

Defending the Role of Formal Education in South Africa: A Theoretical and Argumentative Perspective on Reform

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Introduction

Nelson Mandela's quote, "Education is the most powerful weapon which you can use to change the world" (Ellis, 2019), directly implies his belief in the transformative power of education for both personal and societal change. However, in the dynamic arena of education, an ongoing discourse questions the relevance and efficacy of established educational systems (Rónay & Niemczyk, 2021; Mouton, Louw & Strydom, 2012). A growing number of critics argue that the education system is outdated, ineffective in addressing the country's high unemployment rates, and disconnected from the demands of the modern labour market. This scepticism is fuelled by persistent socio-economic challenges, such as youth unemployment, skill mismatches, and the perception that traditional academic qualifications no longer guarantee financial security (Mense et al., 2018, Modisane, 2025; Moroe et al., 2025; Okolie, 2025).

Amid these criticisms, an alternative narrative has emerged—one that glorifies entrepreneurial success stories of school and university dropouts, such as tech billionaires and self-made business leaders (Watt, 2016). These examples are often used to support the argument that formal education is unnecessary, and that success can be achieved through alternative means, such as self-teaching, vocational training, or direct entry into the workforce (Gonzalez-Argote & Castillo-González, 2024; Putri et al., 2025). At the same time, some argue that education, particularly in South Africa, has failed to equip students with the necessary skills to thrive in an evolving economy shaped by the Fourth Industrial Revolution (4IR) (Yende, 2021). Critics advocate for an overhaul of the system or, in more extreme cases, a shift away from formal education entirely.

This paper challenges the prevailing notion that formal education is obsolete. While acknowledging the limitations and gaps within the current system, this study argues that education remains an essential pillar of economic and social development (Dahal, 2016). The core issue is not the irrelevance of education but rather the failure to modernise curricula, align educational outcomes with industry demands, and create pathways for lifelong learning (Chuene & Teane, 2024; Mlambo & Fynn, 2024; Ndlovu & Mafora, 2024). Using Human Capital Theory (HCT) as a theoretical framework, this paper defends the value of education as an investment in both individuals and society. HCT asserts that education enhances skills, increases productivity, and contributes to economic growth—arguments that remain as relevant today as they were when the theory was first developed (Ntuli, 2022).

This article is structured as follows: The first section provides an overview of Human Capital Theory and its role in shaping economic policies and educational strategies globally. The second section presents the key criticisms of the education system, including concerns about employment, the glorification of dropouts, and the argument that curricula are outdated. Third, the article provides counterarguments, illustrating why education remains vital and how reforms can address existing concerns, focusing on vocational training. Policy recommendations are then outlined, focusing on industry partnerships and digital transformation. Finally, the article concludes by reinforcing the argument that education

should not be dismissed but rather reformed to meet the demands of a rapidly changing world.

By engaging critically with the current discourse, this paper advocates for a balanced perspective—one that neither blindly defends the status quo nor dismisses formal education entirely. Instead, it calls for a reassessment and modernization of the education system to ensure that it fulfils its purpose as a catalyst for economic empowerment and social progress.

Methodology

This study is a theoretical argumentative paper that critically examines contemporary educational discourse through a literature-based analysis employing thematic analysis (Naeem et al., 2023). It synthesises insights from peer-reviewed journal articles, policy documents, and reports from organisations such as the Department of Education, UNESCO, and the World Bank, offering a narrative review rather than a systematic one. Literature reviews are valuable for identifying research gaps and minimising bias while enabling a comprehensive examination of existing knowledge (Williams et al., 2021). Human Capital Theory (HCT) serves as the theoretical framework, providing a lens through which the relationship between education, skills development, and economic productivity is analysed (Wuttaphan, 2017). This perspective strengthens the paper’s argument that while educational reforms are necessary, formal education remains a key driver of both individual empowerment and national development.

Theoretical Framework

Human Capital Theory (HCT) is a fundamental framework in economics and education policy, emphasising the role of education, training, and skill development in enhancing individual productivity and economic growth (Becker, 1964). Human capital refers to the accumulated stock of health, knowledge, skills, and motivation that enhances productivity and economic growth, evolving as the key driver of the post-industrial economy (Mayilyan & Yedigaryan, 2022). The theory posits that investments in human capital—such as education, health, and vocational skills—yield long-term economic benefits for individuals and society by improving employability, innovation, and national development (Schultz, 1961). As economies increasingly shift towards knowledge-based industries, the significance of HCT in shaping educational strategies has grown, making it a central pillar in policy discourse worldwide.

In terms of evolution, HCT emerged in the 20th century through the work of economists such as Gary Becker and Theodore Schultz, who argued that education should be viewed as an investment rather than a consumption expense (Auerbach & Green, 2024). In classical economic thought, labour was seen as a uniform factor of production, but HCT introduced the idea that skills, expertise, and education levels differentiate workers’ productivity (Becker, 1993). Over time, the theory has evolved to incorporate lifelong learning, digital skills, and technological advancements as crucial components of human capital development (OECD, 2019). Human Capital Theory (HCT) has evolved to emphasise the necessity of aligning formal education with the demands of the Fourth Industrial Revolution (4IR), highlighting the role of education—beyond just TVET colleges—in equipping individuals with adaptable skills, technological proficiency, and problem-solving abilities essential for economic growth and societal progress (Magagula & Awodiji, 2024).

At the core of HCT, education is a primary mechanism for human capital accumulation. Governments and international organisations such as UNESCO and the World Bank advocate for universal education access as a means to drive economic development and reduce inequality (UNESCO, 2021). HCT supports the argument that higher education levels correlate with improved labour market outcomes, innovation, and overall societal well-being (Milian et al., 2019). Meanwhile, empirical studies by Unger et al. (2011) and Liu et al. (2024) reveal the nuanced impact of education investments on entrepreneurship success and innovation in different regional contexts. Countries that invest heavily in education and skills development often experience higher GDP growth, lower unemployment rates, and increased global competitiveness (Rodrik & Stiglitz, 2024). For instance, South Korea's substantial investment in education has transformed it into a technological powerhouse, contributing to its status as the 12th largest economy globally (Lee & Choi, 2024). Israel allocates 6.1% of its GDP to education, surpassing the OECD average, which has played a significant role in its economic development and technological advancements (OECD, 2024). Luxembourg stands out by spending approximately \$25,600 per student, reflecting its commitment to fostering academic excellence and global competence (OECD, 2024). These examples underscore the correlation between robust educational investment and economic prosperity.

Despite its widespread influence, HCT has faced criticism for its narrow economic focus and overemphasis on measurable skills and qualifications. Critics argue that it fails to account for structural inequalities, social capital, and non-economic benefits of education, such as civic engagement and personal fulfilment (Gordon, 2020; Tan, 2014). Additionally, credential inflation—where increasing levels of education are required for jobs that previously did not demand them—raises concerns about the practical applicability of HCT in modern labour markets (Grinstead, 2024). Furthermore, automation and artificial intelligence (AI) are reshaping skill demands, challenging traditional HCT assumptions that education alone guarantees employability (Morandini et al., 2023). Despite its dominance in economics, Human Capital Theory (HCT) is critiqued for neglecting the external effects of learning and the social determinants of education demand, necessitating a revised research agenda incorporating behavioural economics and the capability approach (Auerbach & Green, 2024). Fix (2018) challenges the oversimplified assumptions of HCT, advocating for a shift towards understanding income distribution through the lens of social hierarchy, echoing concerns raised by Marginson (2019) regarding HCT's inability to fully explain the complexities of the education-work outcomes relationship.

A key strength of Human Capital Theory (HCT) lies in the trustworthiness and reliability of formal education as a structured mechanism for developing and certifying skills. Unlike informal learning, which lacks standardised validation, formal education undergoes rigorous scrutiny through academic research, industry collaborations, and quality assurance processes (Becker, 1964; Spence, 1973). This ensures that graduates possess competencies that align with industry demands, making qualifications a credible signal of expertise in the labour market. The trust placed in formal education stems from its institutional legitimacy, standardised curricula, and continuous engagement with industry stakeholders, all of which enhance its reliability as an investment in human capital. As Collins (1979) argues, educational credentials serve not only as indicators of knowledge but also as institutional endorsements of an individual's capabilities. Furthermore, Mahardhani et al. (2023) highlight that industry partnerships with educational institutions contribute to curriculum relevance, ensuring that qualifications remain a valid reflection of evolving professional standards. Therefore, within the framework of HCT, education is more than just a means of skill acquisition—it is a socially and economically validated system that fosters employer

confidence in graduates, reinforcing its role as a crucial driver of labour market efficiency and economic growth.

Deduced in this section is that Human Capital Theory remains a dominant lens for understanding the role of education in economic development, but its limitations necessitate a broader, multidimensional approach. While education undoubtedly contributes to individual and national prosperity, its impact is mediated by technological advancements, labour market shifts, and social structures. Furthermore, it can be argued that, while education may not guarantee a higher salary scale, it undoubtedly improves employment prospects and skill acquisition, suggesting a more multifaceted approach is needed to comprehend the true dynamics at play.

Key Criticisms of the Education System

High unemployment among graduates. Critics of South Africa's education system argue that it inadequately prepares students for the job market, contributing to the high unemployment rates, particularly among degree holders (Kipkura, 2021). This failure is compounded by the rapid changes brought by the Fourth Industrial Revolution, which has both displaced traditional jobs and created the need for reskilling (Mokofe, 2024). Furthermore, recent analyses of graduate unemployment trends from 2008 to 2023 reveal rising unemployment, especially among African, female, and young graduates, underscoring the necessity for improving the quality of education and developing policies to address broader youth unemployment (MacGinty, 2024). In KwaZulu-Natal, challenges like limited job availability, lack of relevant experience, and misalignment with labour market demands exacerbate the unemployment crisis, with experts suggesting solutions such as targeted educational reforms (Buthelezi & Ngema, 2024). The issue of graduate unemployment also intersects with self-employment, as studies show that financial literacy and access to tertiary education significantly influence youth entrepreneurial success (Muchemwa & Odimegwu, 2024). Additionally, the rise of gig (short-term, flexible) work through platforms like Uber presents new challenges, as workers are often classified as independent contractors without employee benefits and earn below the minimum wage, calling for updated labour laws to protect digital workers (Mutengwe et al., 2024).

Furthermore, of even great concern is the type and quality of higher education institutions that play a pivotal role in determining graduate employment outcomes, with disparities often linked to race and institutional differences (Van Broekhuizen, 2016). Baldry (2016) takes this a step further by suggesting factors like race, socio-economic status, and graduation year play more significant roles than academic performance as it relates to employment opportunities. Specific sectors, like banking, also face challenges, including mismatched expectations between employers and graduates—which contribute to the unemployment issue—with educational institutions needing to address these gaps (Oluwajodu et al., 2015). On the other hand, surveys of unemployed graduates have found that a lack of relevant work experience and insufficient career guidance are key factors, while employed graduates often attribute their success to personal effort and proactive job searching (Mncayi, 2016). Lastly, barriers such as low social capital and high job-seeking costs have also been identified as major obstacles to employment, with recommendations to better integrate practical experience with academic qualifications to ease the job search process (Graham et al., 2019). Noted from this section is that the persistence of graduate unemployment in South Africa stems from a combination of structural challenges, including an education system that fails to meet labour market demands, inadequate reskilling opportunities, and barriers such as work experience

gaps, racial disparities, and mismatched employer expectations. Addressing these issues requires comprehensive policy changes, improved integration of education with employment needs, and better support for job seekers.

Glorification of Dropouts. Media portrayals of successful entrepreneurs who dropped out of school, such as Steve Jobs, Elon Musk, Bill Gates, and Mark Zuckerberg, have contributed to a growing scepticism about the necessity of formal education. These stories are often framed as proof that traditional education is unnecessary for success, reinforcing the belief that innovation and wealth creation stem from individual genius rather than structured learning (Gregorian, 2011). The tech industry's obsession with dropout founders has created a cultural narrative that equates leaving school with entrepreneurial success, ignoring the exceptional circumstances that enabled these individuals to thrive (Rindermann & Wai, 2017). While figures like Gates and Zuckerberg attended elite institutions before dropping out, this critical detail is often overlooked in media narratives, leading many young people to believe that abandoning formal education is a viable shortcut to success (Leonhardt, 2015; Ahmed, 2021). Scholars argue that these selective success stories misrepresent reality, as statistical analyses show that the vast majority of successful entrepreneurs and industry leaders hold university degrees (Jackson, 2023; Berkley & Mullen, 2017).

This glorification of dropouts is particularly concerning in countries like South Africa, where education is often the primary means of upward mobility. Studies indicate that school dropouts face significantly higher risks of unemployment, poverty, and social exclusion (Roman et al., 2022). Unlike self-made billionaires, most dropouts struggle to secure stable employment, with low-wage jobs and working poverty disproportionately affecting those without qualifications (Feder & Yu, 2020). Socioeconomic factors, such as financial hardship, teenage pregnancy, and inadequate academic support, frequently force students to leave school prematurely, further limiting their prospects (Cimene et al., 2023; Desai et al., 2024). Critics argue that media-fuelled narratives about dropout success contribute to a devaluation of education, particularly among disadvantaged youth who may already face systemic barriers to completing their studies (Hartnack, 2017; Boyes et al., 2017). Additionally, the competitive job market in South Africa, where even university graduates struggle with unemployment, raises concerns about promoting dropout culture as a viable alternative to formal education (Mlachila & Moeletsi, 2019; Department of Higher Education and Training, 2022). While dropout success stories dominate popular culture, research overwhelmingly suggests that for the vast majority, leaving school early leads to economic hardship rather than financial independence.

Outdated Curricula in South Africa. Critics argue that South Africa's education system is grappling with curricula that fail to align with the demands of the modern workforce, contributing to a widening skills gap. One of the key concerns is the outdated curriculum, which does not align with evolving industry needs, leaving graduates with theoretical knowledge but insufficient practical skills (Ngozo & Mtantato, 2018). Additionally, a lack of integration between educational institutions and employers limits students' exposure to workplace environments, making it difficult for them to transition into full-time employment (Khumalo, 2024). Some also highlight persistent quality issues in education, particularly in under-resourced schools, which result in unequal access to opportunities and deepen existing socio-economic divides (Ranchhod, 2019). Despite ongoing reforms, critics argue that the system continues to reinforce inequalities rather than act as a tool for social mobility. Curriculum reforms in South Africa, such as the shift to Outcomes-Based Education (OBE), have struggled due to inadequate teacher training, infrastructure deficits, and socio-political

challenges, exacerbating inequalities in access to quality education (Mandukwini, 2016; Mouton et al., 2012). Despite efforts to address gaps, such as the integration of Wi-Fi in schools during COVID-19 (Dlamini & Zulu, 2024), the education system remains slow to adapt, raising concerns about the country's ability to meet future workforce needs.

Beyond outdated curricula and quality concerns, structural factors further exacerbate unemployment challenges. Structural challenges in the education system, including a flawed understanding of skill formation and a lack of professional development, further complicate efforts to bridge the skills gap (Business Tech, 2022; Nevenglosky et al., 2018). Curriculum advisors also face issues of understaffing and heavy workloads, which undermine the effectiveness of curriculum support (Rambuda, 2023). These issues underscore the need for comprehensive reforms that address both the curriculum's relevance to industry needs and the systemic issues within South Africa's educational system. Only by tackling these challenges can the country ensure that its workforce is adequately prepared for the technological and economic shifts shaping the future.

Skills Mismatch. The 2024 Global Skills Report by Coursera ranks South Africa 100th out of 109 countries in terms of skills availability, highlighting the shortage of critical skills essential for economic growth (IOL NEWS, 2024). This gap, combined with high youth unemployment and a misalignment between employer needs and available skills, threatens the country's transformation goals for 2030, with over 60% of businesses citing it as a barrier to growth (Youth Employment Service, 2025). In SMEs across emerging economies, such as South Africa, challenges like resource scarcity, low technology adoption, and a shortage of skilled labour further hinder economic development (Mer & Viridi, 2024). The legacy of apartheid-era policies continues to shape labour market dynamics, with limited job creation in sectors that align with graduates' skills (Altman, 2003). Employers often cite a skills mismatch, where young job seekers lack both technical competencies and soft skills, such as problem-solving and adaptability which are crucial in a rapidly changing economy. Additionally, rigid qualification requirements in certain industries exclude a significant portion of the workforce, leaving many youth either unemployed or trapped in precarious, informal jobs (Pohlan, 2019). Critics argue that these systemic shortcomings foster economic exclusion, increase reliance on survivalist entrepreneurship, and contribute to broader social issues such as poverty and political instability (Hailu Demeke, 2022). These systemic barriers not only hinder economic mobility but also exacerbate social inequalities, ultimately stalling efforts towards sustainable, inclusive development.

The Continued Importance of Education: Counterarguments and Reforms

The Significance of Education in Development. Education, deeply intertwined with literacy, plays a crucial role in personal and societal advancement, enabling individuals to navigate social, economic, and political spheres while fostering critical awareness, informed decision-making, and upward mobility (Pandey, 2025). In Indonesia, higher education has a significant positive impact on well-being, with every 1% increase in education contributing to a 1% increase in well-being, emphasising the importance of investing in equitable and quality education for sustainable development (Azzahra et al., 2024). Formal education, as a foundational structure for knowledge attainment, not only imparts academic knowledge but also moral values and employability skills (Kapur, 2023). However, the history of education in Africa, marked by the colonial imposition of Western education, calls for curriculum transformation to better serve diverse societies (Ezeanya-Esiobu, 2019). Education that

embraces diversity and different cultures is essential for creating inclusive, tolerant societies, and fostering awareness and acceptance of differences (Paturochman et al., 2024).

In South Africa, Blignaut (2021) advocates for curricula that nurture compassionate, socially just citizens, with evolving pedagogy addressing societal issues and universal values. Mazibuko (2000) argues for education's centrality in South Africa's economic strategy, pointing out its potential to combat poverty and empower citizens. Luvalo (2014) highlights the expanding role of South African universities in rural development, emphasising their impact beyond teaching and research in addressing globalization and socio-economic challenges. Genelza (2022) emphasises education's role in driving social change and promoting sustainability, while Takala (2013) critically examines education's impact on social development, emphasising its complexity and contextual nature. Hampson et al. (2018) emphasise the role of formal education in addressing employment barriers, particularly regarding mental health awareness, and Denkowska et al. (2020) and Brigola et al. (2019) illustrate the positive impacts of additional education on innovation and cognitive status. Collectively, these insights underscore the vital role of formal education in knowledge acquisition, moral development, employability, and the need for transformative curricula that embrace diversity, and informal education, foster social justice, and address pressing societal challenges. It is also noted that the research advocates for context-specific approaches to foster meaningful transformation and development.

The Need for Reform Rather Than Abandonment. Various studies suggest that education's significance lies in its role in facilitating knowledge acquisition, driving continuous development, and fostering competencies vital for contemporary society, encompassing formal, non-formal, vocational, and unstructured learning approaches, as emphasised by Ergashevich (2024), Piala et al. (2024), and Cukurova et al. (2018).

Organisation for Economic Co-operation and Development (2015) discusses the challenges facing South Africa's education system and the need for reforms to address inequities and improve learning outcomes. Ergashevich (2024) provides a comprehensive overview of modern education, highlighting the incorporation of formal, non-formal, and unstructured learning methods to develop students' competencies for contemporary society. Johnson and Majewska (2022) note that there are complexities to formal, non-formal, and informal learning, while Carson and Carson (2024) stress the importance of integrating informal education into formal curricula. Syakhrani and Aslan (2024) demonstrate that informal education provided by families significantly influences children's social and emotional development, fostering skills such as communication, cooperation, emotional regulation, and self-confidence, thereby preparing them for life's challenges. Piala et al. (2024) stress the significance of continuous professional development and collaborative leadership in enhancing school leader capacity, advocating for a renewed commitment to continuous learning to foster educational excellence. Cukurova et al. (2018) underscore the effectiveness of guided independent learning in enhancing students' knowledge acquisition and application, emphasising the importance of guidance in independent learning activities within higher education. Meanwhile, Kucharska and Erickson (2023) reveal that sharing hidden knowledge influences innovation in IT industries, emphasising the importance of managing knowledge sharing to gain a competitive edge.

In terms of vocational training and skills development, Ghosh and Ravichandran (2024) examine how emerging technologies like VR, AR, AI, IoT, and blockchain are transforming vocational education, highlighting their potential to enhance pedagogy and skill development

despite challenges related to cost, training, and accessibility. (Magagula & Awodiji, 2024) explore the implications of the Fourth Industrial Revolution (4IR) on South Africa's TVET programme, revealing the need for curriculum updates, industry collaboration, technological integration, and enhanced lecturer capacity to equip graduates with essential 4IR skills like creativity, computer literacy, and problem-solving. Collectively, these findings highlight the importance of ongoing learning and knowledge acquisition across different domains and underscore the need for guidance, collaboration, and reflective practice to promote effective learning outcomes and innovation in various contexts.

Socioeconomic Mobility: The Role of Education. Education plays a crucial role in fostering socioeconomic mobility by equipping individuals with the skills, knowledge, and opportunities needed to improve their economic and social standing (Sheela, 2025). Access to quality education has been shown to increase employment prospects, raise income levels, and break cycles of poverty, particularly for historically marginalised communities (Tyagi et al., 2021). Beyond financial benefits, education also enhances problem-solving abilities, critical thinking, and civic engagement, contributing to broader societal progress (Spiel et al., 2018). Håkansson Lindqvist et al. (2024) identify key themes of lifelong learning, highlighting its evolving nature in the knowledge society. However, persistent barriers such as unequal access, disparities in educational quality, and systemic exclusion continue to limit its transformative potential (De Clercq, 2020).

In mitigation, Cunninghame (2017) explores the role of higher education in facilitating social mobility for equity groups in Australia, highlighting key barriers and advocating for continued funding of outreach, enabling, and scholarship programs to promote inclusion and social justice. Similarly, Qudisia (2012) examines how race and class intersect to influence social mobility, highlighting systemic barriers in education, employment, and economic advancement while advocating for targeted policy reforms to promote equity. Chari (2024) explores how education and technology can mitigate socioeconomic inequality and finds that equitable access to quality education and digital inclusion are crucial for fostering social mobility and sustainable development. Similarly, Ogunola et al. (2024) examine the role of digital upskilling in promoting social mobility and economic inclusion in the U.S., finding that accessible, high-quality training and cross-sector partnerships are essential for bridging the digital divide and empowering underserved communities. Addressing these challenges requires targeted policies, investment in inclusive education, and curricula that align with evolving labour market demands (Mocanu et al., 2014). Strengthening education as a tool for mobility can drive greater equity, resilience, and sustainable development.

Beyond Employment: The Broader Value of Education. The broader value of education extends far beyond employment, encompassing the development of critical thinking, civic engagement, and social development. Research demonstrates that education, particularly vocational education and training (VET), plays a pivotal role in fostering these skills, with dual VET systems showing the strongest education-employment linkage (Bolli et al., 2018). Critical thinking, as a foundational skill, enhances students' ability to reason, solve problems, and make informed decisions, which is emphasised in various studies (Raj et al., 2022; Adeyemi, 2012). The integration of critical thinking into higher education, including through programs like Design Innovation (Patel et al., 2024) and art appreciation (Wu, 2024), is essential for students' problem-solving abilities and personal growth. Furthermore, civic education has been shown to significantly impact societal engagement, increase awareness, strengthen communities, and promote democratic participation (Thelma, 2024; Li & Frieze, 2016). Saidi (2021) advocates for the institutionalisation of third-mission programs in South

African universities to promote societal welfare. Challenges such as the marginalisation of civic education and cultural barriers to critical thinking (Hammersley-Fletcher & Hanley, 2016) must be addressed to maximise education's transformative potential. The collective efforts of educators, policymakers, and students in fostering these skills contribute to societal stabilisation and democratic resilience (Altaany & Abdelbary, 2024; Wyk et al., 2010). These findings underscore the necessity of rethinking educational approaches to create a more engaged, informed, and resilient society.

Policy Recommendations

Policy Strategies for Continuous Improvement in Education. Advocacy for ongoing improvements in the education system is crucial for addressing systemic challenges and fostering quality learning outcomes. Shrestha et al. (2019) emphasise the need for coherent strategies that align technical inputs with political considerations to improve education quality across countries. Ferreira (2003) discusses the implementation of quality models in higher education institutions, proposing the integration of assessment tools and strategic planning to ensure continuous improvement. UNICEF (2020) highlights the global learning crisis, stressing the importance of equitable distribution of resources to address challenges such as large class sizes and inadequate teacher quality. Sultana (2022) explores continuous improvement in education, underscoring the importance of evidence-based methods and iterative cycles of learning and adaptation. The South African National Planning Commission (2014) outlines priorities for enhancing education and training, emphasising collaboration and innovation to achieve broader national goals. Matloga et al. (2024) highlight the importance of public participation in improving basic service delivery, advocating for active government support and collaboration between stakeholders. In conclusion, ongoing efforts to improve the education system require comprehensive strategies that prioritise quality, equity, and collaboration to ensure effective learning outcomes and contribute to broader societal development.

Leveraging Critiques to Bridge Knowledge Gaps in Education Policy. Acknowledgement of the value of critiques in identifying knowledge gaps is essential for advancing education and addressing emerging challenges. Abdullah Omaish et al. (2022) highlight the significant discipline-specific knowledge gaps among students entering university in Syria, emphasising the disruptions caused by war and displacement and advocating for an integrated approach to address these gaps. Learning from this, South Africa could consider implementing integrated approaches to address similar gaps in its education system, particularly for students affected by socio-economic challenges such as poverty and inequality. Additionally, South Africa could explore strategies to support students' transition from basic education to higher education, ensuring they have the necessary foundational knowledge and skills for university-level studies. Navarro-Ibarra et al. (2023) identify new emerging research areas in education, particularly in the context of information and communication technologies (ICT), underscoring the need for further exploration in areas such as autism, rural education, and social inclusion. Dudu (2015) examines the impact of professional development programs on addressing content knowledge gaps among teachers in South Africa, emphasising the importance of ongoing interventions to enhance teacher effectiveness. Overall, these studies underscore the importance of critiquing existing systems and practices to identify and address knowledge gaps, ultimately contributing to the advancement of education and pedagogy.

Leveraging Industry Partnerships. Leveraging industry partnerships is essential for enhancing curriculum relevance, promoting innovation, and ensuring that graduates acquire

skills aligned with market demands. Research by Khan et al. (2025) demonstrates that industry-academic collaborations boost student employability, foster continuous learning, and equip graduates with vital technical and soft skills for the digital economy. Similarly, Theobald et al. (2023) show that applying a University-Industry Integration Framework to co-design postgraduate programs leads to high satisfaction, improved skills, and strengthened partnerships, despite some workload concerns. Additionally, Semali (2024) emphasises the role of multistakeholder partnerships in vocational training to address unemployment, drive innovation, and enhance adaptability. Collectively, these studies underscore the transformative potential of industry partnerships in fostering relevant, innovative, and adaptable educational models that respond effectively to evolving global workforce needs.

Embracing Technological Advancements and Digital Transformation in Education. The world is experiencing rapid technological advancement, as highlighted by scholars such as Robbin (2011) and Ikhtiyorovna (2023), who emphasise the transformative impact of technology across various societal domains, underscoring the need to embrace these changes for a more promising future. In the education sector, Costley (2014) and Naidoo (2017) stress the critical role of technology in enhancing learning experiences and preparing students for the demands of a technologically driven world, advocating for increased integration of technology in classrooms. Borkovich et al. (2015) provide insights into the influence of organisational culture on technology adoption, navigating complexities through pragmatic approaches. Moreover, scholars like Fitzgerald et al. (2013) and Crittenden et al. (2019) discuss the profound impact of technological advancements on various aspects of society and marketing activities, respectively, urging stakeholders to support faculty efforts in integrating technology effectively into education. Additionally, research by Ma et al. (2009) and Jin et al. (2023) illustrates China's rapid growth in technology and its implications for economic development, suggesting potential strategies for leveraging digital technology to drive growth in developing countries, as emphasised by Jorgenson and Stiroh (2004). Overall, these studies underscore the imperative of embracing technology to unlock its benefits and navigate the evolving digital landscape effectively.

South Africa's embrace of technological innovation, as evidenced by initiatives like JUMO and the Telkom Centres of Excellence, underscores its potential for economic leadership in Africa, necessitating increased investment to translate innovation into tangible improvements, particularly in the face of disruptive technologies like AI (Manci, 2024). Despite strides in innovation, skill gaps and regulatory agility remain key challenges, highlighting the importance of nurturing a supportive environment to advance the ecosystem (Ding & Wu, 2024; Hanlin & Mlilo, 2023). The urgency of this investment is emphasised, as highlighted by the National Planning Commission's review of the National Development Plan, which underscores the need for updated policies to address ongoing challenges and capitalise on digital opportunities amidst the COVID-19 pandemic (National Planning Commission, 2020; Maleka & Maida, 2024). Ng'ambi et al. (2016) highlight the evolution of technology-enhanced learning in South African higher education, underscoring the need for pedagogical innovation. The interconnectedness of digitisation, innovation, and socio-economic progress is evident, with the transformative potential of digital technologies in Africa emphasised by the World Economic Forum (2022). However, addressing issues of connectivity, digital literacy, and cybersecurity requires agile regulations and multi-stakeholder collaboration, as demonstrated by initiatives like the Agile Regulation for Digital Transformation program (Seacom, 2022). Ultimately, understanding the societal implications of technological innovations and AI is crucial for shaping inclusive and sustainable development trajectories, highlighting the need for proactive policies and inclusive strategies to navigate the

complexities of rapid technological integration (Kruger & Steyn, 2024; Maleka & Maidu, 2024).

Conclusion

This article has critically examined the relevance of the formal education system in South Africa through the lens of Human Capital Theory (HCT), while also acknowledging the limitations and criticisms of the theory. Drawing from historical perspectives, current challenges, and proposed reforms, the discourse highlights that formal education remains a foundational structure for skill development, economic growth, and social mobility. However, the rapidly changing global landscape—driven by technological advancements, evolving industry needs, and shifting socio-economic dynamics—demands continuous adaptation and reform.

By juxtaposing the critiques of formal education with counterarguments rooted in HCT, this paper demonstrates that the education system is not inherently flawed but requires targeted reforms to better meet societal and economic needs. While the glorification of dropouts and perceptions of outdated curricula are valid concerns, they should be addressed through strategic interventions rather than outright dismissal of formal education. The integration of vocational training, digital transformation, and industry-aligned curriculum development are essential steps toward bridging the skills-market mismatch and enhancing employability, particularly for the youth.

Furthermore, the synthesis of literature highlights the importance of aligning education systems with the demands of the Fourth and Fifth Industrial Revolutions. By investing in technological proficiency, problem-solving abilities, and adaptable skills, the education system can be transformed into a dynamic mechanism that fosters both economic empowerment and societal progress. The success stories of countries like South Korea and Israel serve as benchmarks, illustrating how robust educational investment can drive technological advancements and economic growth.

In essence, this article advocates for a multidimensional approach to education reform, one that acknowledges the strengths of HCT while addressing its limitations through inclusive, innovative, and context-specific strategies. By embracing lifelong learning, enhancing digital skills, and fostering collaborative partnerships between educational institutions and industries, South Africa can ensure that its education system remains relevant and effective in promoting equitable development. As Nelson Mandela aptly stated, “Education is the most powerful weapon which you can use to change the world.” This vision remains achievable through a commitment to continuous improvement, critical engagement, and strategic policy interventions that address both historical legacies and contemporary challenges.

Future research could explore the practical integration of vocational training, digital skills development, and lifelong learning within formal education systems to enhance employability and economic growth. Additionally, investigating the impact of technological advancements on curriculum relevance and labour market outcomes could provide valuable insights for policy formulation and educational reform.

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