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# Call for Papers

## Volume XVI, Issue 1(19), Summer 2025

### Journal of Research in Educational Sciences

The Journal is designed to promote scholars' thought in the field of education with the clear mission to provide an interdisciplinary forum for discussion and debate about education's most vital issues. We intend to publish papers that contribute to the expanding boundaries of knowledge in education and focus on research, theory, current issues and applied practice in this area.

The Editor in Chief would like to invite submissions for the **Volume XVI, Issue 1(19), Summer 2025** of the **Journal of Research in Educational Sciences** (JRES).

The primary aim of the Journal has been and remains the provision of a forum for the dissemination of a variety of international issues, empirical research and other matters of interest to researchers and practitioners in a diversity of subject areas linked to the broad theme of educational sciences.

The aims and scope of the Journal includes, but is not limited to; the following major topics as they relate to the Educational Sciences:

- Educational Psychology;
- Engagement and Community;
- Leadership in Education;
- School Improvement;
- Human Resources in Education;
- Education and Information Science;
- Global strategies in Higher Education;
- Learner's Needs in the 21<sup>st</sup> Century;
- The Role of Education in The Globalization World;
- Technology-Based Learning.

All papers will first be considered by the Editors for general relevance, originality and significance. If accepted for review, papers will then be subject to double blind peer review.

<b>Deadline for Submission:</b>	25 <sup>th</sup> May 2025
<b>Expected Publication Date:</b>	June 2025
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## Transforming Universities for 21<sup>st</sup> Century Africa: A Case Study of Sierra Leone

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**Article info:** Received 28 September 2024; Revised 10 October 2024; Accepted 30 October 2024; Published 30 December 2024. Copyright© 2024 The Author(s). Published by ASERS Publishing 2024. This is an open access article distributed under the terms of CC-BY 4.0 license.

**Abstract:** This study aims to examine the critical transformation necessary for universities in Sierra Leone to remain relevant in the 21st century. It focuses on aligning academic programs with the demands of the market, integrating digital tools, and fostering industry-academia collaborations.

The research employs a theoretical and narrative methodology. A theoretical approach is adopted to examine academic frameworks related to curriculum reform, digital integration, and industry partnerships. A narrative methodology is used to explore practical case studies and experiences within Sierra Leone's higher education landscape. The study relies on a combination of secondary sources, including contemporary literature and policy documents, to draw relevant insights into educational transformation in Africa.

The study reveals significant barriers to transformation, such as inadequate funding, misaligned curricula, and insufficient technological infrastructure. However, it also highlights key opportunities for growth, including the adoption of innovative digital tools and the reform of curricula to meet market demands.

This paper provides a comprehensive analysis of Sierra Leone's higher education system, contributing to the broader discourse on university transformation in Africa. It offers actionable recommendations for policymakers and educational leaders to implement strategic reforms that align with sustainable development goals..

**Keywords:** higher education; digital integration; curriculum reform; Sierra Leone.

**JEL Classification:** I23; O33; L52; R11.

### Introduction

The 21st century presents a complex landscape for higher education institutions (HEIs) worldwide, and particularly for those in developing nations like Sierra Leone. The drive for knowledge-based economies, technological advancement, and global competitiveness necessitates universities to rethink their approach to education (Jackson, 2023). As Sierra Leone continues to navigate the socio-economic challenges it faces, its universities must evolve to not only support the nation's development but also to contribute to the broader African and global knowledge economies.

Sierra Leone's universities must confront historical legacies that have left them underfunded, technologically behind, and limited in their capacity to deliver quality education across the country (Jackson, 2016a). The challenges facing higher education in Sierra Leone, such as inadequate facilities, outdated pedagogies, and misaligned curricula, continue to impact the quality of education. The Fourth Industrial Revolution (4IR), which emphasizes digital technologies, provides an opportunity for HEIs to transform by integrating innovative educational models (Jackson, 2016b).

The call for transformation is not just about education; it is tied to the broader development agenda, including the achievement of the Sustainable Development Goals (SDGs). Universities have the potential to drive economic growth, build human capital, and provide opportunities for social mobility. In this regard, Jackson (2015) emphasizes the need for competitiveness in higher education practices to ensure sustainable growth in Sierra Leone. Universities must prioritize academic programs that are responsive to the needs of the labour market while also addressing national and regional challenges.

This paper aims to analyse the critical transformations needed in Sierra Leone's higher education system to position it as a key player in the development of a knowledge-driven economy. By drawing on recent literature,

such as Jackson (2022), this study provides a framework for how Sierra Leonean universities can enhance their role in the socio-economic development of the nation and Africa at large.

In the 21st century, African universities face a transformative imperative driven by technological advancements, globalisation, and socio-economic shifts. As Sierra Leone seeks to position itself within the knowledge economy, its universities are at the forefront of this transformation. Higher education must evolve to meet the needs of modern society, moving beyond traditional pedagogies to embrace innovative approaches that prepare students for the challenges of an interconnected world (Tamrat, 2023). This paper seeks to analyse how universities in Sierra Leone can undergo the necessary transformations to remain relevant in the context of a rapidly changing Africa.

The transformation of universities in Sierra Leone involves addressing several systemic challenges that have long plagued the country's education system. Issues such as limited access to higher education, outdated curricula, and inadequate funding continue to hamper progress (Duramany-Lakkoh, 2015). Moreover, as Africa embraces the Fourth Industrial Revolution, Sierra Leone's universities must position themselves to capitalise on the potential offered by digital technologies to enhance learning and research capabilities. Through the examination of these key factors, this paper provides a framework for the transformation of Sierra Leone's universities into hubs of innovation and socio-economic development.

## 1. Literature Review

The transformation of higher education in Sierra Leone reflects broader trends across Africa, where universities are reimagining their role in knowledge economies driven by globalization, technological advancement, and shifting labour market demands. Agbaje (2023) points out that many African institutions, including those in Sierra Leone, are challenged by curricula that fail to align with market needs. This critique echoes findings by Duramany-Lakkoh (2015), who highlighted systemic issues such as outdated pedagogical frameworks and inadequate funding as persistent obstacles. As a result, curriculum reform has emerged as a critical focus for addressing the skills gap and fostering economic development. By aligning academic programs with the needs of key sectors such as agriculture, technology, and health sciences, universities in Sierra Leone can play a pivotal role in addressing both local and global challenges.

Curriculum reform is essential not only for the relevance of university education but also for the global competitiveness of graduates. As emphasized by the African Union (2017) in the Continental Education Strategy for Africa (CESA 16-25), harmonizing educational standards across the continent can enhance the employability of African graduates in both regional and international markets. Jackson (2016a & 2016c) argues that practical skills development and market-responsive academic programs must be central to any curriculum reform effort. In this context, the integration of Information and Communication Technology (ICT) tools into curricula is essential for preparing students to thrive in a digital economy. Sierra Leonean universities, therefore, need to adopt forward-thinking models that emphasize both local and global demands in education.

The adoption of digital tools represents a significant opportunity for higher education reform, particularly in the context of Sierra Leone's limited technological infrastructure. Jackson (2022) highlights how the COVID-19 pandemic exposed the digital divide in Sierra Leonean universities, underscoring the need for robust ICT infrastructure to support online and blended learning models. Asongu and Nwachukwu (2018) further note that digital integration facilitates enhanced research collaboration and innovation, which are crucial for driving socio-economic development in underdeveloped regions. By embracing digital technologies such as artificial intelligence (AI) and data analytics, Sierra Leonean universities can transform their pedagogical approaches and foster environments that encourage critical thinking, collaboration, and creativity.

In summary, the reform of Sierra Leone's higher education system is integral to the country's development agenda, particularly in aligning academic programs with market needs and embracing digital transformation. As Tamrat (2023) notes, universities in Africa must evolve rapidly to meet the demands of modern knowledge economies. The integration of practical skills development, coupled with digital tools and technologies, positions universities not only as educational institutions but also as engines of innovation and socio-economic progress. This literature review supports the assertion that higher education reform in Sierra Leone, with a focus on curriculum relevance and digital integration, is vital to fostering human capital and driving national development, aligning with broader African and global educational trends.

## 2. Methodology

This study utilises a combination of theoretical and narrative methodologies to investigate the necessary transformation of higher education institutions (HEIs) in Sierra Leone. The **theoretical methodology** involves a

detailed review of existing academic literature and policy frameworks (Jackson, 2018). Key sources include Jackson (2022), which examines the relationship between education and economic growth, and the African Union's Continental Education Strategy for Africa (CESA 16-25) (African Union, 2017). These frameworks provide a foundation for understanding how curriculum reforms and digital integration can drive institutional transformation.

The **narrative methodology** allows the research to capture practical insights by examining specific case studies within Sierra Leone's higher education landscape. Narrative accounts from Jackson (2016a) and Duramany-Lakkoh (2015) are employed to highlight the challenges faced by universities, including limited access to technology and outdated governance structures. The narrative approach offers a deeper understanding of the lived experiences of stakeholders within the system, shedding light on the socio-economic realities that shape the educational context.

Both methodologies are supported by a comprehensive review of secondary data, including policy documents, scholarly articles, and reports. The integration of theoretical and narrative methodologies enables a holistic analysis of Sierra Leone's HEIs, addressing both structural challenges and opportunities for innovation.

### 3. Analysis

#### 3.1 Curriculum Reform and Relevance

One of the core challenges facing Sierra Leone's universities is the relevance of their curricula. The mismatch between academic programs and market needs is a growing concern, as many graduates struggle to find employment in their fields of study. According to Jackson (2016a), the reform of university curricula must prioritize practical skills development and ensure that graduates are prepared for the demands of the labour market.

Agriculture, technology, and health sciences are key sectors that need to be emphasized in the revised curricula, as these fields are crucial to Sierra Leone's national development. Jackson (2016b) argues that integrating digital tools such as ICTs into the curricula is vital for preparing students to work in modern environments. Furthermore, aligning curricula with regional and international standards will enhance the global competitiveness of Sierra Leonean graduates.

The African Union's Continental Education Strategy for Africa (CESA 16-25) provides a model for harmonizing educational standards across the continent, which Sierra Leone can draw from (African Union, 2017). By adopting a forward-thinking approach to curriculum development, universities can foster a generation of problem solvers and innovators who can tackle the complex challenges facing the country.

Overall, curriculum reform in Sierra Leone must be holistic, considering both the needs of the local economy and the broader global trends in education and employment. Universities must be responsive to change and must continually assess their programs to ensure their relevance in the face of a rapidly evolving labour market (Jackson, 2023).

The relevance of university curricula in Sierra Leone has come under scrutiny as the country seeks to align its higher education system with the needs of a 21st-century economy. According to Agbaje (2023), many African universities, including those in Sierra Leone, continue to deliver curricula that are disconnected from the realities of the labour market. To transform, universities must overhaul their academic programmes to integrate practical skills that foster entrepreneurship, critical thinking, and problem-solving. In the context of Sierra Leone, this involves revising curricula to focus on sectors crucial to national development, such as agriculture, technology, and health sciences.

A successful curriculum reform must be aligned with international standards while considering local needs. Universities in Sierra Leone can draw inspiration from models such as the African Union's Continental Education Strategy for Africa (CESA 16-25), which prioritises the harmonisation of educational standards across the continent (African Union, 2017). By aligning with such frameworks, Sierra Leonean universities can ensure that their graduates are competitive both regionally and globally, while still contributing to the local economy.

#### 3.2 Digital Integration and Technological Advancement

The COVID-19 pandemic highlighted the critical role of technology in education, as many institutions were forced to shift to online platforms to continue teaching. In Sierra Leone, however, this transition was hampered by a lack of ICT infrastructure and digital skills among educators (Jackson, 2016). The integration of digital technologies is not just a temporary measure but a long-term solution for enhancing educational access and quality, particularly in remote areas where physical infrastructure is lacking.

Digital tools such as artificial intelligence (AI), data analytics, and online learning platforms can revolutionize how education is delivered in Sierra Leone (Jackson & Jackson, 2024) By investing in these

technologies, universities can create more dynamic, interactive learning environments that encourage collaboration and critical thinking. Jackson (2017) emphasizes the importance of mobile learning (M-learning) devices in reaching students who may not have access to traditional classroom settings.

Moreover, digital integration allows for greater research collaboration, both locally and internationally. Sierra Leonean universities can enhance their research output by partnering with institutions that have advanced technological capabilities. This can also improve the quality and scope of research, particularly in fields such as health and environmental sciences, which are critical for the country's sustainable development (Asongu & Nwachukwu, 2018).

To achieve meaningful digital integration, however, Sierra Leone must address the barriers to technological adoption. These include inadequate funding for ICT infrastructure, lack of training for educators, and the digital divide that limits access to technology for students from disadvantaged backgrounds (Jackson, 2022). Addressing these challenges is essential for transforming Sierra Leone's universities into modern institutions that can compete globally.

The integration of digital technologies in education is no longer optional but necessary for the future of universities in Sierra Leone. The COVID-19 pandemic underscored the importance of technology in ensuring continuity in education, yet many institutions in Sierra Leone lag in adopting these tools (Jackson, 2016b; Duramany-Lakkoh, 2015). Digitalisation of education offers significant opportunities for expanding access to higher education, particularly in rural areas where physical infrastructure is limited. This transformation requires investment in ICT infrastructure, as well as training for educators to effectively integrate technology into their teaching.

Moreover, the use of digital tools can enhance research output by facilitating collaboration between universities and international partners. Universities in Sierra Leone must harness technologies such as artificial intelligence, data analytics, and online platforms to create a more dynamic and inclusive learning environment. According to Asongu and Nwachukwu (2018), digitalisation can also promote innovative research, particularly in fields such as health and environmental sciences, which are critical for sustainable development in Sierra Leone.

### 3.3 Industry-Academia Collaboration

In a rapidly changing global economy, industry-academia collaboration is crucial for universities to remain relevant. By working closely with industries, universities can ensure that their academic programs are aligned with the needs of the job market. This collaboration can also enhance research and innovation, as universities partner with industries to address real-world challenges (Jackson, 2015).

Industry stakeholders should be actively involved in the curriculum development process, providing input on the skills and knowledge that graduates need to succeed in the workforce. Internships and work placements should also be an integral part of university programs, giving students the practical experience they need to be competitive in the job market (Jackson, 2017).

Moreover, collaboration between universities and industries can drive innovation, particularly in key sectors such as agriculture and renewable energy, which are critical to Sierra Leone's economic transformation. As noted by the United Nations Economic Commission for Africa (Arogundade, Ngarachu & Bandele, 2024), such partnerships can foster innovation that addresses local challenges while contributing to global knowledge.

However, fostering these collaborations requires universities to adopt a more proactive approach in engaging with industry stakeholders. They must build strong relationships with the private sector, government agencies, and international organizations to create a robust ecosystem that supports research and innovation (Jackson & Jackson, 2024).

For universities to be transformative, they must foster stronger linkages with industries and communities. The disconnect between academia and the labour market has been a longstanding issue in Sierra Leone, where many graduates face difficulties finding employment due to mismatches between their skills and market demands (El-Barrie & Kadry, 2022). Industry-academia partnerships are essential in bridging this gap. By involving industry stakeholders in curriculum development and offering internships, Sierra Leonean universities can produce graduates who are more aligned with the needs of the economy.

This collaboration can also extend to research and innovation, where universities work closely with industries to address local challenges. According to a report by the United Nations Economic Commission for Africa (Arogundade, Ngarachu & Bandele, 2024), stronger partnerships between universities and the private sector can drive innovation, particularly in fields such as renewable energy and agriculture, which are critical for Sierra Leone's economic transformation. By creating a symbiotic relationship between academia and industry, universities can play a pivotal role in advancing the country's development agenda.



### 3.4 Barriers to Transformation

Despite the need for transformation, universities in Sierra Leone face significant barriers that hinder their progress. One of the main challenges is the chronic underfunding of higher education institutions, which limits their ability to invest in infrastructure, staff development, and research (Jackson, 2015). Furthermore, many universities continue to operate under outdated governance structures that stifle innovation and responsiveness to the rapidly changing educational landscape. Addressing these structural challenges is crucial if Sierra Leonean universities are to successfully transform for the 21st century.

In addition, issues of equitable access remain a major concern. Gender disparities, socio-economic inequalities, and geographical barriers continue to limit access to higher education for many in Sierra Leone (Duramany-Lakkoh, 2015). For universities to truly transform, they must ensure that their reforms are inclusive, providing opportunities for all segments of society to benefit from higher education.

### Conclusions and Further Research

Transforming universities for the 21st century is not just a necessity but an urgent priority for Sierra Leone if it is to meet the demands of a globalized economy. By reforming curricula, integrating digital technologies, and fostering industry-academia collaborations, universities in Sierra Leone can become engines of socio-economic development. However, overcoming the barriers of underfunding, outdated governance, and unequal access will require concerted efforts from government, university leadership, and the private sector. This paper has provided a framework for the transformation of Sierra Leone's universities, offering insights that can guide policymakers and educational leaders towards creating a more responsive and dynamic higher education system.

### Credit Authorship Contribution Statement

**Emerson Abraham Jackson:** Wrote all aspects of the paper's contents.

### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### Declaration of Use of Generative AI and AI-Assisted Technologies

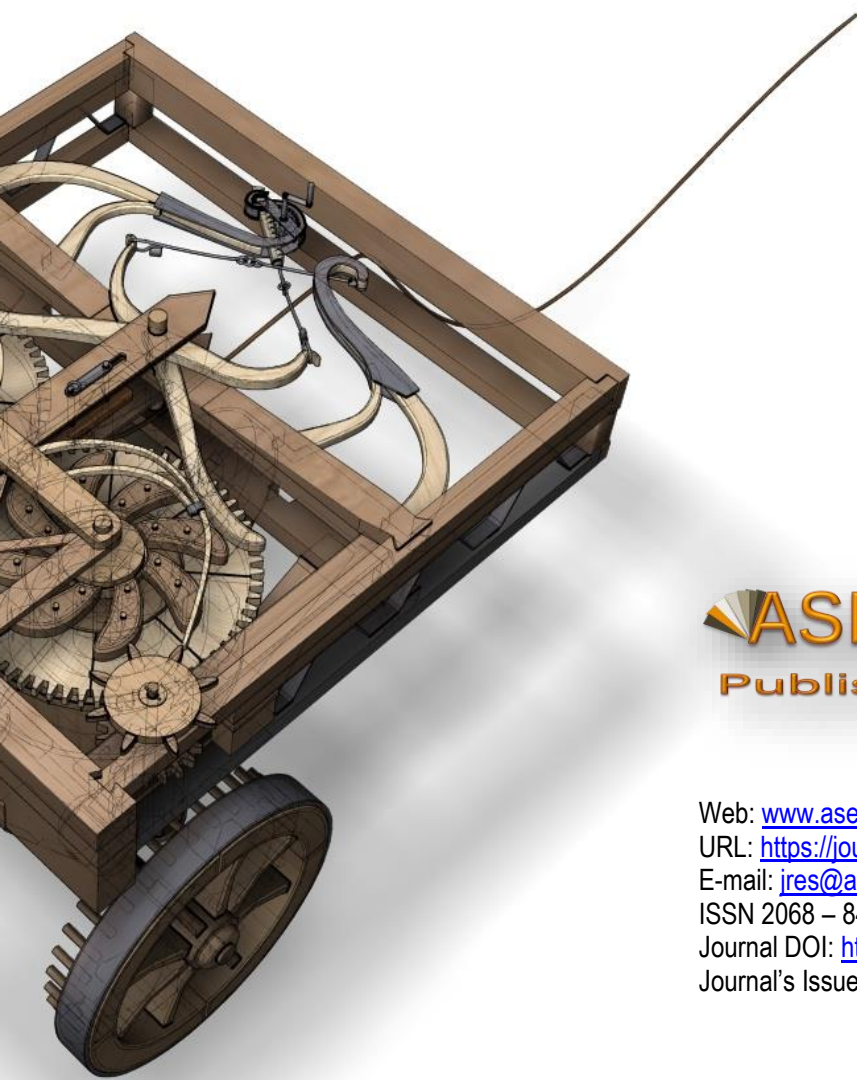
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