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Reconnecting Academia and Practise: Curriculum Improvement in Urban and Regional Planning Education

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1 ABSTRACT

In contemporary academia, institutions of higher learning are experiencing an ideological shift as they strive to align with the Sustainable Development Goals (SDGs) while maintaining relevance within professional planning practices. Research and innovation in community-based projects have emerged as pivotal strategies to enhance planners' engagement with real-world challenges. However, curriculum improvement remains a significant undertaking, particularly as institutions aim to secure accreditation for their academic programs from professional bodies. At the University of Johannesburg, a critical gap has been identified in exposing students to real-world projects, which was previously addressed in the National Diploma program through in-service training and mentorship by professional planners – a feature not retained in the transition to the Degree program. This study examines curriculum improvement as a strategy for program accreditation, using the Department of Urban and Regional Planning at the University of Johannesburg as a case study. A qualitative research approach was employed, drawing on university documents, a literature review, and semi-structured interviews. Content and thematic analyses were applied to interpret the data. The findings highlight the potential for partnerships, such as memorandums with municipalities, to reintroduce professional mentorship for students. This mentorship program, leveraging innovative and transformative approaches, promises to achieve outstanding outcomes in teaching, learning, and research, thereby bridging the gap between academic training and professional practice. This study underscores the necessity of continuous curriculum evaluation and the adoption of innovative, inclusive, and sustainable practices. It concludes with recommendations for implementing a dynamic, future-oriented curriculum that prepares graduates to excel within the planning professional while addressing societal and global challenges.

Keywords: curriculum improvement, planning, sustainable, transformation, innovation

2 INTRODUCTION

Globally, higher education is under pressure to reinvent and transform itself. Urban planning education has faced many challenges over the last two decades, and offering education with limited resources carried this problem to another level, increasing concerns among scholars about the quality of the education and the learning outcomes a planner should possess at graduation (Mpofu et al., 2013); Carrim, 2019). While planning schools in South Africa deal with the issues above, global debates in planning education revolve around integrating topics such as digitalisation, climate change, informality, and decolonisation into the curriculum (Ndlovu & Gumbo, 2018; Xing et al., 2018; Wallin, 2010). The acknowledgment of the need for higher education to be a catalyst for sustainable development has provided the foundation required for curriculum transformation and the actual experiences and lessons learned. Seemingly, Naicker (2016) opines that decolonising university curricula and academic culture will lead to desired social transformation at the institutions.

Urban and Regional planning is a complex area of education and practices that seeks to respond to emerging social, environmental, economic and technical aspects of the built environment. Traditionally Urban and Regional planning at the core is interdisciplinary, however over the years it has emerged to become technocratic emphasising practically and quantitative approaches over critical thinking and qualitative approaches (Dawkins, 2016, Makoni, 2020). Sletto (2021) has also raised concerns about how planning is being taught in higher education institutions and how it impacts the practice of the profession in the real world when students graduate. Similarly, Pojani et al. (2018) have articulated that teaching and learning are mainly traditional, with limited usage of emerging technological tools.

In South Africa, since the demise of apartheid, the education policy terrain has shifted remarkably fast and policies have required that higher education institutions respond to the national plan that commits universities to become cost-effective, massified institutions opening access to all who were historically excluded due to apartheid's policies of educational exclusion (Musakwa and Moyo, 2020). Furthermore student-led protests around the high cost of higher education have also introduced a new kind of pressure point on universities. The aftermath of the #FeesMustFall movement in South Africa has left higher education institutions with numerous challenges with a decrease in government funding and an increase in government control (Ajani and Gamede, 2021). To address these challenges, two contemporary concepts have emerged to inform higher education transformation discourses, namely decolonization and digital transformation. Given that curriculum transformation is not static, it may encompasses any number of themes.

Currently at the forefront are the themes of the decolonisation of teaching, learning and curriculum; and enhanced awareness of the Sustainable Development Goals (Ramrathan, 2016; Roithmayer, 1999); Bloom, 1956; Fataar & Badroodien, 2020). The depth of the emphasis in each of these varies depending on the initiatives of each university. In South Africa, decolonisation has been against the backdrop of the need to address historical, educational segregation that excluded, marginalized, stigmatized, and 'othered.' Digital transformation has aimed to address key competencies for the development of the Fourth Industrial Revolution and 21st century skills in graduates (Musonda et al., 2025; Chikukwa et al., 2025). This has led to universities in the higher education sector being required to generate strategies that broaden awareness, training, and uptake of emerging Fourth Industrial Revolution technologies such as big data, the internet of things, mixed reality, digital twin, and building information modeling. In view of the importance and urgency of transformation within post-colonial educational settings, this study examines curriculum improvement as a strategy for program accreditation, using the Department of Urban and Regional Planning at the University of Johannesburg as a case study. It specifically discusses how concepts of digital transformation and decolonisation are reimagined to meet the urban planning profession's competencies.

3 LITERATURE REVIEW

The decolonial theory understands that Western Modernity keeps imposing itself through a triple mutually reinforcing and shaping imprisonment. Decolonisation within the scope of universities is grounded on decentring using three critical concepts namely coloniality of power in education, coloniality of being focusing on the lasting impact of colonialism on a person's identity and self-perception, coloniality of knowledge focusing on knowledge production discourse. Scholars have articulated that bottom-up and top-down decolonization of higher education can be made complementary (Yang, 2012; Shivji, 1993; Venter, 2018; Moalosi, et al., 2017). Makoni (2020) advocated for a shift in understanding power relationships and conceptions of being and knowing. Additionally, lessons from Wa Thiong'o, N. (1993) writing reveal "moving the center from its assumed location in the West to multiple spheres." This then opens up dialogue from ingenious knowledge systems to be incorporated into higher education spaces. Transformation of higher education will involve unlearning traditional approaches to urban planning in order to relearn news of designing urban spaces and reimagining inclusive utopian registers.

Le Grange (2016) claims that decolonising higher education entails liberation of the present curriculum that is epistemic into "a fusion of both Ubuntu (I am because we are) and the active force of currere into the oneness of decolonised minds". This shift acknowledges the ecological importance of curriculum rather than the subjectivity of being individuals. Lessons learned reveal a shift from 'subjectivity' or individuality to a focus on the embracement of embedded learning, skills development, and critical thinking infused with indigenous knowledge systems. Thus, the curriculum becomes anchored on the attainment and promotion of respectful representation, relational accountability, rights and regulation and reciprocal appropriation.

Rediscovery and reformation of the Urban and Regional planning discipline is essential to ensure the profession remains relevant. The continuing lag in technology adoption within the planning practice is emerging as a growing concern amongst developing countries (Sayed et al., 2017; Zembylas, 2018; Turnbull, 1997). This digital divide within planning poses a considerable obstacle to fostering resilient and inclusive growth. Gumbo (2023) has articulated that the lack of deliberate focus on the digital transition in higher education institutions in developing countries is evident in the limited adoption, use, and experimentation with technology. Conversely, the industry-driven or bottom-up approach to digitalisation relies less on

government intervention, with the industry taking a proactive role in technology implementation. Additionally, professional bodies that do not have mandates for digital skills as part part of competency standards do not experience high adoption of emerging technologies. Bakama (2022) argues higher education institutions that do not have a mandate aligned with digitalisation hinder curriculum transformation and technology adoption.

In an effort to bridge the technology adoption gaps in higher education previous studies have highlighted the crucial role of government oversight, alongside financial and technical support, in fostering technology adoption rather than solely relying on mandates. Additionally, bridging the gap in access to information and communication technology is essential for enhancing adoption, which can be achieved through investments, education, and regulation (Olaitan, et al., 2024). Direct government involvement includes providing subsidies or assistance to higher education institutions and implementing specific programs to engage relevant stakeholders (Armah et al., 2002; Mudau, 2016; Carrim, 2019). Indirectly, higher education institutions can facilitate adoption by establishing policies and regulations that create an environment conducive to innovation. In South Africa the COVID-19 pandemic precipitated significant changes to higher education. Several reformulations were implemented to enable distant learning, these ramifications continue to impact and shape digital transition. Post the pandemic, many higher education institutions have continued to increase investment in digital platforms (Mustapha, 2021). Thus digital transformation in higher education has implied the involvement of sustainable management to adapt to the changes imposed by new technologies (Vázquez-Cano et al., 2020). This result leads to higher education students' development of interpersonal competencies when using Information and Communication Technologies for digital innovational learning and outcomes (Abad-Segura, et al., 2020).

4 METHODOLOGY

A qualitative research approach was employed, drawing on university documents, a literature review, and semi-structured interviews. Table 1 summarises the demographic details of the participants in the focus group discussion. Semi-structured interviews were conducted with staff within the Urban and Regional Planning Department at the Univerity of Johannesburg. The interview duration was between 65 mins and 85 mins. Additionally a focus group of postgraduate Urban and Regional planning students with experiences from the National Diploma and Btech program and the new Bachelor of Urban and Regional Planning program were considered valuable in sharing their insights for the study. This is because focus groups are a popular technique for gathering data since they take advantage of team dynamics to examine interprofessional perspectives. In a focus group, participants are chosen as a deliberate, though not necessarily representative, selection of a certain community and the interviews are "focused" on a specific issue (Takashima et al., 2020). A focus group was employed to collect in-depth answers to questions from a diverse set of participants spread out geographically and to take advantage of group interaction (Blake et al., 2021).

Participants	Urban Planning Qualification	Gender	Position	Years of Employment Experience
Participant 1	Diploma	Female	Student	3
Participant 2	Btech Degree	Male	Student	5
Participant 3	Diploma	Female	Student	9
Participant 4	Btech Degree	Female	Student	4
Participant 5	Bachelors (Hons) degree	Male	Student	1
Participant 6	Bachelors (Hons) degree	Female	Student	0
Participant 7	Masters	Female	Student	2
Participant 8	Masters	Male	Student	6
Participant 9	Bachelors degree	Male	Student	2
Participant 10	Masters	Male	Student	4
Participant 11	Phd	Female	Lecturer	8
Participant 12	Phd	Male	Lecturer	7
Participant 13	Phd	Male	Lecturer	10

Table 1: Demographic Details of the Focus Group Participants.

Three researchers transcribed the audio file using online Microsoft Word for accuracy. The data was analysed using Atlas.ti. The study adopted a thematic analysis approach for coding the major themes and checking for consistency. To analyse the participant responses thematically, the procedures adopted include; familiarisation with the data, developing initial codes, generating themes, reviewing the themes, and defining

and naming the themes. This approach was coded using Atlas ti. Coding the themes involved checking the assessment of the interviewees' feedback to the group and tagging the responses in line with the code to facilitate easy retrieval. The responses from the respondents of this study were coded in nodes (themes) by identifying patterns in them. These themes are discussed and supported by verbatim extracts from the data to highlight important issues

5 FINDINGS AND DISCUSSION

P13 outlined that in developing the improvement plan the Department of Urban and Regional Planning has prioritised analysis of the planning profession accreditation findings. These insights provided invaluable guidance that highlighted areas requiring immediate attention and enhancement. These are part of efforts to ensure the current planning programs are robust and adhere to regulatory standards. Additionally, P12 articulated the need for actively engaging with the evolving needs of students, industry, and society at large. Therefore, the central tenet of the improvement strategy is a commitment to fostering a learning environment that is reflective of contemporary challenges in urban planning, while also ensuring that our graduates are equipped with the skills and competencies necessary to excel in their careers

Transformation is structured around several key initiatives designed to strengthen program marketing, enhance student engagement with industry practices, improve research output, and foster robust connections with alumni and stakeholders. To effectively implement these initiatives, the Department of Ubran and Regional Planning at UJ have established specific actions scheduled for execution over the next two years. By creating a dynamic learning environment with the aim of preparing students to confront the complexities of urban planning today and in the future.

Decolonial Theory Perspectives

The global south discourse on decologinalisation of the built environment has largely enabled transformation to streamline the curriculum, providing a more effective and efficient approach to handling urban challenges. The participants outlined the Department of Urban and Regional Planning boasts of several colleagues who are at the forefront of decolonial thought. There is a call for planning theory which reflects the realities in our urban, regional and rural spaces; hence, decolonisation of knowledge is the only solution that promotes understanding and appreciation of our realities in the African context. Through these efforts, the department has led the quest to decolonize planning education. As part of this exercise, module content is being reviewed to infuse more Global South perspectives and knowledge. This was confirmed by P11 who outlined,

“Interventions to be implemented in the Bachelor of Urban and Regional Planning programme include removing Western-centric theories such as the Garden City model, replacing them with a more Global South perspective (PLNTRA1); incorporating Global South and decolonial perspectives in policy discussions and development planning (RADTRA3); and focussing on decolonising content by integrating Global South approaches to land management and governance (LDCTRB2).”

Makoni (2020) also noted a similar trend, outlining that decolonizing planning education would require radical approaches. Some of the participants indicated that the seminar series has created a platform for advancing the decolonization of the planning agenda. The department has organized multiple conversations with professionals from around the world, giving both postgraduate and undergraduate students the chance to engage with international experts. These events contribute to marketing the programme on an international scale. P12 outlined the seminar series explores the following themes: Decolonial perspectives on smart townships within African contexts, Critical examinations of the ‘smartness’ concept in smart townships and smart cities conceptual frameworks, Gendering Smart Townships, Smart Township and environmental green sustainability, Smart Township and Township Economies, Smart Township and Employment, Smart Townships, surveillance and community safety, Ethical implications of Smart Townships, The interconnections between creatives, creative industries and Smart Townships, and Smart Townships and their Educational implications. This initiative provides intellectual support for academia and the industry to engage in decolonial thought.

Transformative learning is achieved through the use of seminars as a method of teaching urban and regional planning concepts. According to Gibbs (1999), seminars are a method of teaching that brings together small groups of students to discuss a common concept. Through seminars, students focus on a particular theme,

thus enabling them to participate actively in the learning process. Seminars set a platform for many students operating at various levels to come together to discuss urban and regional planning issues holistically, raise questions, and debate on critical concepts in the discipline. What remains important is to isolate individual concepts from the seminars presented and link them to various lecture presentations (P11). Tasks that require students to develop and manuscripts assist in transforming my students and prepare them for lifelong learning

Strategies Enabling Digitalisation

In higher education institutions, digital transitioning holds immense potential to revolutionize traditional education practices, drive efficiency gains, and spur sustainable development. The choice and adoption of any teaching method are determined by an array of factors in the urban and regional planning discipline and institution I serve (Briggs and Wager, 1989). For Urban and Regional planning adopting digital technologies offers a pathway towards addressing the unique challenges the profession faces while capitalising on emerging opportunities in the digital age. Figure 1, presents a drone demonstration collecting aerial data. In such contexts, the integration of geographic information systems and building information modelling presents a transformative opportunity to leapfrog conventional methods, accelerate progress, and bridge the gap between aspiration and realisation (P8). At the heart of this curriculum transformation lies the need for the development of tailored solutions for the specific needs and dynamics of the urban and regional spaces.

Figure 1: Data collection with drone

Authentic and effective assessments play the critical role of influencing students' learning behaviours if properly embedded within the curriculum. It is therefore important to ensure that all the different parts of assessment are integrated, that they fit well within a module as a whole, and that students actively participate in providing feedback (Biggs, 1996). Several case studies have proved that lecturers can manipulate the way students learn through the use of assessment in various strategic and tactical ways. P13 outlined "drawing from relevant assessment concepts and theories, strategies and tactics to inform the several ways that I adopt and implement to make learning activities productive. I ensure that assessment tasks and feedback are built in my learning guides and promote the involvement of students at all stages". Consequently, integrating various assessment opportunities with the learning outcomes and other critical components of curricula (Biggs, 1999; 2012).

The University of Johannesburg is not only implementing but is also at the centre of popularising and influencing the adoption of the Fourth Industrial Revolution in all teaching and learning as well as assessment activities. For example, the University is creating awareness of the 4IR among students and the general public through a free and fully online Short Learning Programme in Artificial Intelligence which highlights what technology can do, how it's used and some of its implications, ethically and productively. Consequently, P12 outlined "I intensively and extensively use blended and hybrid systems to apply the ever-evolving technology in my teaching, learning and assessment". This is particularly true in teaching materials development and packaging, delivering lectures online and hybrid formats and assessing and communicating with my students.

Specifically, staff utilise both interactive and non-interactive platforms such as Blackboard Collaborate Ultra; MS Teams; WhatsApp; Email; Lecture slides (PowerPoint) and Voice-narrated lecture slides (PowerPoint). Students are also taught to use software packages such as the Statistical Package for the Social Sciences (SPSS) in data analysis as well as eographic Information Systems (GIS). P13 added, since the outbreak of the Covid 19 pandemic and the subsequent lockdown in 2020, "I have refined and intensified my skills to use technology in my teaching and assessment."

Limited digital infrastructure, skill gaps, and institutional barriers were described as the key aspects hindering the widespread adoption of digital technologies (P12). Moreover, cultural factors and staff resistance, concerns further complicate the landscape. The urban and regional planning programmes and modules are multi-disciplinary in nature, and the student population in the department is largely from previously disadvantaged communities (P13). Moreover, applying the deductive teaching approach that is informed by the essentialism and constructivism teaching philosophies ensures that the core concepts of the discipline are imparted. Students are enabled to connect them well whilst applying the inductive teaching approach that is informed by the progressivism teaching philosophy. This promotes students' critical thinking and problem solving skills and leads to co-creation of knowledge. The hybrid teaching philosophy thus facilitates students' lifelong, transformative and meaningful learning. Despite these challenges, the imperative for digital transformation remains clear. The benefits extend beyond mere efficiency gains to encompass broader socioeconomic impacts, including job creation, economic growth, and improved quality of life for communities

Innovative Teaching Strategies linked with industry

P11 has outlined although the staffing resources for this component are sufficient as outlined in the primary actors, the department requires budget allocations for marketing campaigns, promotional materials, and event hosting. Figure 2 presents Urban and Regional planning students at a student excursion to Mpumalanga. This includes expenses for travel, advertising, and outreach activities to ensure that this concern continues to be effectively addressed as part of the departmental marketing initiatives. "Undergraduate and Postgraduate students have participated in various excursions, including the SACPLAN Indaba, the Alexandra project, and a Municipal Planning Tribunal (MPT) hearing in Midvaal Municipality" expressed P5. This was echoed by P6, who described the experiences as being positive as they exposed students to industry practices and fostered program awareness.

Figure 2: Student excursion to human settlement project

Partnerships with private and public sector

P12 outlined the advisory board members have been playing a crucial role in promoting the department and advising on potential avenues to effectively advertise the programmes. P10 praised the department for initiating the Urban and Regional Planning Alumni Affinity Group Dinner, describing the space as enabling

a platform for alumni networking and program promotion. Undergraduate students also attended, providing them with valuable networking opportunities with industry professionals.

These ongoing efforts are expected to significantly enhance the visibility and reputation of the department programmes within the planning industries. However, partnerships between the department and industry professionals are still needed through networking events, workshops, or conferences, providing students with opportunities for internships, mentorships, and job placements.

P2 outlined that since the transition from the Diploma program, in-service training has been lost, which was a critical element of the curriculum as it exposed students to 11 months of working in the industry under a mentor. P3 suggested the need for developing a new mentorship program linked with planning projects, this should leverage innovative and transformative approaches. This would ensure students are exposed to the planning profession and learn key aspects such as policy development, application submissions, and reviewing processes. P8 echoed this would achieve outstanding teaching, learning, and research outcomes, thereby bridging the gap between academic training and professional practice. Furthermore, key stakeholders could collaborate on joint events or initiatives that showcase the planning program and highlight its relevance to current planning challenges, furthering exposure and engagement (P8).

6 CONCLUSION

This study examined curriculum improvement as a strategy for program accreditation, using the Department of Urban and Regional Planning at the University of Johannesburg as a case study. Apart from the complex relationship between urban and regional planning theory and practice, addressing transformation issues and implementing the proposed strategies, the department has aimed to further enhance the quality and relevance of its programmes. Through an improvement plan, a proactive approach to addressing the challenges and opportunities to ensure the sustainability of the department programs. Key lessons learned reveal a focus on efforts on curriculum development, student support, research, and industry engagement, which have the potential to ensure graduates are well-prepared to meet the demands of the evolving urban and regional planning profession. The study recommends that support for transforming higher education curricula would assist graduates to become relevant to industry needs. A focus on digital maturity, which is one of the highly targeted skills within the Urban and Regional planning profession, must not be limited to the learning activities; it starts with planners being the agents of curriculum and pedagogy.

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