



Educational Institutions as Catalysts for Economic Growth in South Africa

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ABSTRACT

This study examines the role of South African educational institutions in driving economic growth and fostering leadership. Quality education, skills development, and leadership training are essential for empowering citizens, enhancing productivity, and promoting an inclusive society. A qualitative approach was adopted using a systematic review aligned with PRISMA guidelines. A comprehensive search of databases—including Scopus, Google Scholar, and Elsevier (ScienceDirect)—yielded 35 peer-reviewed articles, which were analyzed to assess higher education's contributions to economic growth and leadership. Keywords included "higher education," "innovation," "leadership," "economic growth," and "policies." Two reviewers evaluated the eligibility of the article, resolving disagreements by consensus. The findings highlight that South African higher education institutions are crucial in workforce development, innovation, and entrepreneurship of the workforce. These institutions equip students with critical thinking, problem-solving, and decision-making skills, preparing them for industry demands. Additionally, research initiatives, incubation centres, and technology transfer programs enhance economic expansion. This study contributes to scholarship by linking educational attainment with workforce productivity, innovation, and leadership development. It assesses existing policies, identifies key challenges, and recommends strategies for strengthening higher education's role in economic growth. The research also explores the implications of positioning higher education as a driver of economic progress while addressing leadership challenges within academic institutions. South Africa can harness its human capital potential by fostering a robust education system, ensuring long-term economic sustainability and leadership excellence.

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Publication History

Received:
26th October, 2024.
Accepted:
7th March, 2025.
Published:
4th April, 2025.

Keywords: *Economy, Education, Growth, Leadership, Institutions.*

INTRODUCTION

Education is a foundational pillar of any thriving society, playing a pivotal role in shaping the minds and futures of individuals, communities, and nations.¹ One of the primary benefits of education is its ability to drive economic development and progress.² Investing in education yields substantial benefits, equipping individuals with the knowledge, skills, and critical thinking capabilities necessary to contribute

¹ Ian Scott, "Designing the South African Higher Education System for Student Success," *Journal of Student Affairs in Africa* 6, no. 1 (2018): 1–17.

² Saurabh Sinha and Vishaal Lutchman, "Transdisciplinary Education: Enabling the Sustainable Development Goals Using the Fourth Industrial Revolution," in *Sustainable Development in Africa: Fostering Sustainability in One of the World's Most Promising Continents* (Springer, 2021), 149–61.

to the workforce and drive innovation.³ The development of a robust and sustainable economy is inextricably linked to the performance of its educational system.⁴ As a developing nation transitioning from the legacy of apartheid, South Africa faces the dual challenge of redressing past inequities while also fostering the skills and knowledge necessary for economic growth and social progress. South Africa's education system is at a critical juncture. Two decades after the dismantling of apartheid, the nation continues to grapple with the legacies of systemic inequality and social fragmentation.⁵ Although significant progress has been made in expanding access to education, persistent challenges remain to ensure quality, relevance, and equity. This paper argues that fostering entrepreneurship and effective leadership within the education system is not merely an aspirational goal but a strategic imperative for South Africa's future prosperity. South Africa faces significant socio-economic challenges, including high unemployment rates, persistent inequality, and a need for increased innovation and productivity. In response, there has been a growing emphasis on the role of higher education as a catalyst for economic growth. This focus has profound implications for leadership within South African HEIs, requiring a shift in mindset, priorities, and approaches to leadership.

This systematic literature review explores the pivotal role of educational institutions in driving economic development and cultivating effective leadership in South Africa. Education is widely acknowledged as a cornerstone of economic development and societal progress.⁶ In the context of South Africa, a nation grappling with the legacy of apartheid and persistent socioeconomic inequalities, the role of educational institutions in driving positive change is particularly crucial.³ Therefore, the study will explore the multifaceted relationship between educational institutions, economic growth, and cultivating effective leadership in South Africa. In addition, a robust and equitable education system is not merely a desirable social good but an economic imperative.⁷ Hence, by equipping individuals with knowledge, skills, and critical thinking abilities, education empowers them to participate actively in the workforce, contribute to innovation, and drive economic growth.⁸

This systematic literature review (SRL) aims to provide comprehensive information on economic growth, effective leadership and higher institutions in South Africa. It consolidates a significant volume of information from various articles, contributing to understanding the global context and encouraging further research and applications in this area. The review aims to increase interest in research and applications, providing insights into sustainable education with technological and economic benefits. The paper systematically examines and assesses educational institutions, which serve as the cornerstone of societal development, equipping individuals with the knowledge, skills, and competencies necessary to contribute to economic growth and assume leadership positions. The study aims to identify effective strategies, challenges, and opportunities. It seeks to offer a comprehensive understanding of existing literature on the role of higher institutions in providing economic growth and cultivating effective leadership in higher institutions in South Africa. The study highlights the interconnection between education, workforce development, innovation, and leadership capacity building. The following research questions underlie the study:

1. How do educational institutions in South Africa contribute to economic growth through the development of human capital and the promotion of innovation?
2. What strategies and initiatives are most effective in promoting inclusive and equitable leadership development in South African educational institutions, particularly for historically marginalized groups?

³ Lucky Sibanda, Chux Gervase Iwu, and Olumide Henrie Benedict, "Academic Success Factors: Implications for Teaching, Learning and Academic Administration," *International Journal of Educational Sciences* 10, no. 2 (2015): 269–79.

⁴ Michael Takudzwa Pasara, "Economic Growth, Governance and Educational Sustainability: A VAR Analysis," *Education Sciences* 11, no. 7 (2021): 343.

⁵ Mr Montfort Mlachila and Tlhalefang Moeletsi, "Struggling to Make the Grade: A Review of the Causes and Consequences of the Weak Outcomes of South Africa's Education System," 2019.

⁶ Nelson Casimiro Zavale and Christian Schneijderberg, "Mapping the Field of Research on African Higher Education: A Review of 6483 Publications from 1980 to 2019," *Higher Education* 83, no. 1 (2022): 199–233.

⁷ Nguyen Thi Hoai Trinh, "Higher Education and Its Role for National Development. A Research Agenda with Bibliometric Analysis," *Interchange* 54, no. 2 (2023): 125–43.

⁸ Sanjay Kumar Singh, VijayLakshmi Singh, and Shivendra Sanjay Singh, "Diversity and Inclusion for Innovation-Led Growth," *Qeios*, 2023.

METHODOLOGY

The following section outlines the methodology used to conduct a systematic review of the pivotal role educational institutions play in driving economic growth and cultivating effective leadership in the South African context. The systematic review aimed to identify patterns across economic growth, the cultivation of effective leadership, and education in higher institutions by integrating various studies. The research approach is qualitative, aligns with the systematic review method, and adheres to the PRISMA guidelines. The objectives were to identify, classify, and summarize research on the pivotal role played by educational institutions in driving economic development and cultivating effective leadership.

The search strategies resulted in 35 peer-reviewed papers used for analysis. Following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines checklist,⁹ an extensive search was conducted on Scopus, Google Scholar, and Elsevier (ScienceDirect) for article extraction. Search terms included "higher education," "innovation," "leadership," "economic growth," "policies," "access," "education," and "students." The initial search yielded 826 articles, and a limit of 5 years was applied. The articles were reduced to 327, and a further limit was applied to only published English journals, resulting in the removal of 210 articles. A subsequent search involved screening 117 abstracts, excluding 65 papers that did not specifically address the study's objective. A total of 17 articles were further removed due to lack of access, leaving 35 articles that were retrieved, analyzed, and included in the study.

Data collection involved recording article details, authors' affiliations, journal names, and publication years in an Excel spreadsheet. The 35 articles that were retrieved underwent eligibility assessment by two reviewers, with disagreements resolved through consensus or by consulting a third reviewer. Using pre-defined keywords and refining the checklist based on a preliminary trial, the study evaluated literature related to inclusive practices in higher education for engineering students with disabilities. To suit the study of economic growth and effective leadership, the checklist was streamlined to 18 key points.

Data extraction was led by one author and cross-validated by another, and any discrepancies were resolved through dialogue. Inclusion and exclusion criteria were set based on PRISMA recommendations, excluding non-research articles, works in progress, and those not meeting the inclusion criteria. The search was limited to peer-reviewed journal articles published in English, and Google Scholar and Scopus were the primary databases used to retrieve information. Specific inclusion and exclusion criteria are outlined in Figure 1.

⁹ Matthew J Page et al., "Mapping of Reporting Guidance for Systematic Reviews and Meta-Analyses Generated a Comprehensive Item Bank for Future Reporting Guidelines," *Journal of Clinical Epidemiology* 118 (2020): 60–68.

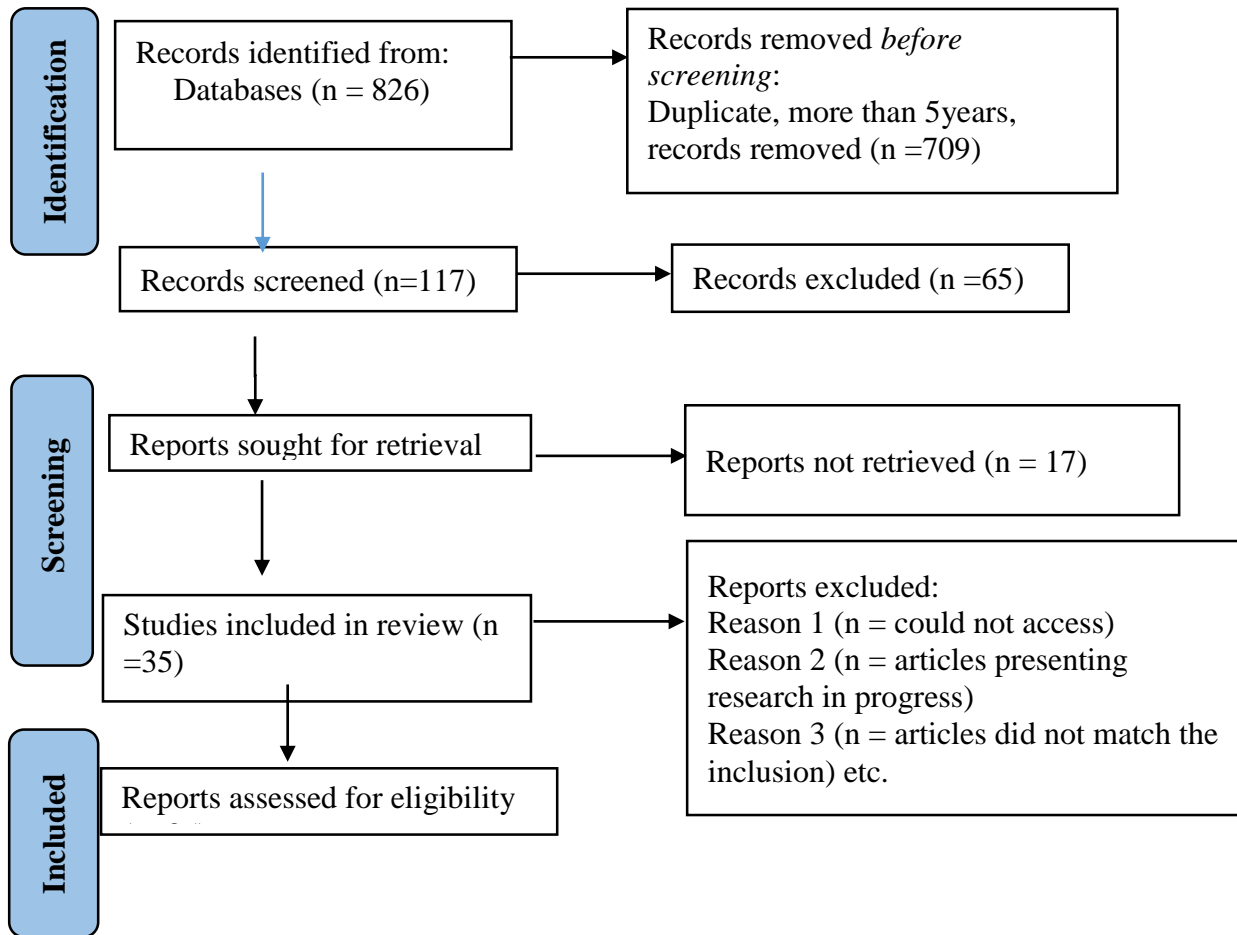


Figure 1: The PRISMA diagram

PRESENTATION OF RESULTS/FINDINGS

This section presents the findings derived from the comprehensive literature review. Subsequent discussion delves into the role educational institutions play in driving economic development and cultivating effective leadership. The search encompassed various databases using the previously described keywords. Figure 1 illustrates the PRISMA diagram, visually representing the article selection process flowchart. The selected articles were scrutinized for their general characteristics and data on the role educational institutions play in driving economic development and cultivating effective leadership. The articles were extracted systematically. Considering all the criteria employed in the Systematic Review of Literature (SRL), the study identified the evolution of studies published in this area during the covered period.

Figure 2 shows the number of documents published per year from 2004 to 2024. Notably, there is a discernible upward trend in the quantity and quality of published papers over time. A particularly notable surge is observed between 2018 and 2023, underscoring the growing interest in the topic. This surge in publications suggests an increasing recognition of the importance of higher institutions in providing economic growth and cultivating effective leadership in higher institutions in South Africa. Furthermore, the findings emphasize that fostering entrepreneurship, creative and critical thinking, and debates in teaching and learning benefits individual students and contributes to the creation of a more diverse group of students. These students are equipped to take on leadership positions, open their own companies, and become job creators. Institutions are increasingly being urged to champion education that contributes to workforce development, produces innovative graduates, and builds leadership capacity. This reflects a broader societal shift toward recognizing the value of diversity in educational settings.

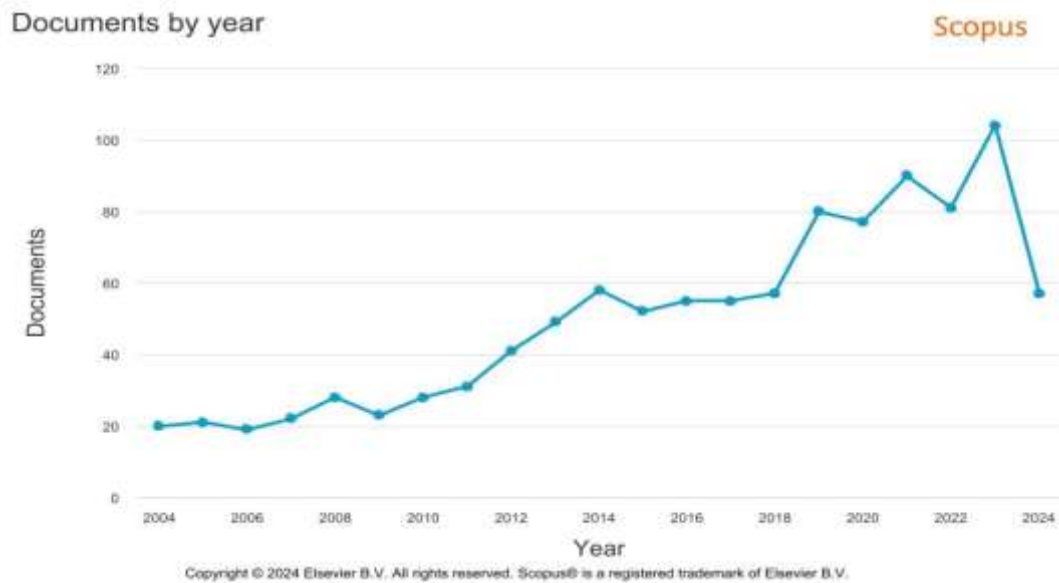


Figure 2: Documents per year

Figure 3 provides a detailed breakdown of the South African universities that contributed to the reviewed articles. The University of South Africa stands out as the leading contributor, with 8 articles that highlight its significant research output. The University of Johannesburg follows closely with 7 articles, and the University of Pretoria with 5. The Durban University of Technology produced 4 articles, while North-West University, the University of KwaZulu-Natal, and the Gordon Institute of Business Science each contributed 3 articles. Both the University of Cape Town and the College of Business and Economics provided 2 articles, while The Da Vinci Institute of Technology Management contributed 1 article to the PRISMA literature review. Of the 35 articles reviewed, only 10 universities with substantial contributions were selected, underscoring the significant role of higher education institutions in promoting economic growth and fostering effective leadership in South Africa. This distribution highlights the collaborative nature of research in this field, with the University of South Africa leading the way, supported by other institutions that also play key roles in advancing the discourse.

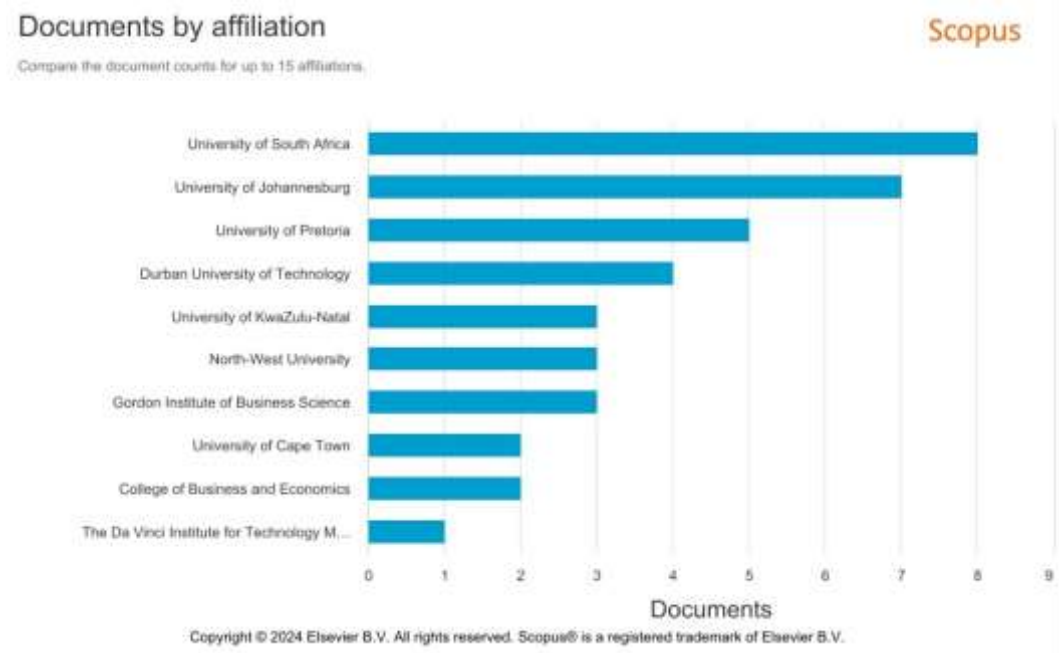


Figure 3: Bibliometric documents per university

Figure 4 elucidates the bibliometric connectivity of keywords within the articles, showcasing the interrelation of concepts across different sources. This visualization offers insights into the thematic

through education, people develop creativity, critical thinking, problem-solving, and leadership skills—vital for the 21st-century workforce and necessary for entrepreneurship and innovation in a competitive global economy.¹⁴ Additionally, education is an enterprise that aims to make both learners and teachers better individuals, emphasizing the importance of constantly reassessing and redefining its core objectives.¹⁵ Furthermore, education involves guiding immature individuals toward maturity, independence and social responsibility, reflecting the effort to help individuals fulfil their life tasks from an early age.¹⁶

Education is primarily aimed at empowering individuals with knowledge and skills to lead successful and fulfilling lives.¹⁷ Alternatively, it can be seen as a way to cultivate a talented workforce that fuels economic progress and innovation. According to Ghafar,¹⁸ education is a tool for promoting social equity and justice, as well as cultivating critical thinking and fostering creativity. Education plays a vital role in the growth of children. It is a foundation for lifelong learning and personal development.¹⁹ Globally, education is recognized as a pivotal force for economic elevation and social reform.²⁰ According to Ghafar, the evolving educational landscape—from primary to tertiary levels—testifies to the country's commitment to overcoming historical disparities and empowering its population.²¹ By harnessing a robust educational framework, South Africa aspires to fuel both macroeconomic growth and microeconomic opportunities.²²

Higher Education as a Catalyst for Economic Growth

South Africa's higher education system is characterized by a diverse landscape of institutions, each with its own strengths and challenges.²³ The legacy of apartheid continues to impact access, quality, and equity within the system. Therefore, positioning HEIs as drivers of economic growth necessitates addressing these historical inequalities while simultaneously equipping graduates with the skills and knowledge demanded by the evolving labor market.²⁴ Higher education institutions play a pivotal role in catalyzing economic growth through various avenues.²⁵ Firstly, they act as nurseries for cultivating a skilled workforce tailored to meet the evolving demands of industries while propelling innovation forward.²⁶ These institutions serve as fertile grounds for leadership development, offering students ample opportunities to hone their leadership skills through extracurricular activities, mentorship programs, and leadership roles.²⁷ By fostering a dynamic learning environment, higher education institutions nurture critical thinking, problem-solving abilities, collaboration, and effective decision-making skills among students.²⁸ Through their diverse educational programs, these institutions arm individuals with the

¹⁴ Mashwama and Dywili, "An Assessment Of Higher Education Institution's Role In Developing Future-Ready Graduates (A Case Of The Built Environment Graduates)-A Systematic Review."

¹⁵ Xolile Nokulunga Mashwama and Bunmi Isaiah Omodan, "Breaking Barriers: A Systematic Review of Inclusive Practices in Higher Education for Engineering Students with Disabilities," *International Journal of Learning, Teaching and Educational Research* 23, no. 7 (2024): 228–49.

¹⁶ Mashwama and Dywili, "An Assessment Of Higher Education Institution's Role In Developing Future-Ready Graduates (A Case Of The Built Environment Graduates)-A Systematic Review."

¹⁷ Zavale and Schneijderberg, "Mapping the Field of Research on African Higher Education: A Review of 6483 Publications from 1980 to 2019."

¹⁸ Abdul Ghafar, "Convergence between 21st Century Skills and Entrepreneurship Education in Higher Education Institutes.," *International Journal of Higher Education* 9, no. 1 (2020): 218–29.

¹⁹ Ahmed S Bakar and Prosperity M Mwila, "Teacher–Student Ratio: The Status Quo in Public Secondary Schools in Ubungo Municipality, Tanzania," *Asian Journal of Education and Social Studies* 34 (n.d.): 24–36.

²⁰ Rudo R Marozva, Emmerentia N Barkhuizen, and Masase E Mageza-Mokhethi, "Factors Affecting the Retention of Millennial Academics," *SA Journal of Human Resource Management* 22 (2024): 2301.

²¹ Ghafar, "Convergence between 21st Century Skills and Entrepreneurship Education in Higher Education Institutes."

²² Sinha and Lutchman, "Transdisciplinary Education: Enabling the Sustainable Development Goals Using the Fourth Industrial Revolution."

²³ Ms Lelo Tshivhase and Christo Alfonzo Bisschoff, "Investigating Green Initiatives at South African Public Universities," *Nurture* 18, no. 2 (2024): 245–63.

²⁴ Mashwama and Dywili, "An Assessment Of Higher Education Institution's Role In Developing Future-Ready Graduates (A Case Of The Built Environment Graduates)-A Systematic Review."

²⁵ Ghafar, "Convergence between 21st Century Skills and Entrepreneurship Education in Higher Education Institutes."

²⁶ Mashwama and Dywili, "An Assessment Of Higher Education Institution's Role In Developing Future-Ready Graduates (A Case Of The Built Environment Graduates)-A Systematic Review."

²⁷ Ghafar, "Convergence between 21st Century Skills and Entrepreneurship Education in Higher Education Institutes."

²⁸ Mashwama and Dywili, "An Assessment Of Higher Education Institution's Role In Developing Future-Ready Graduates (A Case Of The Built Environment Graduates)-A Systematic Review."

knowledge and competencies crucial for driving economic expansion.²⁹ The role of higher education institutions in South Africa is to contribute to the country's economic growth.³⁰ Since they play a crucial role in producing a skilled and knowledgeable workforce, fostering research and innovation, and promoting entrepreneurship and small business development.³¹ By offering high-quality academic programs, research opportunities, and vocational training, these institutions ensure that graduates possess the necessary competencies to thrive in the labor market and contribute to economic development.

THE IMPACT OF HIGHER EDUCATION ON ECONOMIC GROWTH

Entrepreneurship and Innovation- Igniting Economic Empowerment

In a nation grappling with high unemployment rates, particularly among youth, fostering an entrepreneurial mindset is crucial.³² Entrepreneurship education can equip learners with the skills, knowledge, and confidence to identify opportunities, take calculated risks, and create their ventures.³³ This can contribute to job creation, economic diversification, and ultimately, a more inclusive and dynamic economy.³⁴ Moreover, educational establishments facilitate entrepreneurship and innovation through their robust research and development initiatives, incubation centers, and technology transfer programs.³⁵

Catalysts for Economic and Leadership Development

According to Ngcamu,³⁶ strategies such as collective capacity building, joint problem-solving, networking, and system leadership can strengthen the interconnections within higher institutions, providing the necessary "glue" to drive systemic educational change.³⁷

Research and Innovation

Various scholars, and have asserted that through collaborative partnerships with the private sector, higher education institutions can facilitate the transfer of knowledge and the commercialization of research outputs, transforming innovative ideas into viable economic opportunities.³⁸

Promoting Entrepreneurship

Universities and colleges can play a catalytic role in promoting entrepreneurship and small business development.³⁹ By offering entrepreneurship education, incubation programs, and access to financing, higher education institutions can nurture a culture of innovation and empower individuals to start and grow their businesses, contributing to job creation and economic diversification.⁴⁰ Education enhances human capital, referring to the knowledge, skills, and abilities of individuals that contribute to their productivity and learning potential. A more educated workforce is associated with higher levels of

²⁹ Mokoko Piet Sebola, "South Africa's Public Higher Education Institutions, University Research Outputs, and Contribution to National Human Capital," *Human Resource Development International* 26, no. 2 (2023): 217–31.

³⁰ Arman Arman, Budhi Purwandaya, and Asep Saefuddin, "The Impact of Quality of Education and Higher Education on Economic Growth," *Journal of Economic Education* 9, no. 1 (2020): 64–70.

³¹ Bergmann and Utikal, "How to Support Start-Ups in Developing a Sustainable Business Model: The Case of an European Social Impact Accelerator."

³² Mariette Coetzee and Maryam Moosa, "Leadership Contingencies in the Retention of Women in Higher Education," *SA Journal of Human Resource Management* 18 (2020): 11.

³³ Musara, Mazanai, and Cecile Nieuwenhuizen. "Informal sector entrepreneurship, individual entrepreneurial orientation and the emergence of entrepreneurial leadership." *Africa Journal of Management* 6, no. 3 (2020): 194-213.

³⁴ Mashwama and Dywili, "An Assessment Of Higher Education Institution's Role In Developing Future-Ready Graduates (A Case Of The Built Environment Graduates)-A Systematic Review."

³⁵ Daphne Pillay, "Positive Affect and Mindfulness as Predictors of Resilience amongst Women Leaders in Higher Education Institutions," *SA Journal of Human Resource Management* 18, no. 1 (2020): 1–10.

³⁶ Bethuel Sibongiseni Ngcamu, "Transformation through the Lens of Leadership Capabilities in South African Universities," *Problems and Perspectives in Management* 18, no. 3 (2020): 67.

³⁷ Ngcamu, "Transformation through the Lens of Leadership Capabilities in South African Universities."

³⁸ Nurshafiza Ismail, Nabilla Afzan Abdul Aziz, and Arif Hartono, "Instrument Development to Review Factors for Research Commercialization Study in Universities," in *SHS Web of Conferences*, vol. 124 (EDP Sciences, 2021), 05002.

³⁹ Ruhan Kotze and Taryn Miller, "Relational and Decision-Making Skills Development in South African Accounting Students," *Industry and Higher Education* 37, no. 6 (2023): 762–81.

⁴⁰ Mashwama and Dywili, "An Assessment Of Higher Education Institution's Role In Developing Future-Ready Graduates (A Case Of The Built Environment Graduates)-A Systematic Review."

innovation, technological advancement, and overall economic output.⁴¹ In the context of South Africa, investing in quality education, particularly in STEM fields and vocational training, is essential for meeting the demands of a globalized economy and fostering sustainable growth.⁴²

Effective Leadership: Transforming Educational Institutions

The quality of education is inextricably linked to the quality of leadership within educational institutions.⁴³ Effective school leaders can inspire teachers, foster a positive learning environment, manage resources efficiently, and build strong community partnerships.⁴⁴ By empowering school leaders with the necessary skills and support, South Africa can create a more responsive and accountable education system.⁴⁵ Beyond its economic benefits, education plays a critical role in the formation of ethical and effective leaders.⁴⁶ Educational institutions provide spaces for critical thinking, problem-solving, and the development of essential leadership qualities, such as communication, collaboration, and empathy.⁴⁷ By fostering a culture of inclusivity, respect for diversity, and a commitment to social justice, educational institutions can nurture leaders equipped to address South Africa's unique challenges, such as:

- **Persistent Inequalities:** Deep-rooted socioeconomic disparities continue to impact access to quality education, with historically disadvantaged communities facing significant barriers.⁴⁸
- **Quality Concerns:** Issues related to teacher training, curriculum relevance, and infrastructure limitations have impacted the overall quality of education in many schools.⁴⁹
- **Skills Mismatch:** A disconnect between the skills acquired through education and the needs of the labor market has resulted in high levels of youth unemployment.⁵⁰

CHALLENGES IN FOSTERING ENTREPRENEURSHIP

Legacy of Inequality: The legacy of apartheid continues to cast a long shadow on the education system. Disparities in infrastructure, resources, and teacher qualifications persist between schools in affluent areas and those in historically disadvantaged communities.⁵¹

Curriculum Relevance: The current curriculum often struggles to keep pace with the evolving needs of the 21st-century workforce. There is a need to place greater emphasis on digital literacy, critical thinking, problem-solving, and entrepreneurial skills.⁵²

⁴¹ Mashwama and Dywili, "An Assessment Of Higher Education Institution's Role In Developing Future-Ready Graduates (A Case Of The Built Environment Graduates)-A Systematic Review."

⁴² Moses Makgato, "STEM for Sustainable Skills for the Fourth Industrial Revolution: Snapshot at Some TVET Colleges in South Africa," in *Theorizing STEM Education in the 21st Century* (IntechOpen, 2019).

⁴³ Ntokozo Dennis Ndwandwe, "Confronting a Leadership Vacuum: The Principal's Leadership Role in Peace Education in South African Schools," *International Journal of Educational Management* 38, no. 3 (2024): 804–18.

⁴⁴ Carel D Jansen van Vuuren, Kobus Visser, and Marieta du Plessis, "Influential Factors Impacting Leadership Effectiveness: A Case Study at a Public University," *Acta Commercii* 22, no. 1 (2022): 1–9.

⁴⁵ Mlachila and Moeletsi, "Struggling to Make the Grade: A Review of the Causes and Consequences of the Weak Outcomes of South Africa's Education System."

⁴⁶ Andrew J. Martin, "Academic Buoyancy and Academic Resilience: Exploring 'Everyday' and 'Classic' Resilience in the Face of Academic Adversity," *School Psychology International* 34, no. 5 (October 17, 2013): 488–500, <https://doi.org/10.1177/0143034312472759>.

⁴⁷ Sebola, "South Africa's Public Higher Education Institutions, University Research Outputs, and Contribution to National Human Capital."

⁴⁸ John Cullinan et al., "The Disconnected: COVID-19 and Disparities in Access to Quality Broadband for Higher Education Students," *International Journal of Educational Technology in Higher Education* 18, no. 1 (December 21, 2021): 26, <https://doi.org/10.1186/s41239-021-00262-1>.

⁴⁹ Ghafar, "Convergence between 21st Century Skills and Entrepreneurship Education in Higher Education Institutes."

⁵⁰ Anrusha Bhana and Sachin Sukunanan, "Exploring Leadership Factors Creating Employee Engagement or Disengagement across Job Grade Categories at a Public Higher Education Institution in South Africa," *Problems and Perspectives in Management* 19, no. 1 (2021): 317.

⁵¹ Cyrill Walters et al., "The Impact of the Pandemic-Enforced Lockdown on the Scholarly Productivity of Women Academics in South Africa," *Research Policy* 51, no. 1 (2022): 104403.

⁵² Suriamurthe Moonsamy Maistry, "SDG4 and the Ambiguity of Sustainable Development: The Case of Poor Schools in South Africa," *Sustainability* 14, no. 20 (2022): 13393.

Teacher Training and Support: Investing in high-quality teacher training programs that equip educators with the skills and knowledge to foster entrepreneurship and leadership is crucial. Ongoing professional development opportunities and supportive working conditions are also essential.⁵³

Limited Access to Resources: Many schools, particularly in rural and underprivileged areas, lack access to essential resources such as computers, internet connectivity, and updated textbooks. This digital divide further exacerbates existing inequalities.⁵⁴

ADDRESSING DISPARITIES AND PROMOTING INCLUSIVITY

To fully realize this potential, educational institutions in South Africa must address the legacy of apartheid and the persistent disparities in access and opportunities, particularly for historically marginalized groups such as black and female students.⁵⁵ Strategies to promote more inclusive and equitable leadership development programs, such as mentorship initiatives, leadership training, and opportunities for student involvement in decision-making and governance, can help cultivate a diverse pool of leaders emerging from the education system.⁵⁶ **Moreover**, collaboration between the government, private sector, and civil society organizations can leverage resources, expertise, and innovation to support entrepreneurship education and leadership development programs.⁵⁷

Strengthening Educational Institutions and Teacher Development

By strengthening the capacity of educational institutions, investing in teacher development, and promoting innovative pedagogical approaches, South Africa can foster an education system that is more inclusive, responsive, and supportive of economic growth and leadership development.⁵⁸ Furthermore, **empowering school leaders:** Providing school leaders with the necessary training, resources, and autonomy to implement innovative programs and create a supportive environment for both teachers and learners is essential.⁵⁹ In addition, **curriculum reform is essential in** integrating entrepreneurship education into the curriculum across various subjects and grade levels can help normalize an entrepreneurial mindset from an early age. This can include practical projects, business simulations, and mentorship opportunities.⁶⁰

IMPLICATIONS FOR LEADERSHIP IN SOUTH AFRICAN HEIS

Balancing Competing Priorities

- **Academic Excellence vs. Market Demands:** Leaders in HEI must navigate the tension between maintaining academic rigor and responding to the immediate needs of the job market. This requires fostering dialogue between academia and industry, ensuring curriculum relevance, and promoting applied research.⁶¹
- **Access and Equity vs. Financial Sustainability:** Expanding access to higher education for historically disadvantaged communities remains a priority. Leaders must develop innovative funding models, promote inclusivity, and address affordability concerns while ensuring the financial sustainability of their institutions.⁶²

⁵³ Maistry, "SDG4 and the Ambiguity of Sustainable Development: The Case of Poor Schools in South Africa."

⁵⁴ Marozva, Barkhuizen, and Mageza-Mokhethi, "Factors Affecting the Retention of Millennial Academics."

⁵⁵ Singh, Singh, and Singh, "Diversity and Inclusion for Innovation-Led Growth."

⁵⁶ Livhalani Bridget Sinyosi and Onoriode Collins Potokri, "Women in Leadership: Insights from Female Principals of Sural Secondary Schools in Vhembe District of South Africa," 2021.

⁵⁷ Bergmann and Utikal, "How to Support Start-Ups in Developing a Sustainable Business Model: The Case of an European Social Impact Accelerator."

⁵⁸ Singh, Singh, and Singh, "Diversity and Inclusion for Innovation-Led Growth."

⁵⁹ Biyase and Kirsten, "Education and Economic Growth in Cape and Natal Colonies: Learning from History."

⁶⁰ Mashwama and Dywili, "An Assessment Of Higher Education Institution's Role In Developing Future-Ready Graduates (A Case Of The Built Environment Graduates)-A Systematic Review."

⁶¹ Mashwama and Dywili, "An Assessment Of Higher Education Institution's Role In Developing Future-Ready Graduates (A Case Of The Built Environment Graduates)-A Systematic Review."

⁶² Ngcamu, "Transformation through the Lens of Leadership Capabilities in South African Universities."

Essential Leadership Competencies

- **Strategic Vision and Innovation:** Leaders need a clear vision for how their institutions can contribute to economic growth while maintaining academic values. This requires fostering a culture of innovation, embracing new technologies, and adapting to the changing demands of the knowledge economy.⁶³
- **Collaboration and Partnership Building:** Effective leadership requires building strong partnerships with industry, government, and civil society organizations. These collaborations can facilitate knowledge transfer, create internship and job opportunities for graduates, and ensure the relevance of academic programs.⁶⁴
- **Transformational Leadership and Change Management:** Shifting the focus of HEIs towards economic development necessitates significant organizational change. Leaders must effectively communicate vision, empower staff and students, and manage resistance to change.⁶⁵

IMPLICATION TO POLICY

Support for Teacher Training and Development: Establishment of high-quality teacher training programs and ongoing professional development opportunities. Furthermore, there must be advocacy on the policies to create supportive working conditions for teachers, ensuring they are well-equipped to provide quality education.

Inclusive Leadership Development: the development of policies that encourage mentorship programs, leadership training, and opportunities for student involvement in governance is encouraged. Moreover, the focus must be on creating inclusive educational environments that promote diversity and social justice.

Curriculum and Skills Alignment: Policy reforms to align educational curricula with the needs of the 21st-century workforce, emphasizing critical thinking, creativity, and collaboration. In addition, the promotion of STEM education and vocational training will address the skills mismatch in the labor market.

RECOMMENDATIONS

The study recommends the strengthening of institutional capacity to improve economic growth and cultivate effective leadership, and the study recommends the investment in high-quality Teacher Training Programs to ensure that educators are well-prepared to deliver quality education. Moreover, it is recommended that institutions should create supportive working conditions for lecturers to create a conducive work environment that will boost teacher morale and effectiveness, ultimately benefiting students. Furthermore, institutions are encouraged to enhance curricula to be relevant and align with industry needs. Aligning the curriculum with the needs of the 21st-century workforce is crucial. In addition, Fostering Partnerships and Collaboration will help create a supportive ecosystem for education and leadership development.

CONCLUSION

The findings of this research study underscore the critical role that HEI can play in catalyzing economic growth and cultivating effective leadership in South Africa. The country's education system, which continues to face significant challenges, represents a major obstacle to achieving inclusive and sustainable economic progress. To address these challenges, a comprehensive and coordinated approach is required, involving collaboration among policymakers, educational leaders, and the private sector. By strengthening interconnections within schools, developing effective educational leaders, and aligning educational outcomes with the demands of the labor market, South Africa can unlock the transformative potential of its educational institutions and pave the way for a more prosperous and equitable future.

⁶³ Ghafar, "Convergence between 21st Century Skills and Entrepreneurship Education in Higher Education Institutes."

⁶⁴ Zavale and Schneiderberg, "Mapping the Field of Research on African Higher Education: A Review of 6483 Publications from 1980 to 2019."

⁶⁵ Daniels, Carlo, and Ewelina Niemczyk. "Towards Higher Education for Sustainable Development in BRICS: Focus on Brazil and South Africa." *Space and Culture, India* 11, no. 1 (2023): 68-77.

Positioning higher education as a catalyst for economic growth presents both challenges and opportunities for leadership in South African HEIs. By embracing a strategic and collaborative approach, fostering innovation, and developing the necessary leadership competencies, HEI leaders can play a transformative role in driving economic development while upholding the core values of higher education. This requires a commitment to addressing historical inequalities, promoting inclusivity, and ensuring that all South Africans have the opportunity to benefit from the transformative power of education.

LIMITATION

This review might be considered limited, as it only includes articles from education within the last five years. The research search strategy might also have some limitations. Although well considered, the authors included mostly papers found through discipline-specific, and only English peer-reviewed articles were used for the systematic literature review.

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