a multi-level perspective, where emerging, practical innovations disrupt traditional systems, fostering adaptability and creativity in students.
- Prof Msibi stressed the necessity of a mindset shift within education. He argued that traditional methods of rote learning should give way to approaches that foster critical thinking, creativity, and problem-solving. These attributes, he asserted, are crucial for preparing students to navigate a fast-changing, information-rich world.

8.5 Key Observations from the Facilitator

Prof Lethiwe Nzama-Sithole summarised the discussions, highlighting the following key takeaways:

- **Beyond demographics:** transformation must address systemic enablers such as curriculum reform, institutional structures, and historical inequalities, alongside race, gender, and age. Emerging forms of exclusion also need attention to ensure holistic development.
- **Self-transformation:** academics must engage in self-reflection and transformation, rethinking traditional teaching methods and adopting interdisciplinary, innovative practices to prepare graduates for a complex world.
- **Knowledge production:** inclusive knowledge production should prioritise African epistemologies while moving beyond Western-dominated frameworks.
- **Normative education:** ethical and value-based education is critical for addressing societal issues such as corruption and inequality.
- **Curriculum design:** adaptive, future-oriented curricula must embed critical thinking, digital literacy, financial literacy, and design thinking, ensuring graduates are innovative and capable of creating their own opportunities.
- **Collaboration and mentorship:** sustainable transformation requires partnerships across universities, government, and international stakeholders. Mentorship is vital to supporting emerging academics and fostering inclusive, supportive environments.

- Evidence-based transformation: programmes must adopt systems thinking and track outcomes to evaluate the effectiveness of transformation efforts and address institutional discrepancies.

This session reinforced the need for deliberate, reflective action to ensure higher education responds effectively to societal needs while fostering inclusive and equitable practices.

9. RESEARCH PRESENTATIONS BY NESP, NGAP, AND USDP PARTICIPANTS

As part of the colloquium's objectives to showcase the academic achievements and contributions of emerging scholars, participants of NESP, nGAP, and USDP were given the opportunity to present their research. These presentations took place in two parallel breakaway sessions, providing a platform for participants to highlight the scope, depth, and significance of their scholarly work.

The sessions underscored the importance of creating spaces for emerging academics to share their research findings, reflect on their academic journeys, and engage with peers and senior academics. This format not only gave participants valuable exposure but also facilitated intellectual exchange and the sharing of ideas among scholars from diverse disciplines and institutions.

The participants' presentations demonstrated how their research aligns with broader societal needs and contributes to addressing pressing challenges in South Africa and globally. Topics ranged across diverse fields, including education, health, environmental sustainability, and economic transformation. These wide-ranging interests reflected a commitment to linking academic pursuits with national development priorities.

The breakaway sessions also fostered active engagement and dialogue. Attendees, including mentors, programme coordinators, and fellow participants, provided constructive feedback, posed critical questions, and offered alternative perspectives. This dynamic environment was designed to help presenters refine their research and enhance its relevance and impact.

Several recurring themes emerged during the sessions:

- Transformation in higher education: many participants examined issues of equity, inclusivity, and curriculum reform, emphasising the role of research in advancing meaningful change within the sector.
- Innovative solutions for societal challenges: presenters highlighted research addressing critical challenges such as sustainable development, public health improvements, and socio-economic inequality.
- Interdisciplinary approaches: the value of interdisciplinary collaboration was evident, as several studies drew on methods and insights from multiple fields to tackle complex problems.

The presentations demonstrated the pivotal role of NESP, nGAP, and USDP in nurturing the next generation of academics and researchers. These programmes provide critical support that enables emerging scholars to advance in their fields while contributing to the transformation and sustainability of higher education.

Details of the participants' research can be found in Annexure B, which offers a comprehensive record of the work presented. This annexure stands as a testament to the participants' dedication and the programmes' impact on fostering excellence and transformation in academia.

10. APPRECIATION FROM PROGRAMME PARTICIPANT

Dr Sibusiso Senzani, from the University of KwaZulu-Natal, began his testimonial by reflecting on the formative experiences that shaped his academic journey. Raised in Vosloorus, a township in the East Rand, by two supportive parents, Dr Senzani was encouraged from an early age to explore his curiosity. This innate inquisitiveness often led him into trouble, as he continually sought to understand how things worked.

In high school, his curiosity found a focus in biology, driven by an interest in the complexity of the human body. In his community, this passion typically led to a career in medicine. However, after his application to medical school was rejected, Dr Senzani pivoted to a Bachelor of Science (BSc) degree, still with the hope of eventually becoming a doctor. Looking back, he now views that rejection as a blessing, as it led him to his true calling: research. During his first year of university, he discovered his passion for genetics and pursued this path, ultimately earning his PhD in 2018.

After completing his PhD, Dr Senzani faced the harsh reality of South Africa's high unemployment rate. Determined, he applied widely for opportunities and was introduced to nGAP by a colleague. He described securing a position in the programme as a turning point in his career, offering a rare opportunity to enter academia. Dr Senzani praised the Programme for providing three key opportunities:

- **Proving his value:** nGAP gave him the chance to demonstrate his abilities and showcase what he could contribute.
- **Expressing himself:** The programme provided a platform for him to express his identity and the value he brings.
- **Opening doors:** nGAP offered a crucial entry into academia, where opportunities are often limited by slow turnover in academic positions.

He highlighted the importance of programmes like nGAP, noting that they create opportunities that might otherwise not exist. For example, in his department, three new hires were only made possible due to retirements, and fresh PhD graduates, like himself, often struggle to find opportunities. Programmes like nGAP are essential for creating paths for aspiring academics.

Dr Senzani also acknowledged the critical support of seed funding, which he credited as the foundation of his success. Without initial funding, he said, it is nearly impossible to launch research initiatives. Through nGAP, he secured the resources needed to obtain further grants, collaborate, and publish multiple papers.

One of his proudest achievements is his role in mentoring young people. He takes great pride in guiding students, ensuring they become both impactful and employable. Every student he has trained, whether at the master's or honours level, has either secured employment or continued with further studies. He views this mentorship as one of the most meaningful aspects of his career. However, he also acknowledged the challenges posed by the COVID-19 pandemic, which disrupted many activities during the second year of his academic career.

Dr Senzani offered suggestions for improving nGAP, stressing the importance of annual events like the colloquium. These events provide valuable opportunities for participants to come together, collaborate, share ideas, and support one another. He also proposed including early participants in these gatherings, allowing them to offer inspiration and guidance to newer members.

Reflecting on his journey, Dr Senzani likened his nGAP experience to his PhD, where he was encouraged by his supervisor to take full ownership of his project. He applied this mindset to his nGAP role, using the platform as an opportunity to build something impactful. With gratitude, he concluded by affirming the life-changing impact of the Programme.

11. FUTURE OF THE NGAP: CLOSING REMARKS

Ms Cakwe began her address by expressing her gratitude and satisfaction with the day's proceedings, commending the seamless execution of the event. She extended her heartfelt thanks to the communications team for effectively disseminating updates across various social media platforms, ensuring the broader community was informed about the colloquium. Additionally, she acknowledged the vibrant participation of all attendees, applauding their active engagement throughout the programme.

Reflecting on the future of the nGAP, Ms Cakwe highlighted its profound impact in building the capacity of emerging academics. She reminded attendees that the transformation of higher education extends far beyond appointments; it requires deliberate efforts to enact meaningful change within institutions and across the higher education sector. She encouraged participants to introspect on their roles as agents of transformation, recognising the challenges they had overcome on their journey through the programme. Their perseverance, she noted, was a testament to their dedication and commitment. She also expressed the Department of Higher Education and Training's immense pride in their achievements, anticipating their continued contributions to their respective universities and the higher education system at large.

Ms Cakwe accentuated the success of the programme, noting its far-reaching influence not only at institutional levels but also internationally. This success, she said, reflects the hard work, innovation, and dedication of the participants. She reaffirmed the

department's unwavering commitment to supporting the programme, recognising the substantial progress already made and the potential for even greater impact in the future.

Sharing her vision for the programme, Ms Cakwe stressed its ultimate aim: the holistic transformation of higher education. While issues of race, gender, and age remain crucial, the programme aspires to drive systemic change, enhance research quality, and translate academic findings into solutions for real-world challenges. She urged attendees to ensure that their research extends beyond journals and libraries, actively contributing to societal progress. Challenging the status quo, she emphasised, is a critical responsibility of academics.

Mentorship, Ms Cakwe noted, is a cornerstone of transformation in academia. While it cannot be taught in a formal setting, mentorship embodies a commitment to nurturing the next generation of scholars. She encouraged participants to adopt this role in their academic careers, fostering inclusive and supportive environments for those who follow in their footsteps. Transformation, she emphasised, is not only about individual success but also about creating a dynamic, high-quality academic ecosystem that benefits all. In her closing remarks, Ms Cakwe provided a message of reassurance, stating that the future of the nGAP was secure, regardless of any changes in government. The department would remain steadfast in its support, ensuring the continued growth and expansion of the programme. She expressed her confidence in the transformative work already underway, affirming that it would flourish and continue to shape the future of higher education.

As she concluded her speech, Ms Cakwe extended her warm wishes for the evening's celebratory dinner, a moment for participants to relax and reflect on their achievements. She thanked everyone for their invaluable contributions to the programme's success and expressed her anticipation for the next day's discussions and presentations, confident that they would further inspire and advance the goals of the nGAP.

ANNEXURE A

NESP	nGAP	USDP
Tlotlo Radebe (CUT)	Nolwazi Qumbisa (CUT)	Thembinkosi Sotsaka (DUT)
Emilia Sarupdeo (DUT)	Sizwe Siwela (CUT)	Mmatshuene Segooa (TUT)
Yonela Ndila (NMU)	Thandokuhle Khoza (DUT)	Vuyelwa Dondolo (UFH)
Innocentia Zintl (NMU)	Jey Nyalungu (DUT)	Moeketsi Dlamini (UFH)
Silindile Mkize (MUT)	Mulalo Makhuvha (NMU)	Sithembele Ndovela (UFS)
Samkele Monakali (MUT)	Lerato Mdaka (NWU)	Siphokazi Gatyeni (UJ)
Thabang Chama (TUT)	Taryn De Vega (RU)	Zanele Matsane (UJ)
Anouschka Swart (TUT)	Thapelo Tselapedi (RU)	Puleng Motshoane (UJ)
Nohaya Esona (UFH)	Sabashnee Govender-Davies (SMU)	Letebele Mphahlele (UJ)
Phindile Shinga (UFH)	Kesentsen Mahlaba (SMU)	Lutendo Muremi (UJ)
Bulelwa Stemele (UFH)	Martha Kabinde-Machate (TUT)	Lethiwe Nzama-Sithole (UJ)
Chumasande Dapula (UFS)	Rudzani Glen Muthelo (TUT)	Sebonkile Thaba (UJ)
Manamele Mashabela (UJ)	Thivhafuni Tshishonge (TUT)	Nosipho Bele (UKZN)
Sphumelele Sibuta (UJ)	Xolisa Guzula (UCT)	Reginald Govender (UKZN)
Nosipho Dlamini (UKZN)	Musa Nxele (UCT)	Leevina Iyer (UKZN)
Tebogo Mokwana (UL)	Jarlen Keet (UFS)	Leevina Iyer (UKZN)
Kukhanyile Mali (UWC)	Vuyiswa Letsoko (UJ)	Vusi Msiza (UKZN)
Faranani Gethe (WITS)	Lerato Ndabezitha (UJ)	Nokukhanya Ndlovu (UKZN)
Lerato Mapela (WITS)	Lebo Phiri (UJ)	Ndumiso Ngidi (UKZN)
Vuledzani Badetswana (WSU)	Siyabonga Dlamini (UKZN)	Thabile Zondi (UKZN)
	Viloshin Govender (UKZN)	Nontobeko Khumalo (UNISA)
	Katelyn Johnson (UKZN)	Lungile Luthuli (UNISA)
	December Mpanza (UKZN)	Elliot Ndlovu (UNISA)
	Ntombifuthi Ngubane (UKZN)	Julia Mafumo (UNIVEN)
	Sibusiso Senzani (UKZN)	Mpho Magwalivha (UNIVEN)
	Tsetselenane Mdhluli (UL)	Taurayi Chinaka (UNIZULU)
	Kheto Nemutandani (UL)	Primrose Khumalo (UNIZULU)
	Aluwani Ramalata (UL)	Siphelele Makhubu (UNIZULU)
	Themba Lukhele (UMP)	Sello Mokoena (UNIZULU)
	Sukoluhle Mazwane (UMP)	Zanele Msweli (UNIZULU)
	Nyiko Khoza (UNISA)	Aviwe Sondlo (UNIZULU)
	Gloria Ledwaba (UNISA)	Zanele Msweli (UNIZULU)
	Mpho Maboja (UNISA)	Taurayi Chinaka (UNIZULU)
	Nomampondo Magwa (UNISA)	Sibonelo Blose (UP)
	Zolile Mguda (UNISA)	Makhaya Malema (UWC)
	Raseputuka Saasa (UNISA)	
	Phumzile Sibisi (UNISA)	
	Jabulani Dlamini (UNIZULU)	
	Nondumiso Hadebe (UNIZULU)	
	Gonste Lebakeng (UNIZULU)	
	Khomotso Lekola (UNIZULU)	
	Ongezwa Mnethu (UNIZULU)	

	Jabulile Mzimela (UNIZULU) Zwivhuyo Ndou (UNIZULU) Seitebaleng Makgai (UP) Phumudzo Tshiambara (UP) Nyameka Mbonambi (WITS) Nomfundo Moreo (WITS)	
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ANNEXURE B

BREAK-AWAY PLENARY – A		
Presenter	Discipline	Presented Research Paper
1. Dr. Letebele Mphahlele University of Johannesburg	Accounting	<p>Title: A Framework for developing critical thinking skills for accounting students</p> <p>This was qualitative study examines the significance of critical thinking skills in the field of accounting, emphasising their relevance as a key soft skill for accounting graduates. It identifies a core challenge: the misalignment among three key stakeholder groups, accounting employers, professional bodies, and academics in defining critical thinking skills. This misalignment hinders the effective fostering of such skills in accounting education. The research aimed to address three questions:</p> <ul style="list-style-type: none"> • How do stakeholders define and describe critical thinking skills in accounting? • What teaching strategies are effective for developing these skills in accounting students? • What tools or methods are suitable for assessing and evaluating critical thinking skills? <p>Key findings include:</p> <ul style="list-style-type: none"> • Stakeholders use different terminologies but associate critical thinking skills with three main attributes: <ul style="list-style-type: none"> ○ Evaluating information. ○ Applying information to solve problems. ○ Adopting attitudes that support ongoing critical thinking. <p>There is a lack of recognised effective teaching strategies and assessment tools for critical thinking in accounting education. To address these issues, the study developed a framework for fostering critical thinking skills, anchored in a unified definition of critical thinking, and aimed to align the perspectives of all three stakeholder groups. The framework highlights the importance of integrated teaching strategies and robust assessment methods tailored to accounting programmes.</p>
2. Dr. Sukoluhle Mazwane University of Mpumalanga	Agricultural Economics	<p>Title: Value Chain Digitalisation and Adoption Intention by Proactive Land Acquisition Strategy (PLAS) Farmers in the Eastern Cape Province, South Africa</p> <p>This study explored the behavioural factors influencing farmers' intentions to adopt digital technologies in agricultural value chains, focusing on Eastern Cape Proactive Land Acquisition Strategy (PLAS) farms in South Africa. The research highlights the role of digital technologies in enhancing connectivity, resilience, and sustainability within agricultural systems. A random sample of 100 PLAS farms was surveyed using semi-structured questionnaires.</p> <p>The data was analysed using R and STATA, applying the Unified Theory of Acceptance and Use of Technology (UTAUT) framework and Structural Equation Modelling (SEM). Findings:</p> <ul style="list-style-type: none"> • Performance expectancy (perceived benefits) and effort expectancy (ease of use) significantly influence farmers' intentions to adopt value chain digital technologies. • Male farmers exhibited higher expectations for both performance and effort, indicating gender differences in adoption attitudes. • Demonstrating the performance benefits and conducting training sessions on using these technologies are crucial to encourage broader adoption. <p>The study enriches the literature on the adoption of digital technologies in agricultural value chains and underscores the need for targeted training and demonstrations to address behavioural barriers among farmers.</p>
3. Dr. Dannis Mashabela University of Johannesburg	Biochemistry	<p>Title: Rhizosphere Tripartite Interactions and PGPR-Mediated Metabolic Reprogramming towards ISR and Plant Priming: A Metabolomics Review</p> <p>This study reviewed the role of plant growth-promoting rhizobacteria (PGPR) in plant growth and defence against biotic and abiotic stresses, focusing on rhizosphere chemical communications and tripartite interactions between plants, pathogenic microbes, and beneficial microbes. The objective of the study was to explore rhizosphere communication systems, tripartite interaction mechanisms, and the biochemical implications for plant metabolomes, with a focus on how PGPR induce systemic resistance (ISR) and priming at molecular and metabolic levels. Key insights:</p> <ul style="list-style-type: none"> • Plant-Microbe Interactions: PGPR contribute to plant growth and defence through chemical communication in the rhizosphere, yet comprehensive knowledge of these interactions remains limited. • Tripartite interactions: The interactions among plants, pathogenic microbes, and PGPR influence plant metabolome reprogramming, but the detailed mechanisms are not fully understood. • Metabolomics Applications: Advances in metabolomics have enabled detailed analysis of plant metabolomes and metabolic reprogramming due to tripartite interactions, offering insights into ISR and priming. <p>The review highlighted the need for further investigation into rhizosphere communications and PGPR effects at the molecular and metabolic levels, emphasising the utility of metabolomics in decoding these complex interactions.</p> <p>This work synthesises current knowledge and identifies research gaps in understanding PGPR's role in plant growth and defence, proposing metabolomics as a key tool for advancing this field.</p>
4. Dr. Thabile Zondi University of KwaZulu Natal	Geography Education	<p>Title: An Inquiry-based Learning framework for teaching Geographic Information Systems in a rural learning ecology. Improving the teaching of Geographic Information Systems in schools with no computers</p> <p>This study investigated the use of an inquiry-based learning framework for teaching Geographic Information Systems (GIS) in a rural learning ecology, aiming to address challenges in GIS education. The research was grounded in the transformative paradigm and utilised Participatory Action Research (PAR) to involve 17 stakeholders in a collaborative exploration of teaching and learning GIS. Key findings indicated barriers to GIS education included:</p>

		<ul style="list-style-type: none"> • Lack of formal GIS training for educators. • Reliance on traditional, non-interactive teaching approaches. • Inadequate resources for GIS instruction. • Negative teacher attitudes toward GIS. <p>To address the training gap, workshops were conducted focusing on GIS content knowledge and pedagogy, integrating the Inquiry-based learning framework. These workshops:</p> <ul style="list-style-type: none"> • Improved teacher attitudes toward GIS. • Enhanced participants' capacity to adopt innovative teaching strategies. <p>The study emphasised the role of collaborative action and communicative engagement among stakeholders in overcoming educational challenges. The research highlights the effectiveness of Inquiry-based learning in fostering collaboration and improving GIS teaching practices in rural contexts. It recommends adopting this framework to enhance GIS education and address systemic barriers in resource-constrained settings.</p>
<p>5. Dr Nolwazi Qumbisa <i>Central University of Technology</i></p>	<p>Built Environment</p>	<p>Title: <i>Case-based research on the FEDUP model for self-help housing</i></p> <p>This dissertation investigated the relationship between self-help housing and the promotion of community identity in neighbourhoods where residents construct their own homes. Self-help housing relies on individuals' sweat equity, allowing households to plan and build their houses, embedding personal elements into the design and fostering a sense of identification with the local area. Primary data was collected via surveys to provide a local perspective. Secondary data contextualised the findings internationally. The study was guided by Social Identity Theory (Tajfel & Turner, 1979) and Self-Help Housing Theory (Turner, 1976). Key findings:</p> <ul style="list-style-type: none"> • There is a clear link between self-help housing and community identity. • Construction activities encourage personal input, enabling residents to create environments that reflect their individual and collective identities. • This process has the potential to enhance social cohesion and community unity, addressing the current lack of these elements in many South African communities. <p>The research expanded on the social dynamics of self-build housing in South Africa, providing insights for stakeholders seeking to improve community identity and cohesion. It highlights self-help housing as a possible solution for fostering stronger, more unified neighbourhoods.</p>
<p>6. Dr Chinaka & Dr Msweli <i>University of Zululand</i></p>	<p>MSTE</p>	<p>Title: <i>Identifying the critical features of the University Staff Doctoral Program. Intentions of the coordinators and academics</i></p> <p>This study examined the experiences of academics in the first generation of the University Staff Development Program (USDP) in South Africa, which aimed to enhance research and teaching capacity in Higher Education Institutions (HEIs). The objective of the study explored the varied experiences of academics participating in the USDP and the influence of mentors' critical features and beliefs on program implementation. Participants included:</p> <ul style="list-style-type: none"> • Six universities: two previously disadvantaged, three advantaged, and one US-based. <p>Data collected from five academics (three females, two males) and three coordinators (one female, two males) with direct involvement in the program.</p> <p>Theoretical Framework: Variation Theory: Used to analyse how academics experienced the object of learning (USDP) and to understand the dichotomy between focal awareness and background experiences. Methodology:</p> <ul style="list-style-type: none"> • Design: Phenomenological research. • Data Collection: Semi-structured interviews. • Data Analysis: Thematic analysis to identify themes and patterns. <p>The findings highlighted:</p> <ul style="list-style-type: none"> • Academics experienced the USDP differently based on the mentors' critical features and beliefs. • The lived object of learning was not homogeneously experienced, influenced by varying focal points and relegated aspects. • Shared expertise among mentors could align the lived object of learning more closely, enhancing program consistency. <p>Mentorship within the USDP should emphasise sharing expertise and aligning mentor perspectives to create a unified learning experience for participants.</p> <p>Variation Theory provides valuable insights for improving mentorship and program design in professional development initiatives.</p>
<p>7. Dr Elias Moeketsi Dlamini <i>University of the Free State</i></p>	<p>Education</p>	<p>Title: <i>Using transformative learning theory to prepare the assessment of work-integrated learning of university student teachers</i></p> <p>This study examined the inclusion of student teacher voices in the assessment of work-integrated learning (WIL) in South Africa, addressing a gap in current practices. Despite the development of assessment instruments in 2015 to align with policy requirements for initial teacher education, these instruments often exclude student perspectives. The study aimed to develop a transformative assessment framework for WIL based on Transformative Learning Theory (TLT), ensuring student teachers are actively involved in the assessment process.</p> <p>The methodology was guided by Transformative Learning Theory (TLT) and Participatory Action Research (PAR), the study engaged participants collaboratively. Participants included a university teaching practice officer, a lecturer overseeing the teaching practice module, five mentor schoolteachers, ten student teachers participating in a WIL programme at a secondary school.</p> <p>The findings of the study:</p> <ul style="list-style-type: none"> • The study highlights the importance of including student teachers' voices in WIL assessment processes. • It proposes a new strategy for WIL assessment that incorporates student input, fostering empowerment and engagement. <p>The research contributes to improving WIL assessment in teacher education by proposing a participatory, student-centred approach. This strategy aligns assessments with transformative learning principles, ensuring they reflect the experiences and insights of all stakeholders.</p>

8. Dr Nokukhanya Ndlovu & Dr Vusi Msiza <i>University of KwaZulu Natal</i>	Educational Leadership, Management & Policy	<p>Title: Embracing liminality: academic development for early career academics within a community of practice</p> <p>This study explored the experiences of early career academics engaging in academic development through their community of practice. Recognising academic development as a significant and collaborative effort, the authors examine how their shared practices and interactions within this community have supported their academic growth. A collaborative self-study approach was used to reflect on the authors' personal and collective experiences. A metaphorical drawing was employed as a visual tool to represent the rigorous and rewarding practices of the community. Key insights from the study indicated:</p> <ul style="list-style-type: none"> Communities of practice are shown to be effective in fostering academic growth, particularly for early career academics navigating the challenges of academic development. Liminal spaces—transitional or in-between spaces—are identified as valuable hubs for collaboration, creativity, and learning within these communities. <p>The study highlights the potential of liminal spaces and communities of practice to expedite the professional and academic progress of early career academics. It underscores the importance of collective efforts in academic development and advocates for intentionally designed spaces to facilitate collaboration and support.</p>
9. Mr Phindile Shinga <i>University of Fort Hare</i>	GIS & Remote Sensing	<p>Title: Modelling spatiotemporal patterns of wildfire risk in the Garden Route District biodiversity hotspots using analytic hierarchy process in South Africa</p> <p>This study addressed the growing need for effective wildfire risk management in biodiversity hotspots, focusing on the Garden Route District (GRD) in the Western Cape, South Africa. Using a multi-criteria decision analysis-analytic hierarchy process (MCDA-AHP) model, the research evaluates wildfire risk patterns based on various factors, including human activities, topography, and climate. Methodology adopted data sources: Landsat imagery and WorldClim data (1991–2021); wildfire risk factors were weighted and analysed using overlay methods; validation: the model was tested with MODIS historical fire data from the Global Forest Watch database and Confusion Matrix; and burned areas were mapped using the differenced Normalised Burn Ratio (dNBR). Key findings included:</p> <ol style="list-style-type: none"> Fire Patterns: <ul style="list-style-type: none"> 53% of the most burned areas accounted for only 12% of actual burns. High-risk zones (11%) show a greater likelihood of wildfire spread and intensification. Risk Correlations: <ul style="list-style-type: none"> A weak positive correlation ($r = 0.28$) exists between historical fire occurrences and burned areas. A negative correlation ($r = -0.27$) was observed between historical fire occurrences and fire seasons. Risk Factors: <ul style="list-style-type: none"> Human and climatic factors significantly influence wildfire propagation in high-risk zones. Topographic factors play a lesser role, suggesting a lower ignition risk from terrain. Risk Distribution: <ul style="list-style-type: none"> 26% of high-risk zones are concentrated in the southwestern GRD biodiversity hotspots. 27% of low-moderate-risk zones are in the northwestern GRD. <p>The findings provide critical insights for wildfire prevention and management, offering a fire risk-based criterion weighting system to assist decision-makers. This approach can inform both regional and global strategies for mitigating wildfire hazards in biodiversity-rich areas.</p>
10. Dr Mafumo <i>University of Venda</i>	Healthcare	
11. Dr Taryn De Vega <i>Rhodes University</i>	Journalism & Media Studies	

Presented Research Paper	
Presenter	Discipline
1. Dr Mulelo Makhuvha Nelson Mandela University	Mathematics
<p><i>Title: Studying the Effect of Parasite Switching in Optimal Control Analysis of Sleeping Sickness</i></p> <p>Sleeping sickness, or Human African Trypanosomiasis (HAT), is a neglected tropical disease capable of infecting humans, animals, and Tsetse flies, which act as vectors. Its persistence in communities is due to the ability of the parasite to utilise multiple hosts. The study addresses the dynamics of the disease through a three-species epidemiological mathematical model, focusing on stage-specific treatment and vector trapping as control strategies. Methodology adopted:</p> <ul style="list-style-type: none"> - Model construction: <ul style="list-style-type: none"> • The human population is divided into five compartments, representing distinct stages of the disease. • Two compartments each are used for Tsetse flies and non-human animal reservoirs. - Mathematical analysis: <ul style="list-style-type: none"> • The model's properties were analysed using the effective reproductive number (Rec) to determine equilibrium points and stability conditions. • Bifurcation analysis revealed that $Rec < 1$ alone is insufficient to guarantee disease eradication. - Optimal Control: <ul style="list-style-type: none"> • Pontryagin's Maximum Principle was applied to design an optimal control model for managing the disease. <p>Key Findings:</p> <ul style="list-style-type: none"> • The biting rate of Tsetse flies is the most sensitive parameter influencing disease dynamics. • A combination of vector control and stage-specific treatments is necessary to effectively interrupt disease transmission. • Vector control must be sustained for an extended period to achieve long-term eradication. <p>The study advocates for integrated control measures, combining vector trapping, medical treatment, and surveillance to manage and eliminate HAT effectively. This approach aligns with the World Health Organization's (WHO) goal to deplete the parasite reservoirs and stop disease transmission.</p>	
2. Ms Bulelewa Stemele University of Fort Hare	Mathematics Education
<p><i>Title: Exploring learner errors and misconceptions in algebraic expressions with Grade 9 learners</i></p> <p>This study investigated Grade 9 learners' errors and misconceptions when solving algebraic expressions, a foundational yet challenging area of mathematics. The research is grounded in the Vygotskian sociocultural theory of learning, which emphasises the role of teachers and manipulatives in facilitating learning within a learner's Zone of Proximal Development (ZPD). The problem is South African learners perform poorly in mathematics, particularly in algebra, a critical area that underpins further mathematical study and other disciplines. Learners struggle with the abstract nature of algebra, especially variables and equations, leading to errors and misconceptions stemming from a lack of foundational knowledge.</p> <p>A mixed-methods approach was employed, combining tests and learner interviews. Data was collected from 22 Grade 9 learners through a pre-test to identify errors and misconceptions. An intervention using algebra tiles—a manipulative tool for teaching algebraic expressions—was implemented. A post-test was conducted to assess the effectiveness of the intervention. Key findings:</p> <ul style="list-style-type: none"> • The study confirmed error types found in existing literature, such as incorrect handling of variables, misapplication of rules, and failure to simplify expressions. • The use of algebra tiles significantly improved learners' understanding and performance in the post-test. Manipulatives helped bridge the gap between abstract concepts and concrete understanding, fostering better comprehension of algebraic ideas. <p>This study supports the use of manipulatives like algebra tiles as effective tools for addressing algebra-related challenges in mathematics classrooms. It adds to the body of research advocating for conceptual teaching approaches to improve learners' engagement and achievement in algebra.</p>	
3. Dr Sibuta University of Johannesburg	Mechanical Engineering
<p><i>Title: Design and Manufacturing of An Air-Filled Travelling-wave Thermo-acoustic Generator</i></p> <p>This study reviewed the role of plant growth-promoting rhizobacteria (PGPR) in plant growth and defence against biotic and abiotic stresses, focusing on rhizosphere chemical communications and tripartite interactions between plants, pathogenic microbes, and beneficial microbes. The objective was to explore rhizosphere communication systems, tripartite interaction mechanisms, and the biochemical implications for plant metabolomes, with a focus on how PGPR induce systemic resistance (ISR) and priming at molecular and metabolic levels. Key Insights:</p> <ul style="list-style-type: none"> • Plant-Microbe Interactions: PGPR contribute to plant growth and defence through chemical communication in the rhizosphere, yet comprehensive knowledge of these interactions remains limited. • Tripartite Interactions: The interactions among plants, pathogenic microbes, and PGPR influence plant metabolome reprogramming, but the detailed mechanisms are not fully understood. • Metabolomics Applications: Advances in metabolomics have enabled detailed analysis of plant metabolomes and metabolic reprogramming due to tripartite interactions, offering insights into ISR and priming. <p>The review highlights the need for further investigation into rhizosphere communications and PGPR effects at the molecular and metabolic levels, emphasising the utility of metabolomics in decoding these complex interactions. This work synthesises current knowledge and identifies research gaps in understanding PGPR's role in plant growth and defence, proposing metabolomics as a key tool for advancing this field.</p>	
4. Dr Mpanza University of KwaZulu Natal	Occupational Therapy
<p><i>Title: Aftercare services to people with substance use disorders: analysis of South African policy</i></p>	

	<p>This paper examined the state of substance use aftercare and reintegration policies in South Africa, where limited access to treatment and aftercare services remains a critical issue. The study highlighted the paucity of empirical research on aftercare and the need for alignment with international frameworks to enhance treatment outcomes for individuals with substance use disorders. The study aimed to analyse South African policies for aftercare content and explore how these policies respond to the national and international context, particularly the guidelines set by the United Nations Office on Drugs and Crime (UNODC) and the World Health Organization (WHO). The analysis was guided by policy analysis triangle (Walt and Gilson); beer's viable systems model; and thematic analysis of eight selected policies.</p> <p>Key findings of the study:</p> <ul style="list-style-type: none"> • Over time, South African substance use policies have progressed from excluding aftercare to incorporating minimal provisions for aftercare services. • South African policies primarily reflect an acute treatment model, consistent with the broader South African healthcare system, which focuses on short-term interventions. • Current policies do not fully embrace the chronic treatment approach advocated by the UNODC and WHO, which emphasise long-term recovery and reintegration. <p>The study advocates for an Integrated Recovery Management Model, tailored to South Africa's local context while aligning with international best practices. Such a model would:</p> <ul style="list-style-type: none"> • Strengthen aftercare service delivery. • Address chronic care needs. • Ensure sustainable reintegration for individuals recovering from substance use disorders. <p>This integrated approach could better support the long-term recovery of individuals and improve national outcomes in substance use treatment.</p>	Development Studies	
<p>5. Dr Themba Lukhele <i>University of KwaZulu Natal</i></p>	<p><i>Title: A Conceptual Framework for Systematic Project Planning Towards the Successful Delivery of Infrastructure Development Projects in the Public Sector</i></p> <p>Infrastructure projects in the public sector aim to meet the needs of stakeholders and beneficiaries, with project success determined by how effectively these needs are addressed. However, traditional methodologies for project planning and management often focus on delivering the physical infrastructure, neglecting the operational environment where the project's outcomes and benefits are realised. This neglect contributes to unsatisfactory outcomes and the failure of many public infrastructure projects to meet their intended goals. Key issues highlighted the following:</p> <ul style="list-style-type: none"> • Emphasis is placed on the physical delivery of infrastructure during planning and execution phases. • Insufficient attention is given to preparing the operational environment, crucial for realising project outcomes. <p>Importance of the Operational Environment:</p> <ul style="list-style-type: none"> • The operational phase determines the ability to harvest benefits and sustain value from infrastructure projects. • Many public sector projects fail because the operational environment is not adequately prepared during earlier phases. <p>The article advocates for integrating the concept of operational readiness into infrastructure project planning and management. This approach emphasises:</p> <ul style="list-style-type: none"> • Preparing the operational environment as part of project planning and execution. • Ensuring a systematic framework to bridge the gap between infrastructure delivery and its operational phase. <p>A theoretical shift towards systematic project planning and management, with operational readiness as a central component. A foundation for future empirical research to test and refine the framework. Practical insights for improving the delivery and long-term success of public sector infrastructure projects. Adopting this framework could enhance the effectiveness and sustainability of infrastructure projects, ensuring they achieve their intended societal value.</p>	Real Estate, Sustainable Cities	
<p>6. Mr Faranani Getha <i>University of the Witwatersrand</i></p>	<p><i>Title: Integrating land value capture into infrastructure investment planning in South Africa: a local government framework</i></p> <p>This study explored Land Value Capture (LVC) as an alternative funding model to address South Africa's infrastructure development challenges amidst fiscal constraints and economic contraction. Traditional government funding methods are inadequate to meet the demands of urbanisation and a growing population, necessitating innovative approaches like LVC. The study aims to develop guidelines for the effective implementation of LVC using planning gain and investment theories, addressing its current fragmented application in South Africa.</p> <ul style="list-style-type: none"> • A qualitative approach was used, analysing five key South African legislative and policy documents selected based on the study's conceptual framework and research questions. • Content analysis was conducted, comparing findings with conceptual guidelines developed in the study, with these guidelines serving as analytical themes. <p>Findings:</p> <ul style="list-style-type: none"> • Significant inconsistencies exist between current LVC practices, as identified in policy documents, and the study's conceptual framework for successful implementation. • The document analysis highlights disparities in LVC's alignment with principles of planning gain and investment theories. • The study emphasises the need for evidence-based, refined guidelines to ensure LVC supports inclusive urbanisation and drives economic growth effectively. <p>The research underscores the urgency of adopting LVC as a strategic funding model to expedite infrastructure development and counteract apartheid-era spatial inequities. This study contributes to policy development by proposing actionable guidelines for implementing LVC in South Africa, ensuring alignment with urban growth imperatives and economic inclusivity.</p>	Real Estate, Sustainable Cities	
<p>7. Dr Lerato Ndobezitha <i>University of Johannesburg</i></p>	<p><i>Title: A framework for designing and implementing guided</i></p> <p>This study explored the implementation of a pre-service teacher education course on guided play as pedagogy, addressing the gap in preparing teachers to use play-based teaching methods effectively. While play is widely recognised for its role in fostering learning and creativity, the course aimed to align guided play with curricular goals and enhance pre-service teachers' understanding of their guiding role. The research, conducted at the University of Johannesburg, used a design-based research approach:</p> <ul style="list-style-type: none"> • Participants: Bachelor of Education students in the foundation phase of schooling. • Methods: data were collected through questionnaires, interviews, analysis of students' work, and a research journal. 	Childhood Education	

8. Dr Aviwe Sondlo University of Zululand	Science Education	<p>The findings of the study:</p> <ul style="list-style-type: none"> • The course helped pre-service teachers develop a foundational understanding of guided play and its potential to foster creativity. • A significant gap was identified in their comprehension of guiding practices during play-based learning. <p>This research proposes greater emphasis on the connection between play and creativity. The study contributes to addressing the limited research on teacher preparation for play-based teaching, offering insights to improve pre-service teacher education programmes.</p> <p>Title: <i>The pedagogical orientations of pre-service science teachers towards instructional approaches</i></p> <p>This study investigated the pedagogical orientations of pre-service science teachers in Life Sciences and Physical Sciences, focusing on their instructional approaches and alignment with curriculum goals. The term "orientation" refers to a teacher's beliefs and knowledge about teaching sciences. Pedagogical orientations were classified into two main approaches: direct (Direct Didactic and Direct Active) and inquiry-based (Guided Inquiry and Open Inquiry). The research employed an explanatory sequential mixed-method approach:</p> <ul style="list-style-type: none"> • Quantitative method: Determined the pedagogical orientations, shifts in these orientations over time, and alignment with curriculum goals using the Pedagogy of Science Teaching Test (POSTT) administered to 114 final-year pre-service teachers. • Qualitative method: Explored factors influencing the orientations through interviews with eight purposefully selected Physical Sciences pre-service teachers. <p>The findings of the study:</p> <ul style="list-style-type: none"> • Preferred pedagogical approaches: pre-service teachers favoured Guided Inquiry as the most appropriate and Direct Didactic as the least appropriate. • Shifts in pedagogical orientation: over time, Physical Sciences pre-service teachers exhibited a shift towards inquiry-based approaches. • Alignment with curriculum goals: the orientations were consistent with the secondary school curriculum's emphasis on Guided Inquiry. • Influencing factors: pedagogical orientations were shaped by school resources, class size, teaching time, pedagogical beliefs, curriculum goals, and content knowledge. <p>This study highlighted the importance of fostering inquiry-based pedagogical approaches in pre-service science teacher education and addressing contextual factors that influence teaching orientations.</p>
9. Dr Makhaya Malema University of the Western Cape	Sport, Recreation and Exercise Science	<p>Title: <i>Leisure education to leadership: Youth with physical disabilities' experiences in South Africa</i></p> <p>This study explored how leisure education can be used to develop leadership skills in youth with physical disabilities, a group often lacking opportunities for leadership development. The research aimed to understand the perceptions of young people with physical disabilities regarding leisure education as a tool for enhancing their leadership potential. A descriptive qualitative research design was employed, using purposive sampling to select 10 youths with physical disabilities (ages 18–34) in the Western Cape, South Africa. Data were collected through one-on-one semi-structured and open-ended interviews. The study found the following findings:</p> <ul style="list-style-type: none"> • The study identified four main themes and 11 sub-themes. • The key findings indicated that participants saw leisure education as a means of building their leadership capacity. • Their experiences reflected how leadership opportunities in leisure education contributed to their personal development and ability to take charge of activities within their community. <p>Leisure education should be considered an effective tool for promoting leadership among youth with physical disabilities in South Africa. This study provides valuable insight into the potential of leisure education for fostering leadership in youth with physical disabilities, contributing to the understanding of their experiences and skill development during such activities.</p>
10. Mr Nyiko Muhluri Khoza UNISA	Statistics	<p>Title: <i>Handling incomplete data using random draws</i></p> <p>This study addressed gaps in current methods for handling missing observations in data. It evaluates the effectiveness of using the HPSPLIT procedure to assess variable importance, comparing data before and after cleaning to demonstrate the procedure's effectiveness. The study argues that missing observations occur randomly, similar to observed data, but emphasizes the importance of preserving data value formats when addressing incomplete data issues. The methodology adopted:</p> <ul style="list-style-type: none"> • The study proposes a new method that avoids violating value formats in data, unlike existing techniques that may alter data formats when handling missing values. • The new method retains sample size and provides biased estimates when comparing the handled sample to the true population. • The study also assessed the reliability of imputation techniques and conducts experiments to evaluate current methods. <p>The study found:</p> <ul style="list-style-type: none"> • The study finds that not all imputation techniques effectively handle missing data. • It identified gaps in existing methods and proposes a solution that involves multiplying imputing random draws of observations until convergence is reached, while maintaining data value formats. • The proposed method also includes a cleaning step to resolve issues with the random-draw approach. <p>The proposed method offers a more effective solution for handling missing data by preserving value formats and improving upon current imputation techniques. This study contributes to the understanding of handling missing data, highlighting the importance of value formats and proposing a more reliable technique for imputing missing observations.</p>



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