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Afrocentric Graduate Attributes for Future-Ready Graduates: Conceptualization in the South African Decolonial Context

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Abstract. The purpose of this study was to investigate how lecturers at a University of Technology conceptualize 21st-century graduate attributes within an Afrocentric framework through their teaching practices. The objective was to explore how academics understand and implement these attributes, considering the imperatives of decolonization and contemporary educational demands. The Fourth Industrial Revolution and decolonization imperatives necessitate reconceptualizing graduate attributes that reflect 21st-century competencies and African philosophical foundations. Despite extensive research on graduate attributes, limited scholarship explores how these can be conceptualized within decolonized curriculum frameworks embracing Afrocentric principles. This study addresses the gap in understanding graduate attributes for future-ready graduates within South African decolonial contexts. A qualitative descriptive case study design grounded in Afrocentricity philosophy was employed. Purposive sampling selected 14 participants: seven academics and seven students from two faculties. Data were collected through semi-structured interviews and classroom observations. Thematic analysis using Atlas. The study generated 36 codes and 57 quotations, resulting in nine categories across three themes: conceptualisation of 21st-century graduate attributes, their importance, and teaching strategies. Findings revealed that lecturers used case studies, role-plays, and interactive discussions to facilitate student engagement, collaboration, critical thinking, and problem-solving while promoting technological literacy. Students confirmed that lecturers used real-world examples and expected active problem-solving engagement to enhance the development of graduate attributes. The study revealed a comprehensive framework for 21st-century Afrocentric graduate attributes. The research demonstrates the effective conceptualization and

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implementation of Afrocentric graduate attributes in preparing students for contemporary challenges while maintaining their cultural identity. The study recommends integrating 21st-century Afrocentric graduate attributes into institutional teaching, learning, and assessment strategies to guide academic practices systematically.

Keywords: Afrocentric graduate attributes; decolonization; Ubuntu, Indigenous knowledge system; higher education

1. Introduction

Paradigm shifts in higher education influence graduate attributes, as the 21st-century workplace and entrepreneurship demand require students to demonstrate knowledge, skills, competencies, and values beyond simple knowledge retention. The problems in this study are that, despite the post-colonial era, the South African educational system still struggles to integrate African Indigenous Knowledge Systems into the curriculum, resulting in graduates with limited Afrocentric attributes. This sentiment is supported by Harrison and Clarke (2022), who further indicate that, despite continuous efforts in the Pacific, North America, and South Africa, approaches to incorporating indigenous knowledge in higher education are not well-informed by explicit curriculum scholarship.

Furthermore, Bitzer and Withering (2020) contended that higher education in Africa is influenced by the continent's colonial past, politics, poverty, global inequality, and the poor output and quality of research. Moreover, Lwandle & Yallem (2021) indicated that, despite the abundance of national and international research on graduate attributes, there is a lack of information on these attributes within a decolonised curriculum or on the qualities a decolonised student should possess. This study aims to address a gap in the literature by contributing to the understanding of Afrocentric graduate attributes that can shape future-ready graduates in South Africa.

Decolonization is a part of marginalized yet persistent movements that emerged from struggles against the negative aspects of hegemonic Eurocentric modernity, such as the slave trade, imperialism, colonialism, apartheid, neocolonialism, and underdevelopment (Nwobodo, 2025; Ndlovu-Gatsheni, 2019). Since at least 2011, the idea of decolonizing the higher education has gained popularity due to the promotion of non-Eurocentric paradigms (Kassaye, 2024; Charles, 2019).

The literature revealed that curriculum decolonization is essential for education in previously colonized countries and those that were once colonizers (Wimpenny et al., 2022). The Department of Higher Education and Training's transformation agenda has faced criticism for its failures, which stem from the fact that higher education's knowledge content predominantly represents Europe and the Global North from an international perspective (Muraina, 2022; Ndlovu-Gatsheni, 2019). This suggests that the curriculum and learning, teaching, and assessment are still closely linked to the country's colonial and apartheid past, which is a challenge.

The purpose of this study was to investigate how lecturers at a University of Technology conceptualize 21st-century graduate attributes within an Afrocentric framework through their teaching practices. This study is significant because it addresses a gap in the literature. Despite the abundance of national and international research on graduate attributes, there is a lack of information on these attributes in decolonised curricula or on the graduate attributes that a colonial student should possess (Lwandle & Yallew, 2021). This study aims to contribute to the literature by addressing a gap in the understanding of graduate attributes that can shape future graduates.

The researchers employed semi-structured interviews to identify the learning activities that facilitated the integration of 21st-century graduate attributes into teaching practice. Moreover, the goal is to establish students' understanding of the importance of 21st-century graduate attributes within the program, enabling them to excel in their chosen fields of work. Finally, the classroom observations were used to determine the teaching strategies employed by the lecturers. The following section reviews the literature related to the Afrocentric perspective, graduate attributes, and Afrocentric graduate attributes.

2. Literature Review

2.1 Afrocentric Perspective

An Afrocentric worldview emphasizes the significance of African culture, values, beliefs, history, and experiences in interpreting global events, societal progress, and individual identities (Asante, 2020). Afrocentric frequently seeks to refute Eurocentric myths (Asante, 2003). Recent studies further elaborate on the concept of 'Afrocentricity,' emphasising the need to integrate African-rooted cultures, values, and beliefs into educational curricula that reflect African philosophy (Ditsele, 2025; Khumalo, 2023).

Afrocentricity asserts that Africans should embrace their identity and reject negative perceptions, regardless of criticism or geographical dispersion (Asante, 2020). While the existing literature emphasizes the importance of Afrocentric perspectives in education, a notable gap remains in understanding how these attributes are specifically conceptualized and implemented in higher education settings. This study aims to address this gap by exploring the practical application of Afrocentric graduate attributes in teaching practices, thereby contributing to a more comprehensive understanding of their role in preparing future-ready graduates.

2.2 Graduate Attributes

Graduate attributes encompass the transferable skills, knowledge, and potential of graduates applicable across various disciplines and contexts (Gamage et al., 2023). In the 21st century, these attributes include competencies such as critical thinking, problem-solving, personal and intellectual autonomy, communication and information literacy, contextual learning, lifelong learning, research and inquiry, global citizenship, employability, and collaboration (Ditsele, 2025). The literature indicates that graduates from different institutions develop unique attributes shaped by their educational environments (Gamage et al., 2023; Mahon,

2022; Ramnund-Mansingh & Reddy, 2021). In this regard, the cultivation of these skills is influenced by both internal factors, such as institutional characteristics, and external factors, including stakeholder impacts from business and government (Mahon, 2022). However, there is a significant gap in understanding how these graduate attributes are specifically conceptualized and integrated within Afrocentric frameworks in higher education. This study aims to fill this gap by examining the application of Afrocentric graduate attributes in teaching practices, thereby contributing to the discourse on preparing future-ready graduates.

2.3 Afrocentric Graduate Attributes

Afrocentric graduate attributes emphasize the integration of Indigenous Knowledge Systems (IKS), African thought, African languages, and Ubuntu humanism into educational frameworks (Ditsele, 2025). The literature emphasises the need for clearer research on the attributes of graduates from colonial backgrounds, advocating for a prioritisation of these attributes in educational discourse (Lwandle & Yallew, 2021). They express concern over the insufficient research addressing curriculum outcomes that foster graduate attributes essential for curriculum decolonization, such as nurturing patriotic students, critical thinkers, and change agents (Lwandle & Yallew, 2021).

This highlights a significant gap in the literature regarding the specific ways Afrocentric graduate attributes can be effectively incorporated into curricula to promote Africanization, which emphasizes humanity, culture, and values. This study aims to address this gap by exploring how Afrocentric graduate attributes can be operationalized in teaching practices, thereby enhancing the representation of African perspectives in South African HE. The following section presents a theoretical framework that incorporates Ubuntu, constructivism, progressivism, and connectivism.

2.4 Theoretical Framework

Multiple theories, including Ubuntu, constructivism, progressivism, and connectivism, were employed to ground this study. These theories were employed in a complementary manner to achieve the study's aim, rather than in a competitive manner. Each of these theories addresses distinct tenets that, when used together as a lens, provide a foundation for this study. These theories present robust frameworks for creating higher education curricula that complement 21st-century Afrocentric graduate attributes. Ubuntu encourages a holistic view of education where success is not individual but collective, promoting the idea that students should develop not only academic skills but also values that contribute to the well-being of others and society (Ditsele, 2025; Bekele et al., 2023).

In this case, Ubuntu aligns with graduate attributes such as collaboration, empathy, and social responsibility. For progressivists, education is a reconstruction of experiences, an opportunity to apply previous experiences in new ways (Cohen et al., 2000). Progressivism is relevant to this study because it aligns with the educational philosophy that emphasizes student-centred learning, critical thinking, and real-world application of knowledge.

Constructivism is a theory that complements progressivism, as it posits that learning is an active and constructive process. The social constructivist views students as active participants in creating knowledge because they can analyse the material provided to them and connect it to previously acquired knowledge to produce new interpretations (Ntshwarang et al., 2021). This study may argue that applying constructivist theory in the digital age of learning provides students with opportunities to acquire essential skills in collaboration, communication, problem-solving, interpersonal relations, and global citizenship, which are necessary for employment.

This implies that the connectivism theory emerged to address the apparent shortcomings of traditional learning theories. It explains how technology and the proliferation of information could be manipulated for effective learning and teaching in this forever-shifting 21st-century higher education landscape, as argued by Mampota et al. (2023). In this study, the connectivism theory can offer a helpful framework for managing and organizing the curriculum learning and teaching processes and graduate attributes by applying digital technologies in the 21st century. The research questions are presented in the next section.

2.5 Research Questions

The objective of the study was to explore lecturers' understanding and implementation of graduate attributes, considering decolonization imperatives and contemporary educational demands. The questions posed were:

- How do lecturers embed/integrate 21st-century graduate attributes in teaching practice? Identify learning activities the lecturer uses to incorporate 21st-century graduate attributes in your practice.
- Do you believe that lecturers' teaching practices address 21st-century graduate attributes?
- Which are the 21st-century graduates' attributes that students think should be developed to be able to perform well in the field of work?
- Explain why you think the identified 21st-century graduates' attributes are important in your program.
- List the teaching strategies used by lecturers during the class.

3. Methodology

To answer the research questions posed in this study, the Afrocentricity research philosophy was applied. Afrocentricity is a research philosophy that provides a platform for human and social scientists to offer ideas, analysis, and solutions for the social, cultural, and economic circumstances of Africans (Van Wyk, 2023; Asante, 2020). This implies that researchers are required to investigate African people from their everyday experiences fundamentally.

Qualitative methodology was employed to understand and learn from lecturers' and students' experiences, opinions, and ideas (Creswell & Creswell, 2022) about the conceptualization of 21st-century graduate attributes. The descriptive case study design was used because it allows researchers to explain a phenomenon or intervention along with the real-world setting in which it takes place (Maree, 2023). The University of Technology (UoT) research ethics committee gave

permission for the study to be conducted. The following section provides the demographic data of the participants involved in the study.

3.1 Participants

Purposeful sampling was used to select the seven lecturers and students because they were suitable for the study and were familiar with the phenomenon under investigation (Lumadi, 2023; Cohen et al., 2018). Table 2 shows the demographic data of the participants. It is crucial to note that the participants' age and gender were not gathered because the researchers adhered to the guidelines of the UoT's ethics approval committee. Data collection and analysis are presented in the next section.

Table 1: Participants' demographic data

	Lecturers	Students
Number the Participants	7	7
Faculty	A	B
Department	Information Communication Technology	Human Resource Management

3.2 Data Collection and Analysis

Data were collected by means of semi-structured interviews and observation. In semi-structured interviews, open-ended questions are used to allow for flexibility (Creswell & Creswell, 2022). The main objective of the observation is to assist researchers in understanding the viewpoints that study populations hold (Maree, 2023). The lecturer's individual semi-structured interview questions comprised two parts. Part A gathered the demographic data. Part B comprised two questions.

Examples of typical questions for lecturers were (1) *How do lecturers embed/integrate 21st-century graduate attributes in teaching practice? And identify learning activities the lecturer uses to incorporate 21st-century graduate attributes in your practice.* (2) *Do you believe that lecturers' teaching practices address 21st-century graduate attributes?* The students' individual semi-structured interview questions consisted of two parts. Part A collected data about demographic data. Part B consisted of two questions.

Examples of typical questions for students were: (1) *Which are the 21st-century graduates' attributes that students think should be developed to be able to perform well in the field of work?* And (2) *explain why you think the identified 21st-century graduates' attributes are important in your program.* The researcher used an observation sheet that included the question: *List the teaching strategies used by lecturers during the class.*

The data in this study were analysed utilizing Saldaña's thematic analysis with the aid of Atlas.ti. Thematic analysis is the process of finding patterns of meaning, such as themes, through codes and categories (Saldaña, 2021). Qualitative analysis data software, such as Atlas.ti, could help with the systematic approach to coding data and developing categories and themes (Maree, 2023). A project named 21st-century graduate attributes was created on Atlas.ti. In this project, three primary documents relating to lecturers' and students' interviews, as well as class

observations, were uploaded. After these documents were uploaded, 36 codes were created, and the system automatically generated 57 quotations. From these codes and quotations, nine categories were created with three themes relating to the conceptualization of the 21st-century graduate attributes, the importance of 21st-century graduates' attributes, and teaching strategies. The names used for the participants are pseudonyms. The following section presents the findings.

4. Findings

The findings are organized thematically, focusing on the lecturer's conceptualization of 21st-century graduate attributes. This theme was developed based on responses to two critical questions posed to the lecturers, which directly address the main research question.

To provide a comprehensive understanding of this theme, we identified nine categories that relate to various pedagogical strategies and their impact on fostering graduate attributes relating to *questions and answer technique to foster graduate attributes, students engagement through case studies to promote graduate attributes, group projects to collaborate and enhance graduate attributes, real-life scenarios to foster graduate attributes, uses questioning techniques effectively to engage students, lecturer dialogues with one student only questioning, lecturer not probing students, the lack of students engagement in class, the lecturer using real-life scenarios, as well as students' ability to solve real-life problems, were generated.*

Figure 1 illustrates the conceptual network of lecturers' perspectives on 21st-century graduate attributes, highlighting the interconnections between these categories and their relevance to effective teaching practices.

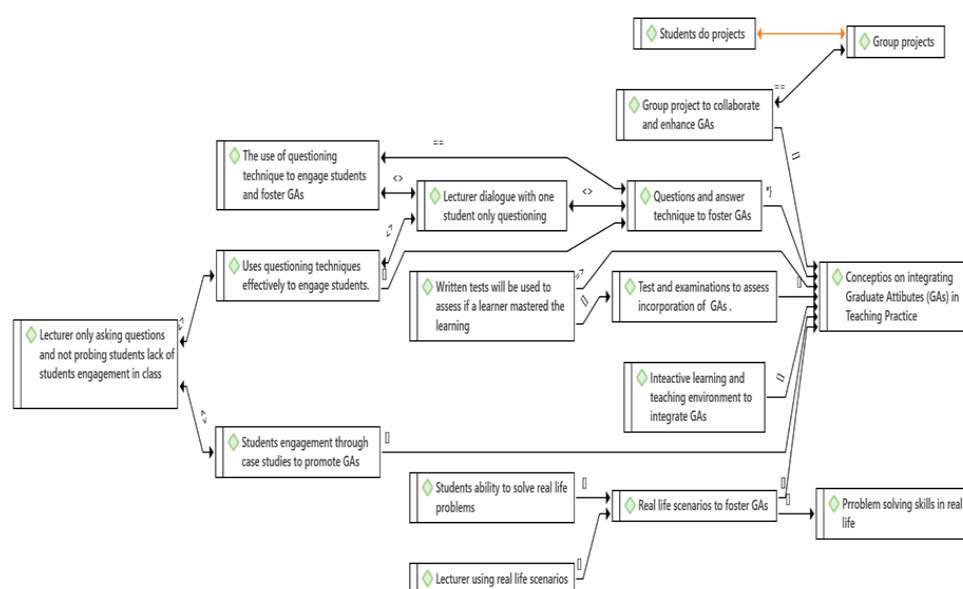


Figure 1: The conceptual network of lecturers' conceptualization of the 21st-century graduate attributes

4.1 Conceptualization of the 21st-century Graduate Attributes

The lecturers were asked to identify the learning activities that support the integration of 21st-century graduate attributes into their teaching practices. The

findings indicate that lecturers employ a variety of interactive methods, including case studies, role plays, and question-and-answer sessions, to facilitate student interaction and engagement. These strategies promote essential skills such as collaboration, critical thinking, problem-solving, and digital literacy. For instance, Lecturer 1 emphasized the interactive nature of their lectures, stating, *"My lectures are highly interactive; I pose questions, to which the students must answer."* Similarly, Lecturer 2 noted, *"When I ask a question in class about new concepts, I can tell that a student is having difficulty responding."*

This highlights the importance of questioning techniques in fostering student engagement. Lecturer 3 further elaborated on promoting critical thinking and collaboration by encouraging students to discuss their difficulties with peers. Additionally, Lecturer 4 pointed out the use of case studies and role plays to address concepts like 'problem-solving' and 'group work.' The integration of technology was also a key finding, as Lecturer 5 remarked, *"When I teach using the course material as a guide, I integrate 21st-century technologies to help students become more digitally literate while working through content-related problems."*

In terms of group projects aimed at enhancing graduate attributes, most lecturers reported using collaborative activities to teach students how to work together effectively. Lecturer 6 shared, *"I give my students group projects at the beginning of the semester, which they will later use to develop a system that integrates the content from the module I teach."* This approach not only fosters collaboration but also encourages the application of knowledge in practical contexts. Lecturer 7 added that technology is integrated into these group activities, stating, *"I assign learning tasks that require students to use technology to work in groups on LMS group projects and solve problems."* Furthermore, real-life scenarios were utilized to enhance graduate attributes, with Lecturer 3 noting, *"Students must answer the learning activities with a workable solution and an example from real life."* Lecturer 7 echoed this sentiment, explaining that summarizing concepts and providing real-life examples enhances students' understanding and application of the material.

The findings suggest that integrating interactive learning activities, technology, and real-life scenarios into teaching practices significantly contributes to developing 21st-century graduate attributes. This integration fosters an environment that encourages collaboration, critical thinking, and problem-solving. Lecturers are better preparing students for the complexities of the modern workforce. Moreover, the emphasis on technology not only enhances digital literacy but also equips students with the necessary skills to navigate an increasingly digital world. These insights emphasize the importance of adopting diverse pedagogical strategies to cultivate essential competencies in graduates, ultimately leading to more effective and relevant educational outcomes.

4.2 Importance of 21st-century Graduates' Attributes

Students were asked to identify the 21st-century graduate attributes that enabled them to perform effectively in the workplace and to explain the significance of these attributes within their academic program. This led to the emergence of the theme highlighting the importance of 21st-century graduate attributes. The findings revealed a strong alignment between students' perspectives and the

conceptualizations provided by their lecturers. Specifically, students noted that lecturers effectively utilized real-life scenarios to enhance their understanding of complex concepts. For instance, Dikeledi remarked, *"I have seen some improvements from prior years. The lecturers were not very clear the last time I took IRS2, but this time, he provided me with all the information I needed along with examples from real life."*

Similarly, Angel emphasized the role of lecturers in preparing students for the future workforce, stating, *"In order to prepare us for the future world of work, lecturers contributed to our understanding of concepts by requiring us to give discipline-specific examples from real life."* Michael added, *"We are primarily focused on problem-solving techniques in our curriculum, which differs from what we learned in first-year classes. In the second year, it seems we are learning more about how to approach and resolve issues with examples from everyday life."*

These findings suggest that the integration of real-life examples and problem-solving techniques in the curriculum significantly enhances students' comprehension and application of 21st-century graduate attributes. The alignment between students' experiences and lecturers' teaching strategies indicates that practical, real-world applications are crucial for preparing students for the complexities of the modern workplace. By emphasizing these attributes, educational programs can better equip students with the necessary skills and knowledge to navigate their future careers successfully. This approach not only fosters a deeper understanding of the material but also cultivates essential competencies that are highly valued in today's job market.

4.3 Teaching Strategies

The observation sheet required researchers to document the teaching strategies employed by lecturers during class, leading to the emergence of the theme focused on teaching strategies. The findings indicated a range of learning strategies, including notetaking, limited questioning, passive listening, clarity-seeking questions and answers, and a notable lack of student engagement.

Specifically, some lecturers struggled to implement learning activities that effectively fostered an understanding of the attributes expected of 21st-century graduates. The researchers observed, *"Students are not being asked to respond to further questions by the lecturer. The lecturer tends to concentrate on a single student."* Additionally, it was noted that *"students are not being engaged by the academic's questions, which are not pertinent to the subject matter."*

This suggests a reliance on a teacher-centred approach, where the lecturer assesses comprehension through questions but fails to encourage deeper inquiry that actively involves students in the lesson. Conversely, the findings also highlighted that some lecturers engaged students successfully through effective questioning techniques. These lecturers utilized question-and-answer sessions and self-reflection activities, which fostered the development of critical thinking and problem-solving skills. One researcher noted, *"I can see that the academic can motivate students to use problem-solving and critical thinking skills in the learning activities,"* while another remarked on the lecturer's ability to connect the subject matter to students' personal experiences.

These findings suggest that while some lecturers employ effective teaching strategies that promote active student engagement and critical thinking, there remains a significant challenge in addressing the overall lack of engagement in many classrooms. The reliance on passive learning methods can hinder the development of essential 21st-century graduate attributes, which require students to participate actively in their learning process. To enhance educational outcomes, it is crucial for lecturers to adopt more interactive and student-centered teaching approaches that encourage participation and deeper inquiry. By doing so, they can better prepare students for the demands of the modern workforce, equipping them with the necessary skills to navigate complex challenges and fostering a more engaging learning environment. The following section presents the discussion.

5. Discussion

This study aimed to address the research questions posed in this study. The findings demonstrated that most lecturers believed that employing strategies such as case studies, role plays, questions and answers, and group work significantly promoted student engagement, interaction, collaboration, critical thinking, and problem-solving. This aligns with the assertion by Simelane-Mnisi and Mangavana (2022) that student engagement is heavily influenced by the learning and teaching approaches or environments utilized.

Moreover, the integration of technology emerged as a critical method for enhancing student engagement within the curriculum. This implies that leveraging various technological tools can support academic, behavioural, cognitive, and emotional attributes, thereby enriching the learning experience (Williams, 2017). The literature further supports this notion, indicating that technology not only facilitates engagement but also fosters a more interactive and personalized learning environment (Gunter & Gunter, 2020).

The study found that most lecturers employed group activities to help students develop collaborative and teamwork skills, which are essential for enhancing graduate attributes. This is consistent with Charania et al. (2021), who noted that constructive technology use, such as authentic learning and problem-based learning, promotes higher-order thinking skills and the application of these skills in diverse contexts. Group activities, rooted in social constructivist theory, allow students to learn from and with one another, thereby enriching their educational experience (Naicker et al., 2022).

Interestingly, while lecturers were asked to conceptualize the attributes of a 21st-century graduate, students' perspectives corroborated the lecturers' views. The study revealed that some lecturers designed learning activities that encouraged students to submit real-world or authentic examples. This means that transitioning to an individual-centred approach necessitates a focus on authentic and reflexive graduate attribute attainment, which is enhanced through student-directed learning that fosters situational adaptability (Hill et al., 2016).

Students confirmed that advanced-level lecturers utilized real-world examples to clarify concepts, which was crucial for their understanding and problem-solving abilities. This aligns with the literature suggesting that providing students with access to innovative support systems, encompassing relevant knowledge, skills, and practical applications keeps learning engaging and personalized in the 21st century (Gunter & Gunter, 2020).

The researchers also found that lecturers effectively engaged students in reflection activities and interactive questioning, which are vital for developing analytical and problem-solving skills. Literature highlighted that social constructivists view students as active participants in knowledge creation, capable of analyzing information and connecting it to prior knowledge to generate new insights (Ntshwarang et al., 2021).

However, the study also identified a concerning trend that most lecturers employed passive teaching strategies, such as note-taking and minimal questioning, which hindered the development of essential 21st-century graduate attributes. This aligns with findings from Simelane-Mnisi (2023), who reported that some lecturers struggled to create tasks that encouraged student interaction with online materials, resulting in low engagement levels. These findings emphasize the need for a shift towards more interactive and student-centred pedagogies to foster the necessary attributes for 21st-century graduates.

5.1 21st-century Afro-Centric Graduate Attributes

The findings of this study suggest that the conceptualization of graduate attributes is closely aligned with an Afrocentric perspective. The researchers argue that incorporating Ubuntu educational theory into the curriculum is essential for promoting curriculum decolonization and integrating IKS. By emphasizing Afrocentric graduate attributes, it is crucial to embrace Ubuntu humanism, African languages, and IKS, which reflect African thought and values.

This approach ensures that the significance of Africanization, promoting humanity, culture, and values, is effectively integrated into the curriculum for South African students. To ensure that these attributes remain relevant in the rapidly evolving environment in which graduates operate, this study proposes a framework for 21st-century Afrocentric graduate attributes, as illustrated in Figure 2. The proposed conceptualization consists of six key principles relating to academia, digital and technology fluency, society and community, humanitarian, competitiveness, and 21st-century skills. This framework aims to contribute to the body of knowledge regarding Afrocentric graduate attributes, ultimately shaping future-ready graduates in South Africa. By aligning educational practices with these principles, institutions can better prepare students to meet the challenges of the 21st century while honoring their cultural heritage.

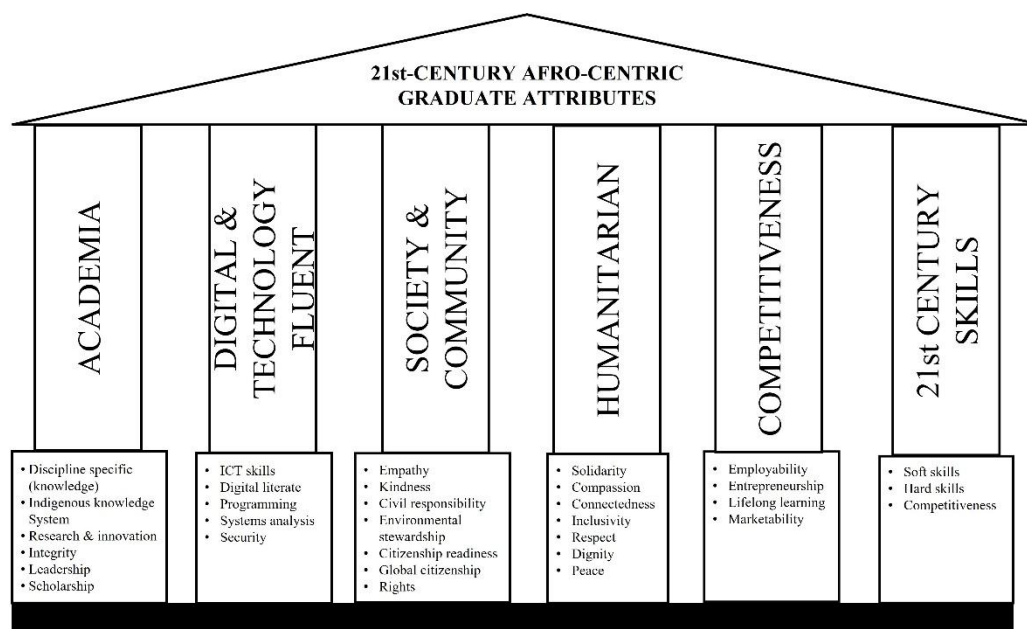


Figure 1: The proposed 21st-century Afro-centric graduate attributes

5.1.1 Academia

The findings of this study highlight the critical role of academia in equipping graduates with the knowledge, skills, and mindset necessary for success in their chosen fields, while also enabling them to make meaningful contributions to society. To cultivate 21st-century Afrocentric graduate attributes, it is essential to develop a collaborative body of knowledge that focuses on research about Indigenous peoples, ensuring that it is mindful, respectful, and culturally appropriate. This approach necessitates that research methods be rooted in principles of spirituality, dialogue, and consensus-building, emphasizing a humanity-centred perspective towards others.

Such methodologies not only honor IKS but also foster a deeper understanding of the cultural contexts in which these systems operate (Gumbo et al., 2024). This aligns with the broader discourse on decolonizing research practices, which advocates for the inclusion of Indigenous voices and perspectives in academic inquiry (Smith, 2019). Furthermore, literature emphasizes the importance of incorporating Indigenous knowledge and cultural practices into educational frameworks to create a more inclusive and holistic learning environment (Mkhize, 2021). By doing so, educational institutions can better prepare graduates to navigate the complexities of a globalized world while remaining grounded in their cultural heritage.

5.1.2 Digital and technology fluent

Digital and technological fluency encompasses the ability to effectively utilize relevant technology to generate meaning, create content, and ethically convey ideas in an increasingly interconnected digital landscape. The emphasis on Afrocentric 21st-century graduate attributes highlights the necessity of integrating information and communication technology skills into the curricula of higher education institutions. This integration is vital for igniting graduate

students' interest in innovative technologies, thereby promoting a balanced development of hard, soft, and technical skills. Addressing the alarming statistic that 75.1% of African youth apply for jobs lacking essential information and communication technology (ICT) skills and competencies (Statistics South Africa, 2025) is crucial for enhancing employability and fostering economic growth. In this context, connectivism theory is particularly relevant, as it leverages digital technologies to facilitate socialization and learning, reflecting the transformative impact of technology on communication and interaction in the 21st century (Lemy, 2020).

5.1.3 Society and community

Community is a fundamental concept deeply embedded in society, and higher education institutions (HEIs) play a crucial role in instilling civil responsibility in students to cultivate responsible citizens who actively engage with their communities and government. Civil responsibility encompasses a range of behaviours and mindsets essential for participation in a democratic society (Ditsele, 2025). The importance of fostering a sense of community and civic engagement is further supported by social constructivism theory, which posits that social interactions are pivotal in the creation of new knowledge and ideas (Ntshwarang et al., 2021).

This perspective suggests that cognitive development is significantly influenced by social development, as individuals learn and grow through their interactions with others. Literature reinforces this notion, indicating that promoting civic engagement within educational settings not only enhances students' understanding of their roles in society but also empowers them to contribute meaningfully to community development and democratic processes (Ntshwarang et al., 2021). By integrating these principles into their curricula, HEIs can better prepare students to navigate and address the complex social challenges of the 21st century.

5.1.4 Humanitarian

Humanitarianism emphasises that a community or group is more critical than unrelated individual success. Humanitarians oppose individualism and prioritise group interests over individual ones (Makhele, 2018; Lutz, 2009). The Afro-centric graduate attribute of solidarity requires one to act in a way that advances the well-being of every member. Instead of selfishness and rivalry among community members, solidarity thrives on unity, unconditional love and respect for one another, shared interest in collective survival, and responsibility towards fellow members (Ngubane & Makua, 2021).

The Afro-centric graduate must promote inclusivity by embracing cultural diversity. The main objective of cultural competence in education is to create inclusive learning environments that celebrate diversity and advance equal opportunities for all students, as argued by Ngubane & Makua (2021). Students should show respect and love for one another for who they are as people before there can be any meaningful learning. In this regard, dignity describes actions or characteristics deserving respect (Nxumalo & Mncube, 2018).

5.1.5 Competitiveness

Competitiveness is the set of consumer and value attributes that guarantee a product's market viability, that is, the capacity to exchange the same product for capital in situations with a substantial exchange offer for comparable competing goods (Mirzayev, 2024). To attain the 21st-century Afrocentric graduate attributes, HEIs must ensure equal opportunities for learning and professional development, irrespective of gender. This approach aims to improve the quality of education, which has the potential to increase economic competitiveness and cultivate social harmony (Bakhmat, 2024).

5.1.6 21st-century skills

The conceptualization of Afrocentric 21st-century graduate attributes must incorporate 21st-century skills relating to soft and hard skills as well as competitiveness. These skills are encouraged by the progressivism theory, which emphasizes that education should be more than just a way of preparing students for life; it should be an essential component to meet students' demands and desires better. The conclusion is presented in the following section.

6. Conclusion

In conclusion, Afrocentric graduate attributes for future-ready graduates: conceptualization in the South African decolonial context should be a collaborative effort involving both lecturers and students. This approach ensures that the curriculum is responsive to the needs of the community and the evolving job market. By fostering an inclusive and dynamic learning environment, HEIs can better equip graduates to thrive in their professional lives and contribute positively to society. This study highlights the critical need for integrating Afrocentric graduate attributes into higher education curricula to prepare students for the demands of the 21st century.

The research reveals that while there is a growing recognition of the importance of these attributes, significant gaps remain in their effective implementation within teaching practices. Lecturers are encouraged to adopt more interactive and student-centred teaching strategies that foster critical thinking, collaboration, and real-world problem-solving skills. It may be seen that some of the lecturers still rely on traditional, passive teaching methods, which do not adequately engage students or promote the necessary competencies for future employment.

To address this, it is essential for HEIs to embrace a curriculum that reflects African values, cultures, and knowledge systems, thereby supporting the decolonization of education. This approach not only enhances the relevance of the educational experience for students but also contributes to the development of responsible and engaged citizens who can navigate the complexities of a globalized world. The recommendations are presented in the next section.

7. Recommendations

HEIs should incorporate Afrocentric graduate attributes actively into their curricula. This includes emphasizing Ubuntu humanism, IKS, and African languages to create a more relevant and culturally responsive educational

experience for students. Lecturers are encouraged to shift from traditional, passive teaching methods to more interactive, student-centred approaches. Lecturers should leverage technology to facilitate student engagement and interaction. Furthermore, lecturers should design learning activities that require students to apply theoretical concepts to real-life scenarios to prepare students for the complexities of the modern workplace. HEIs should provide ongoing training and support to lecturers to develop their skills in implementing innovative teaching strategies that align with the 21st-century graduate attributes.

Further research should be conducted across various educational settings and disciplines to understand how Afrocentric graduate attributes can be implemented effectively in different contexts. Further research should focus on gathering student feedback about the effectiveness of teaching strategies that incorporate Afrocentric attributes and their perceptions of the relevance of these attributes to their future careers. The processes and challenges involved in developing curricula that integrate Afrocentric perspectives and graduate attributes, providing insights for other institutions aiming for similar transformations should also be investigated. Furthermore, the research should assess the effectiveness of different technological tools and platforms in enhancing student engagement and learning outcomes in relation to Afrocentric graduate attributes.

8. Conflict of Interest and Acknowledgements

The researchers declare no conflict of interest. The authors acknowledge that the article is derived from the first author's doctoral research project.

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