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# Entrepreneurship Education in African Universities: Gaps, Opportunities, and Outcomes

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**ABSTRACT:** Entrepreneurship education in universities is crucial for developing the skills needed to identify opportunities, innovate, and create value. It promotes critical thinking, problem-solving, and adaptability in graduates. While many African countries have introduced entrepreneurship programs and universities offer degrees or electives in the field, Africa still lags in entrepreneurial activity and innovation. Many businesses are small-scale and informal, limiting their economic impact. Companies like MTN, Sasol, and Naspers show Africa's potential, but the number of large-scale enterprises remains low compared to the US and China. A key issue is the theoretical focus of many curricula, lacking practical, experiential learning opportunities. Additional challenges include resource constraints, outdated teaching methods, and socio-cultural barriers. Addressing these gaps requires curriculum reform, investment in infrastructure, funding for initiatives, and private-sector partnerships. Further research is needed to understand the gaps and opportunities in African entrepreneurship education. This review provides an overview of the current state of entrepreneurship education in Africa, its challenges, and necessary reforms.

**KEYWORDS:** Entrepreneurship Education, African Universities, Gaps, Opportunities, Outcomes

## I. INTRODUCTION

In Africa, the integration of entrepreneurship education into universities and colleges is a relatively recent development, spanning just two to three decades, compared to its establishment in the United States at Harvard Business School in 1947 (Kuratko, 2005; Bawuah et al., 2006; Fayolle et al., 2016; Ratte & Usmanij, 2021). While many African countries have introduced entrepreneurship education programs in recent years, these initiatives have not yet yielded the desired outcomes (Blimpo & Pugatch, 2020; World Bank, 2023). The continent continues to lag in entrepreneurial activity and innovation compared to other regions (Blimpo & Pugatch, 2020; World Bank, 2023). In countries and regions where entrepreneurship education has been introduced, such as the USA, China, Europe, and many others, significant improvements in entrepreneurship, development, and innovation have been recorded (Huang et al., 202; Zhou et al., 2024). This has led to substantial national development, the creation of strong global companies, and much more.

Entrepreneurship education in universities is essential for equipping students with the skills, knowledge, and mindset needed to identify opportunities, innovate, and create value across various industries (Bawuah et al., 2006; Fayolle et al., 2016; Ratte & Usmanij, 2021). It promotes critical thinking, problem-solving, and adaptability, empowering graduates to address real-world challenges effectively. By nurturing entrepreneurial skills and promoting creativity, universities play a vital role in economic development, job creation, and promoting sustainable enterprises (Bawuah et al., 2006; Fayolle et al., 2016; Ratte & Usmanij, 2021). Practical experiences through incubation centers, mentorship, and networking opportunities enhance students' capacity to manage risks and turn ideas into viable businesses (Fayolle et al., 2016; Talukder, 2024). Most importantly, entrepreneurship education prepares graduates to be job creators rather than job seekers, addressing unemployment and driving socio-economic progress (Kuratko, 2005; Fayolle et al., 2016). In Africa, the integration of entrepreneurship education into universities and colleges is a relatively recent development, spanning just two to three decades, compared to its establishment in the United States at Harvard Business School in 1947 (Fayolle et al., 2016; Ratte & Usmanij, 2021; Li et al., 2021). Although many African countries have introduced entrepreneurship education programs in recent years, these initiatives have not yet yielded the desired outcomes. The continent continues to lag in entrepreneurial activity and innovation compared to other regions (Blimpo & Pugatch, 2020; World Bank, 2023). Several factors contribute to this shortfall, including curricula that are predominantly



theoretical and fail to equip students with the practical skills required to implement their ideas (Iwu, 2022; World Bank, 2023). This lack of experiential learning opportunities limits students' ability to translate entrepreneurial concepts into real-world applications. Furthermore, the situation is compounded by inadequate funding for education programs, research, and start-up support, creating significant barriers for aspiring entrepreneurs (Iwu, 2022; World Bank, 2023). Globally, successful entrepreneurship education programs emphasize a blend of theoretical knowledge and hands-on learning experiences, such as internships, incubation hubs, and business simulations (Galloway & Brown, 2002; White et al., 2016; Hägg, 2018). For instance, institutions in the U.S. and Europe integrate mentorship, networking opportunities, and access to venture capital into their programs, promoting environments where students can test and scale their innovations (White et al., 2016; Hägg, 2018). In contrast, many African institutions lack such comprehensive support systems, stifling the potential of graduates to thrive in competitive markets (Iwu, 2022; World Bank, 2023). Addressing these gaps requires not only curriculum reforms but also investments in infrastructure, funding for entrepreneurial initiatives, and partnerships with the private sector to bridge the theory-to-practice divide. Furthermore, additional research is essential to gain a comprehensive understanding of the educational gaps, challenges, and opportunities within Africa.

## II. HISTORICAL CONTEXT OF ENTREPRENEURSHIP EDUCATION

Entrepreneurship education (EE) first emerged as a formal academic discipline in the United States in the 1940s, with Harvard University offering one of the earliest courses on small business management in 1947 (Fayolle et al., 2016; Jena et al., 2020; Li et al., 2021). The concept gained traction in the 1970s, with universities like Babson College and Stanford leading efforts to institutionalize entrepreneurship studies. By the 1980s, EE became a recognized field in Europe, driven by the European Union's emphasis on promoting innovation and addressing youth unemployment (Fayolle et al., 2016; Li et al., 2021). Countries like the United Kingdom, Germany, and France introduced dedicated entrepreneurship courses at higher learning institutions, focusing on equipping students with skills for business creation and growth (Van der Sluis et al., 2003). In China, EE gained prominence in the late 1990s and early 2000s as part of broader reforms to stimulate economic growth and innovation (Cho & Honorati, 2013). The government prioritized entrepreneurial training through policies like the "Mass Entrepreneurship and Innovation Initiative" launched in 2015, which integrated EE into the national curriculum and supported university-led incubators (Wright et al., 2022).

Africa's journey with entrepreneurship education began in the late 20th century, primarily in South Africa, where the post-apartheid government emphasized education reforms to address economic disparities (Ngobeni et al., 2023). Institutions such as the University of Cape Town and the University of Pretoria introduced EE programs in the 1990s. Nigeria followed closely in the early 2000s, incorporating EE into its tertiary education curriculum under initiatives like the National Universities Commission's directive for entrepreneurship development (Ngobeni et al., 2023). Countries like Kenya, Ghana, and Uganda adopted similar programs by the mid-2000s, recognizing the role of entrepreneurship in addressing unemployment and economic stagnation (Chigunta, 2016). Today, EE continues to expand across Africa, with universities and vocational institutions embedding entrepreneurial courses to prepare students for the challenges of a globalized economy.

## III. STATUS OF ENTREPRENEURSHIP EDUCATION IN AFRICAN UNIVERSITIES

Entrepreneurship education (EE) in African universities has expanded over the past two to three decades to address high unemployment, drive innovation, and promote economic growth (Blimpo & Pugatch, 2020; Thetsane, 2023). Despite this progress, its development remains uneven, with many institutions still in the early stages of integrating EE into their curricula (Iwu, 2022; World Bank, 2023). Most universities offer entrepreneurship courses as electives within broader disciplines like business or economics, rather than as dedicated standalone fields, and only a few have established specialized faculties or departments to foster comprehensive innovation (Iwu, 2022; World Bank, 2023). A major challenge is the predominant focus on theoretical knowledge over practical skills, leaving graduates ill-equipped to turn ideas into viable businesses. Many programs lack hands-on learning opportunities such as internships, business incubators, and mentorship initiatives, which are essential for practical application (Blimpo & Pugatch, 2020; Iwu, 2022). These gaps are intensified by systemic issues in higher education, including limited funding, outdated curricula, and weak industry partnerships, which constrain the development of entrepreneurial ecosystems (Ratte & Usmanij, 2021).

Africa's entrepreneurial landscape reflects the continent's ongoing efforts to compete on a global stage (World Bank, 2023). According to the Global Entrepreneurship Monitor (GEM) (2020), Africa has some of the highest rates of entrepreneurial activity worldwide, yet many of these ventures remain informal and small-scale, limiting their contribution to the global economy. In contrast to regions like North America, Europe, or Asia, Africa has fewer companies operating at a global level in technology, manufacturing, or other high-value industries. However, some African companies have made significant strides internationally (Brookings, 2025). For example, MTN Group, a telecommunications giant, serves over 280 million subscribers across Africa and the Middle East, while Shoprite Holdings operates over 2,900 outlets beyond the continent (Total Telecom, 2019). Similarly, Sasol, an integrated energy and chemical company, and Naspers, a global internet group, demonstrate Africa's capacity for global competitiveness (Tralac, 2024). Despite these successes, the continent still lags in the number of large-scale enterprises, with only 345 companies generating annual revenues of over \$1 billion, compared to 5,586 in the United States and 3,223 in China as of 2018 (US Census Bureau, 2024). This disparity emphasizes the pressing need for improved entrepreneurship education, robust infrastructure, supportive policies, and tailored educational systems to empower African enterprises and bridge the global competitiveness gap.

#### IV. INCLUSION IN ENTREPRENEURSHIP EDUCATION

In recent years, African universities have made significant progress in promoting inclusivity within entrepreneurship education, focusing on reducing gender disparities and improving access for people with disabilities (Lwamba et al., 2022; Kuteesa, 2024). Countries like Nigeria, South Africa, and Kenya have implemented targeted initiatives to address these gaps. In Nigeria, programs such as the Tony Elumelu Foundation Entrepreneurship Programme have increased female participation in entrepreneurial training (Edozie; 2017). Similarly, South African universities, like the University of Cape Town, have introduced initiatives such as the Women in Business Initiative to support female students through mentorship and funding (Ngobeni et al., 2023). In Kenya, institutions like Strathmore University have partnered with organizations like the Mastercard Foundation to offer scholarships and training for women, resulting in nearly 45% female enrollment in some programs (Mastercard Foundation, 2018). Efforts to include people with disabilities are also gaining traction, with accessible infrastructure and resources being prioritized in countries such as Ghana and Uganda (Abimanyi-Ochom & Mannan 2014). Programs like Rwanda's Hanga Ahazaza Initiative further demonstrate the continent's commitment to promoting inclusive entrepreneurship education (Mastercard Foundation, 2023). While progress is evident, challenges such as cultural biases, funding limitations, and inadequate support systems remain, highlighting the need for sustained investment in policies and initiatives to ensure equal access to entrepreneurial opportunities across Africa (Abimanyi-Ochom & Mannan 2014; Ngobeni et al., 2023).

#### V. INTEGRATING AI INTO ENTREPRENEURSHIP EDUCATION IN AFRICA

The integration of Artificial Intelligence (AI) into entrepreneurship education has the potential to revolutionize the business landscape in Africa (Mienye et al., 2024; AUDA-NEPA, 2024). AI empowers students with tools to enhance decision-making, optimize business operations, and drive innovation (Sedky, 2024). By embedding AI into entrepreneurship programs, African universities can prepare graduates to leverage technology for identifying market opportunities, scaling businesses, and addressing local challenges effectively (Mienye et al., 2024; Menzies et al., 2024). This approach not only modernizes education but also positions Africa's future entrepreneurs to compete on a global scale. Despite its promise, the adoption of AI in African universities is still limited (Chisom et al., 2024). While institutions like the University of Johannesburg and the African Institute for Mathematical Sciences (AIMS) have pioneered AI courses, most universities face challenges such as inadequate infrastructure, insufficient funding, and a shortage of skilled faculty (Rest of World, 2024).

The digital divide, including uneven internet access and limited technological resources, further worsens these challenges (Investopedia, 2021, July 21). Successful examples, such as the African AI Research Institute and Google AI's hub in Ghana, highlight the continent's potential but remain exceptions rather than the norm (Ade-Ibijola & Okonkwo, 2023). To fully realize the benefits of AI integration, African universities must prioritize investments in infrastructure, faculty development, and public-private partnerships (Ade-Ibijola & Okonkwo, 2023; Mienye et al., 2024; Menzies et al., 2024). Curricula should merge AI tools with entrepreneurial strategies to equip students with practical, tech-driven solutions for local and global markets. With these efforts, Africa can cultivate a generation of

innovators capable of leveraging AI to transform industries, drive economic growth, and establish the continent as a competitive force in the global economy (Mienye et al., 2024; Menzies et al., 2024).

## VI. OUTCOMES OF ENTREPRENEURSHIP EDUCATION IN AFRICAN UNIVERSITIES

### 6.1 Economic Development and Employment

University entrepreneurship education (EE) has made significant contributions to economic development across Africa by nurturing startups and small and medium enterprises (SMEs), which are vital drivers of GDP growth and economic diversification (Blimpo & Pugatch, 2020; Iwu, 2022; Syed et al., 2024). Universities like Strathmore in Kenya and the University of Lagos in Nigeria have launched programs to support student-led startups, particularly in technology and agribusiness (Kenyan Chronicle. (2025). Innovation hubs such as CcHub in Nigeria and iHub in Kenya further highlight the growing impact of higher education institutions in promoting entrepreneurship. Entrepreneurship education plays a crucial role in promoting job creators rather than job seekers. For instance, in Nigeria, universities like the University of Lagos have integrated entrepreneurship training into their curricula, leading to a surge in startups, particularly in technology and fintech (Afanwoubo, 2024).). These ventures have created jobs and attracted investments that stimulate economic growth. In East Africa, programs in Tanzania and Uganda have empowered students to start businesses addressing gaps in healthcare, education, and agriculture, improving local infrastructure and livelihoods (Abimanyi-Ochom & Mannan 2014). Furthermore, these entrepreneurial initiatives contribute to regional economic integration by facilitating trade, knowledge exchange, and collaborative business ventures.

Despite these advances, many African universities face systemic challenges, including inadequate funding, limited access to technology, and outdated curricula, which hinder their potential to fully contribute to economic growth (Blimpo & Pugatch, 2020; Iwu, 2022). In comparison to institutions in North America and Europe, African universities are still developing their entrepreneurial ecosystems. However, the increasing recognition of EE's importance and growing investments in education signal a positive trajectory.

### 6.2 Africa's Capacity to Compete in the Global Economy

University entrepreneurship education is gradually enabling African graduates to compete in the global economy by promoting innovation and enhancing access to international markets (Blimpo & Pugatch, 2020; Iwu, 2022; Syed et al., 2024). Initiatives like Nigeria's Tony Elumelu Foundation and the Startup Garage at Stellenbosch University in South Africa have connected students to global networks, venture capital, and mentorship, enabling them to scale their businesses beyond national borders (Ngobeni et al., 2023). While these successes highlight the potential of African universities to foster globally competitive entrepreneurs, significant gaps remain (Iwu, 2022; World Bank, 2023). Universities in Africa often lack the resources and infrastructure seen in top institutions in the United States, Europe, or Asia. For instance, the number of African universities with dedicated entrepreneurship faculties or robust industry partnerships remains low (Iwu, 2022; World Bank, 2023). However, the continent's growing youth population and increasing focus on technology and innovation provide a solid foundation for future progress.

### 6.3 Poverty and Hunger

Entrepreneurship education in Africa has significantly contributed to poverty and hunger alleviation by promoting innovation and equipping individuals with the skills to address food security challenges (Ijiwole, 2019; Dzingirai & Mhlanga, 2024). University-based agribusiness programs have empowered students to develop innovative solutions, such as sustainable farming practices and value chain improvements, which have enhanced productivity and reduced food waste (Titus & Nguwap. (2020). Initiatives such as entrepreneurship boot camps, mentorship programs, and student-run businesses have bridged the gap between theoretical knowledge and practical application, enabling graduates to establish ventures that create jobs and improve livelihoods (Allied Business Academies, 2024). These efforts have particularly benefited smallholder farmers and rural communities, where agricultural innovations have increased incomes and reduced food insecurity. Despite these successes, the impact of entrepreneurship education remains uneven across the continent. Many programs are still overly theoretical, failing to equip students with the hands-on skills necessary for real-world problem-solving (Iwu, 2022; World Bank, 2023). High unemployment rates among graduates and limited access to funding and infrastructure further hinder the potential of entrepreneurial ventures to achieve large-scale poverty reduction.

## VII. THE ROLE OF PARTNERSHIPS IN ENHANCING ENTREPRENEURSHIP EDUCATION

Partnerships are essential for addressing challenges in entrepreneurship education by leveraging resources, expertise, and support from various stakeholders (Galvão et al., 2020; Ernest Lloyd & Yihua, 2022). University-industry collaborations, as seen in Germany and Japan, provide students with practical exposure to real-world business environments through internships, mentorships, and research funding (Larsen et al, 2016). African universities can adopt similar strategies by promoting partnerships with local businesses, creating industry-sponsored incubators, and establishing government-backed incentives for private-sector involvement (Manishimwe et al., 2024). Government and international collaborations further bolster entrepreneurship education by offering funding, policy support, and access to global best practices (Galvão et al., 2020; Ernest Lloyd & Yihua, 2022). Examples like China's investment in technology parks and Finland's faculty exchange programs demonstrate the impact of such alliances. African universities can replicate these models by partnering with governments to create innovation hubs, streamline regulatory frameworks, and fund student ventures (Cho & Honorati, 2013). Additionally, global collaborations can facilitate curriculum modernization and capacity building for educators. Public-private partnerships (PPPs) and NGO involvement complete the ecosystem by addressing gaps in infrastructure, training, and inclusivity (Larsen et al, 2016). Inspired by Silicon Valley's venture capital networks and NGOs like the Tony Elumelu Foundation, African universities can collaborate with financial institutions, private firms, and nonprofits to provide seed funding, specialized training, and mentorship (US Census Bureau, 2024).

## VIII. CHALLENGES IN ENTREPRENEURSHIP EDUCATION IN AFRICAN UNIVERSITIES

### 8.1 Inadequate Resources and Infrastructure

African universities often struggle to provide the resources necessary for effective entrepreneurship education. The lack of innovation hubs, business incubators, and access to venture capital limits students' ability to gain hands-on entrepreneurial experience. Moreover, poor financial management skills (Eresia-Eke & Okerue, 2020) and inadequate infrastructure, such as outdated libraries and limited laboratory space (Makhathini, Mlambo, & Mpanza, 2020), restrict innovation. Reliable internet connectivity and modern technology remain scarce in countries like Malawi and Zimbabwe, further hindering learning (World Bank, 2023). Without these essential elements, students are unable to bridge the gap between theoretical knowledge and practical applications, leaving them ill-prepared to navigate competitive markets.

### 8.2 Outdated Curricula

Entrepreneurship curricula in many African universities remain focused on theoretical concepts rather than practical skills such as risk management, financial literacy, and startup development (Deale, 2016). This disconnect leads to graduates feeling unprepared for real-world challenges, as highlighted in a study from Uganda (Chigunta, 2016;). Furthermore, curricula often fail to address local market conditions and opportunities (Moses & Akinbode, 2014). While countries like South Africa have begun integrating practical business challenges into academic programs, much work remains across the continent to modernize entrepreneurship education and align it with regional economic demands.

### 8.3 Lack of Industry Partnerships

Collaboration between universities and industries is limited in many African countries, depriving students of opportunities for internships, mentorships, and exposure to market dynamics. For instance, universities in Ghana and Tanzania lack structured programs connecting students to industry professionals (Iwu, 2022; World Bank, 2023). However, examples like Strathmore University in Kenya, which partners with organizations such as the Mastercard Foundation to offer internships and business incubation, demonstrate the potential of such collaborations. Expanding these partnerships could provide students with practical insights and better equip them for entrepreneurial success (Iwu, 2022).

### 8.4 Funding Constraints for Students

A significant barrier for many aspiring entrepreneurs in Africa is access to funding. African universities rarely offer financial support mechanisms such as grants or venture capital (Iwu, 2022; World Bank, 2023). For example, in Nigeria, young entrepreneurs frequently cite funding limitations as a primary obstacle to business growth. Initiatives like the Tony Elumelu Foundation Entrepreneurship Programme, which provides seed funding and training, offer a



model for addressing this gap (Iwu, 2022; World Bank, 2023). Expanding such initiatives to more institutions across the continent could provide much-needed financial resources for student startups.

### 8.5 Socio-Cultural Barriers

Societal attitudes in many African countries often discourage entrepreneurship in favor of traditional career paths such as medicine or law (Kuratko, 2005; Ngobeni et al., 2023). This mindset, compounded by the stigma associated with business failure, dissuades students from entrepreneurial pursuits. In Ethiopia, for instance, entrepreneurship is viewed as a fallback for those unable to secure formal employment (World Bank, 2023). On the other hand, Rwanda is actively challenging this narrative by embedding entrepreneurial thinking into its national education strategy, encouraging students to see entrepreneurship as a viable and prestigious career (Blimpo & Pugatch, 2020).

### 8.6 Policy and Governance Issues

Weak governance and inconsistent policies hinder entrepreneurship education in Africa (Iwu, 2022). Government initiatives often face delays due to administrative inefficiencies, as seen in Zambia (GAN Integrity, 2020). In contrast, Botswana's Local Enterprise Authority (LEA) collaborates with universities to provide funding and training, showcasing how clear policies and effective governance can support entrepreneurship education (Themba, 2015). Replicating such models across Africa could create a more supportive environment for entrepreneurship education.

### 8.7 Limited Faculty Expertise

A shortage of qualified faculty with practical entrepreneurial experience undermines the quality of entrepreneurship education. Many educators lack the skills to teach advanced entrepreneurial concepts or guide students in starting businesses (Ferreira et al., 2018). In Nigeria, for example, most entrepreneurship lecturers have minimal business experience. South Africa's efforts, such as Stellenbosch University's faculty training programs, provide a template for addressing this issue (Ngobeni et al., 2023). Expanding similar initiatives across the continent would significantly enhance teaching quality.

## IX. HOW CAN WE ADDRESS THESE CHALLENGES

### 9.1 Enhancing Resources and Infrastructure

Robust infrastructure is essential for effective entrepreneurship education (Iwu, 2022). In the U.S., universities like Stanford and MIT provide access to innovation labs, incubators, and venture capital networks, while China's Tsinghua University benefits from government investment in technology parks (Fayolle et al., 2016; US Census Bureau, 2024). These models emphasize the importance of partnerships between universities, governments, and the private sector (Fayolle et al., 2016). African universities can adopt similar strategies by establishing innovation hubs, improving facilities, and ensuring access to modern tools and resources. Investing in infrastructure, such as transportation, communication, and energy systems, will further support entrepreneurship by creating an enabling environment for business development (Fayolle et al., 2016).

### 9.2 Modernizing Curricula

Global best practices highlight the value of practical, interdisciplinary learning. European institutions like the University of Cambridge incorporate design thinking, startup simulations, and industry collaborations into their entrepreneurship programs (Iwu, 2022). African universities should align curricula with local and global economic opportunities, emphasizing experiential learning through internships, case studies, and problem-solving projects (Chigunta, 2016; Lwamba et al., 2022; Ngobeni et al., 2023). Incorporating modules on digital skills, financial literacy, and market dynamics can bridge the gap between theory and practice, equipping students with the skills needed to thrive as entrepreneurs.

### 9.3 Promoting Industry Collaboration

Collaborative models from Germany and Japan demonstrate the benefits of linking academic programs with industry needs (Galvão et al., 2020; Ernest Lloyd & Yihua, 202). Germany's dual education system integrates apprenticeships with academic learning, while Japanese universities collaborate with corporations to fund research and support startups (Cho & Honorati, 2013; Larsen et al, 2016). African universities can replicate these approaches by partnering with local and international businesses to provide mentorship, internships, and funding for student ventures (Manishimwe et al., 2024). Such partnerships can foster hands-on learning and better prepare students for market challenges.

#### 9.4 Expanding Funding Mechanisms

Access to funding is critical for entrepreneurial success (Cho & Honorati, 2013; Larsen et al, 2016). The U.S. relies on venture capital networks and startup accelerators, while China offers government-backed grants and subsidies for entrepreneurs (Cho & Honorati, 2013; Larsen et al, 2016). African universities can establish campus-based venture funds, organize pitch competitions, and collaborate with financial institutions to provide micro-loans and scholarships (Iwu, 2022; Manishimwe et al., 2024). Encouraging governments and private sectors to support funding initiatives will enable students to turn their business ideas into reality.

#### 9.5 Changing Societal Perceptions

Countries like Rwanda and South Korea have successfully transformed societal attitudes toward entrepreneurship by promoting success stories and integrating entrepreneurial goals into national strategies (Blimpo & Pugatch, 2020). African universities, in collaboration with governments and media, can foster a culture that values entrepreneurship, celebrates innovation, and normalizes failure as part of the entrepreneurial journey (Chigunta, 2016; Lwamba et al., 2022; Ngobeni et al., 2023). Highlighting local success stories and engaging communities will further demystify entrepreneurship and inspire the youth.

#### 9.6 Improving Faculty Expertise

Educator training programs in Finland and the U.S. focus on experiential learning techniques, equipping faculty to teach entrepreneurship effectively (Cho & Honorati, 2013; Larsen et al, 2016). Programs like the Babson Collaborative train educators in innovative teaching methods while promoting international exchanges (Babson College, 2024). African universities must invest in faculty development through training, global exposure, and research opportunities (Iwu, 2022; Manishimwe et al., 2024). This will ensure educators have the skills and knowledge to mentor aspiring entrepreneurs effectively.

#### 9.7 Promoting Inclusivity

Inclusive entrepreneurship education is key to equitable development. Kenya's Strathmore University and initiatives in Ghana provide scholarships and resources for women and marginalized groups, while Sweden promotes gender equality through mentorship and targeted funding (Iwu, 2022). African universities can expand access to entrepreneurship programs by offering bursaries, scholarships, and mentorship opportunities for underrepresented communities, ensuring that all students can participate in entrepreneurial activities (Chigunta, 2016; Ngobeni et al., 2023).

#### 9.8 Strengthening Policy Support

Policy support is vital for promoting entrepreneurship education (Themba, 2015; Iwu, 2022). Botswana's Local Enterprise Authority and Singapore's Enterprise Singapore streamline regulations, provide funding, and encourage university-industry collaboration (Themba, 2015). African governments must develop policies that simplify administrative processes, prioritize entrepreneurship education, and incentivize private sector involvement (Ratte & Usmanij, 2021; Ngobeni et al., 2023). Comprehensive policies will create a supportive environment for entrepreneurial growth and innovation.

### X. PROSPECTS OF UNIVERSITY EDUCATION IN AFRICA

The future of entrepreneurship education in African universities is promising, with efforts happening to integrate practical experiences, promote university-industry collaborations, and modernize curricula. Initiatives like innovation hubs, business incubators, and models such as the Open University of West Africa's startup incubation program provide students with hands-on experience. Programs like South Africa's Entrepreneurial Development in Higher Education (EDHE) aim to reduce graduate unemployment by promoting entrepreneurial skills. Nonetheless, challenges such as resource constraints, outdated teaching methods, and socio-cultural barriers persist, resulting in lower entrepreneurial output, development, and innovation in Africa compared to the rest of the world. To achieve meaningful and rapid progress, Africa must address several key issues through sustained investment, educational reforms, policy support, and a shift toward more interactive and practical teaching approaches.



**XI. CONCLUSION**

Entrepreneurship education in African universities has seen significant growth, with many institutions offering full degrees or incorporating it as an elective in some degree programs. However, despite these efforts, Africa continues to lag behind other regions in entrepreneurial activity and innovation. Many businesses on the continent remain informal and small-scale, limiting their regional and global economic impact. While companies like MTN, Sasol, and Naspers showcase Africa's potential for global competitiveness, the number of large-scale enterprises is still low compared to countries like the United States and China. A major challenge lies in the theoretical nature of most entrepreneurship curricula, which lack practical, experiential learning opportunities needed to equip students with real-world skills. Additionally, resource constraints, outdated teaching methods, and socio-cultural barriers further impede entrepreneurial development. To unlock Africa's entrepreneurial potential, key priorities include investing in education, developing infrastructure, creating supportive policies, and shifting towards interactive teaching methods.

**REFERENCES**

1. Abimanyi-Ochom, J., & Mannan, H. (2014). Uganda's disability journey: Progress and challenges. *African journal of disability*, 3(1), 108. <https://doi.org/10.4102/ajod.v3i1.108>.
2. Ade-Ibijola, A., & Okonkwo, C. (2023). Artificial intelligence in Africa: Emerging challenges. *Social and Cultural Studies of Robots and AI*, 101-117. [https://doi.org/10.1007/978-3-031-08215-3\\_5](https://doi.org/10.1007/978-3-031-08215-3_5).
3. Afanwoubu, B. (2024). Africa's overlooked nexus of opportunity: Secondary cities, higher education institutions, and innovation hubs. *InnovateLab*. [https://www.researchgate.net/publication/387567732\\_Africa's\\_Overlooked\\_Nexus\\_of\\_Opportunity\\_Secondary\\_Cities\\_Higher\\_Education\\_Institutions\\_and\\_Innovation\\_Hubs#fullTextFileContent](https://www.researchgate.net/publication/387567732_Africa's_Overlooked_Nexus_of_Opportunity_Secondary_Cities_Higher_Education_Institutions_and_Innovation_Hubs#fullTextFileContent)
4. Allied Business Academies. (2024). The role of mentorship in entrepreneurship education: Building bridges between classroom and industry. *Journal of Entrepreneurship Education*. Retrieved from <https://www.abacademies.org/articles/the-role-of-mentorship-in-entrepreneurship-education-building-bridges-between-classroom-and-industry-17129.html>.
5. AUDA-NEPAD. (2024, August 26). Shaping Africa's artificial intelligence (AI) strategies. NEPAD AUDA-NEPAD. <https://www.nepad.org/news/shaping-africas-artificial-intelligence-ai-strategies>
6. Bawuah, K., Buame, S., & Hinson, R. (2006). Reflections on entrepreneurship education in African tertiary institutions. *Acta Commercii*, 6(1). <https://doi.org/10.4102/ac.v6i1.78>.
7. Blimpo, M. P., & Pugatch, T. (2020). Entrepreneurship education and teacher training in Rwanda. [https://doi.org/10.35489/bsg-rise-wp\\_2020/052](https://doi.org/10.35489/bsg-rise-wp_2020/052).
8. Brookings. (2025, January 13). Leveraging Africa's inner strength to realize its full economic potential. <https://www.brookings.edu/articles/leveraging-africas-inner-strength-to-realize-its-full-economic-potential/>.
9. Chigunta, F. (2016). Entrepreneurship as a possible solution to youth unemployment in Africa. *Labouring and Learning*, 1-19. [https://doi.org/10.1007/978-981-4585-97-2\\_19-1](https://doi.org/10.1007/978-981-4585-97-2_19-1).
10. Chisom, O. N., Unachukwu, C. C., & Osawaru, B. (2024). Review of AI in education: Transforming learning environments in Africa. *International Journal of Applied Research in Social Sciences*, 5(10), 637-654. <https://doi.org/10.51594/ijarss.v5i10.725>.
11. Cho, Y., & Honorati, M. (2013). Entrepreneurship programs in developing countries: A Meta-regression analysis. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2250332>.
12. Dzingirai, M., & Mhlana, D. (2024). Cooperative entrepreneurship and rural poverty alleviation in Africa. *Fostering Long-Term Sustainable Development in Africa*, 77-94. [https://doi.org/10.1007/978-3-031-61321-0\\_5](https://doi.org/10.1007/978-3-031-61321-0_5).
13. Edozie, R. K. (2017). Afro-modern entrepreneurs and (Pan) African business leaders: Tony Elumelu and Reuel Khoza as exemplars. "Pan" Africa Rising, 105-134. [https://doi.org/10.1057/978-1-137-59538-6\\_5](https://doi.org/10.1057/978-1-137-59538-6_5).
14. Ernest Lloyd, J., & Yihua, X. (2022). The impediments to global health justice: What can and should be improved from COVID to make health affordable and accessible to everyone. *International Journal of Science and Research (IJSR)*, 11(4), 1227-1229. <https://doi.org/10.21275/sr22322090704>.
15. Fayolle A., Verzat C., Wapshott R. (2016). In Quest of Legitimacy: the theoretical and methodological foundations of entrepreneurship education research. *Int. Small Bus. J.* 34 895–904. 10.1177/0266242616649250.
16. Galvão, A. R., Marques, C. S., Ferreira, J. J., & Braga, V. (2020). Stakeholders' role in entrepreneurship education and training programmes with impacts on regional development. *Journal of Rural Studies*, 74, 169-179. <https://doi.org/10.1016/j.jrurstud.2020.01.013>.

17. GAN Integrity. (2020, November 5). Zambia country risk report | GAN integrity. Ethics & Compliance Management Software. Retrieved from <https://www.ganintegrity.com/country-profiles/zambia/>.
18. Global Entrepreneurship Monitor (GEM). (2020). Global Entrepreneurship Monitor 2020/2021 global report. Retrieved from <https://www.gemconsortium.org>.
19. Global Entrepreneurship Monitor. (2020). Global Entrepreneurship Monitor 2020/2021 global report. Retrieved from <https://www.gemconsortium.org>
20. Hägg, G. (2018). The reflective novice entrepreneur: From habitual action to intelligent action using experience-based pedagogy as a vehicle for change. A Research Agenda for Entrepreneurship Education. <https://doi.org/10.4337/9781786432919.00017>.
- Galloway L., Brown W. (2002). Entrepreneurship education at university: a driver in the creation of high growth firms. *Educ. Train.* 44 398–445. 10.1108/00400910210449231.
21. Huang, Y., Bu, Y., Liu, L., Xu, D., Xu, Z., & Zhao, G. (2022). Relationship between entrepreneurship education curriculum and agricultural students' satisfaction in China. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.884565>.
22. Ijiwole, A. A. (2019). Employment generation and poverty alleviation in Nigeria: The role of social entrepreneurship. *Asian Journal of Education and Social Studies*, 1-8. <https://doi.org/10.9734/ajess/2019/v4i430128>.
23. Investopedia. (2021, July 21). The digital divide: What it is, and what's being done to close it . <https://www.investopedia.com/the-digital-divide-5116352>
24. Iwu, C. G. (2022). Entrepreneurship education challenges in the African setting. *Academia Letters*. <https://doi.org/10.20935/al4544>.
25. Jena R. K. (2020). Measuring the impact of business management student's attitude towards entrepreneurship education on entrepreneurial intention: a case study. *Comput. Hum. Behav.* 107:106275. 10.1016/j.chb.2020.106275.
26. Kenyan Chronicle. (2025, January 13). How Kenyan universities are supporting tech innovation. <https://kenyanchronicles.com/kenyan-universities-supporting-tech-innovation/>
27. Kuratko, D. F. (2005). The Emergence of Entrepreneurship Education: Development, Trends, and Challenges. *Entrepreneurship Theory and Practice*, 29(5), 577-597. <https://doi.org/10.1111/j.1540-6520.2005.00099.x>.
28. Kuteesa, K. N., Akpuokwe, C. U., & Udeh, C. A. (2024). Gender equity in education: Addressing challenges and promoting opportunities for social empowerment. *International Journal of Applied Research in Social Sciences*, 6(4), 631-641. <https://doi.org/10.51594/ijarss.v6i4.1034>.
29. Larsen, K., Bandara, D. C., Esham, M., & Unantenne, R. (2016). Status of and trends in university-industry collaboration in Sri Lanka. *Promoting University-Industry Collaboration in Sri Lanka: Status, Case Studies, and Policy Options*, 9-24. [https://doi.org/10.1596/978-1-4648-0922-4\\_ch2](https://doi.org/10.1596/978-1-4648-0922-4_ch2).
30. Li, J., Huang, S. Z., Chau, K. Y., & Yu, L. (2021). The Influence of Undergraduate Entrepreneurship Education on Entrepreneurial Intention: Evidence From Universities in China's Pearl River Delta. *Frontiers in psychology*, 12, 732659. <https://doi.org/10.3389/fpsyg.2021.732659>.
31. Li, J., Huang, S. Z., Chau, K. Y., & Yu, L. (2021). The Influence of Undergraduate Entrepreneurship Education on Entrepreneurial Intention: Evidence From Universities in China's Pearl River Delta. *Frontiers in psychology*, 12, 732659. <https://doi.org/10.3389/fpsyg.2021.732659>.
32. Lwamba, E., Shisler, S., Ridlehoover, W., Kupfer, M., Tshabalala, N., Nduku, P., Langer, L., Grant, Sonnenfeld, A., Anda, D., Eysers, J., & Snilstveit, B. (2022). Strengthening women's empowerment and gender equality in fragile contexts towards peaceful and inclusive societies: A systematic review and meta-analysis. *Campbell Systematic Reviews*, 18(1), e1214. <https://doi.org/10.1002/cl2.1214>.
33. Manishimwe, T., Frazier, D. P., & Yusuf, H. (2024). Frugal innovation and entrepreneurial university: A case study of African first development university in Africa. *Discover Education*, 3(1). <https://doi.org/10.1007/s44217-024-00299-0>.
34. Mastercard Foundation. (2018, June 26). Public-private partnership economically empowers women and youth in Kenya. Mastercard Foundation. <https://mastercardfdn.org/public%E2%80%90private-partnership-economically-empowers-women-and-youth-in-kenya/>.
35. Mastercard Foundation. (2023, December 13). Hanga Ahazaza 'Create the future' in Rwanda. <https://mastercardfdn.org/all/hanga-ahazaza/>

36. Menzies, J., Sabert, B., Hassan, R., & Mensah, P. K. (2024). Artificial intelligence for international business: Its use, challenges, and suggestions for future research and practice. *Thunderbird International Business Review*, 66(2), 185-200. <https://doi.org/10.1002/tie.22370>.
37. Mienye, I. D., Sun, Y., & Ileberi, E. (2024). Artificial intelligence and sustainable development in Africa: A comprehensive review. *Machine Learning with Applications*, 18, 100591. <https://doi.org/10.1016/j.mlwa.2024.100591>.
38. Ngobeni, N. R., Chibambo, M. I., & Divala, J. J. (2023). Curriculum transformations in South Africa: Some discomfoting truths on interminable poverty and inequalities in schools and society. *Frontiers in Education*, 8. <https://doi.org/10.3389/educ.2023.1132167>.
39. Okello, D., Mshenga, P., Saidi, M., Juma, F., Maria, S., Egeru, A., & Gogo, E. (2024). Entrepreneurship education in east, west and North Africa higher education institutions (HEIs): Mapping agripreneurship curriculum and lecturers' competencies. *Discover Education*, 3(1). <https://doi.org/10.1007/s44217-024-00204-9>.
40. Ratten, V., & Usmanij, P. (2021). Entrepreneurship education: Time for a change in research direction? *The International Journal of Management Education*, 19(1), 100367. <https://doi.org/10.1016/j.ijme.2020.100367>.
41. Rest of World. (2024, April 29). African universities are failing to prepare tech graduates for jobs in AI. <https://restofworld.org/2024/ai-skills-training-africa/>.
42. Sedky, A. (2024). Investing in artificial intelligence (AI) for business leaders to enhance decision-making. *Advances in Logistics, Operations, and Management Science*, 91-115. <https://doi.org/10.4018/979-8-3693-0712-0.ch005>.
43. Syed, R. T., Tariq, U., Arnaut, M., & Agrawal, R. (2024). Entrepreneurship educator: A vital cog in the wheel of entrepreneurship education and development in universities. *Journal of Innovation and Entrepreneurship*, 13(1). <https://doi.org/10.1186/s13731-024-00433-0>.
44. Talukder, S. C., Lakner, Z., & Temesi, Á. (2024). Development and state of the art of entrepreneurship education: A bibliometric review. *Education Sciences*, 14(3), 295. <https://doi.org/10.3390/educsci14030295>.
45. Themba, G. (2015). Entrepreneurship development in Botswana: Lessons for other developing countries. *Botswana Journal of Business*, 8(1). [https://www.researchgate.net/publication/305619237\\_Entrepreneurship\\_Development\\_in\\_Botswana\\_Lessons\\_for\\_other\\_developing\\_countries#fullTextFileContent](https://www.researchgate.net/publication/305619237_Entrepreneurship_Development_in_Botswana_Lessons_for_other_developing_countries#fullTextFileContent)
46. Thetsane, M. R. (2023). Entrepreneurship education: Remedy to graduates' unemployment in sub-saharan countries. *Unemployment - Nature, Challenges and Policy Responses*. <https://doi.org/10.5772/intechopen.1001450>
47. Titus, S., & Nguwap. (2020). Impact of entrepreneurship training on poverty reduction among rural youths. *Journal of Education and Practice*, 11(21), Article 08. <https://doi.org/10.7176/JEP/11-21-08>
48. Total Telecom. (2019, May 15). News, analysis and events for global telecoms:MTN strengthen its leading position in Africa's ICT industry with ambition 2025. <https://totaltele.com/mtn-strengthen-its-leading-position-in-africas-ict-industry-with-ambition-2025/>.
49. TralacBlog. (2024, November 29). Sasol demonstrates Africa's industrialisation dilemma. <https://www.tralac.org/blog/article/16610-sasol-demonstrates-africa-s-industrialisation-dilemma.html>.
50. US Census Bureau. (2024, December 10). Statistics of U.S. businesses. <https://www.census.gov/programs-surveys/susb.html>.
51. Van der Sluis, J., Van Praag, M., & Vijverberg, W. P. (2003). Education and entrepreneurship in industrialized countries: A meta-analysis. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.417341>.
52. White, R., Hertz, G., & Moore, K. (2016). Competency based education in entrepreneurship: A call to action for the discipline. *Annals of Entrepreneurship Education and Pedagogy* – 2016. <https://doi.org/10.4337/9781784719166.00013>.
53. World Bank. (2023, 5). The World Bank in Africa: Overview. <https://www.worldbank.org/en/region/afr/overview>
54. Wright, E., Feng, S., & Zheng, Y. (2022). Unemployed graduate to the next Jack Ma? A counter-narrative to the entrepreneurship movement in higher education. *Higher Education*. <https://doi.org/10.1007/s10734-021-00709-4>.
55. Zhou, R., Rashid, S. M., & Cheng, S. (2024). Entrepreneurship education in Chinese higher institutions: Challenges and strategies for vocational colleges. *Cogent Education*, 11(1). <https://doi.org/10.1080/2331186x.2024.2375080>.





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