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RESEARCH ARTICLE

The Challenges of Tertiary Education in Ghana and Its Impact on Education Financing.

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ABSTRACT

There are a lot of challenges in tertiary education in Ghana; these are the major developments that affect education funding. A literature review and mixed-method analysis of Ghana's higher education system has been conducted by which we have identified critical infrastructural, financial, and governance issues in Ghana's higher education structure. The key findings are that poor state support of higher education facilities, lack of access to health care in Ghana and a lack of quality assurance in the system and poor implementation of the quality assurance process can make institutions more and more financially challenged. It is well-known that universities in Ghana are still waiting for government funding, lack of research infrastructure and lack of self-financing. At the same time, they have developed new challenges in areas which are emerging from neoliberal policies and weak policy implementation, and where access is not equal. Moreover, our study shows that good financing mechanisms (public-private partnerships, cost management, and diversified revenue sources) are needed to address these problems. We suggest a comprehensive policy package that is better at government funding and institutional autonomy, fiscal prudence, and collaborative funding models to promote sustainable tertiary education in Ghana.

Keywords: *Tertiary Education, Education Financing, Higher Education Challenges, Quality Assurance, Infrastructure, Public Funding, Institutional Sustainability*

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INTRODUCTION

Tertiary education is fundamental to national development, serving as a catalyst for socio-economic transformation, innovation, and human capital development. In Ghana, the higher education sector comprises public universities, polytechnics, colleges of education, and private institutions that collectively contribute to the nation's knowledge production and professional workforce development. However, tertiary education institutions in Ghana have increasingly struggled with systemic challenges that threaten their ability to deliver quality education and maintain institutional viability (P. Mensah, 2024). The role of tertiary education for socio-economic development globally demands adequate funding to effectively train high-quality experts in the current knowledge economy (P. Mensah, 2024). Conversely, government funding support for tertiary education institutions in Ghana has declined due to national financial crises and competing demands for social services and infrastructure development (P. Mensah, 2024).

The tertiary education landscape in Ghana presents a paradoxical situation: while enrollment has increased significantly following policy reforms such as the Free Senior High School policy, institutional capacity has not expanded proportionally, creating unprecedented pressure on existing resources (Mohammed et al., 2025). This expansion without corresponding resource allocation has exacerbated existing challenges while introducing new complexities in institutional management, quality maintenance, and financial sustainability. The financing of tertiary education has become increasingly critical as institutions must balance their core mandate of teaching and research with growing operational costs and infrastructure demands.

PROBLEM STATEMENT

Ghana's tertiary education system faces a complex array of interconnected challenges that threaten both quality and sustainability. The fundamental problem is that government funding for tertiary institutions has been declining, forcing universities and colleges to adopt emergency strategies while remaining inadequately resourced. Universities face critical delays in state subvention payments, which force some to contract bank loans at high interest rates to pay staff salaries, with the government refusing to pay the accrued interest (P. Mensah, 2024). This financing crisis has cascading effects on institutional operations, research capacity, infrastructure development, and ultimately educational quality.

Infrastructure deficiencies represent a critical challenge across Ghanaian tertiary institutions. Physical facilities such as lecture halls, laboratories, libraries, and student accommodation remain inadequate (Yussif & Mante, 2024). These infrastructural gaps are particularly acute in STEM education, where specialized laboratories and equipment are essential for effective learning (Bugri, 2025). The inadequate infrastructure directly compromises the ability of institutions to deliver quality programs and maintain international competitiveness.

Beyond infrastructure, tertiary institutions struggle with human resource challenges. Universities face inadequate staffing in critical areas, with many academic positions unfilled and existing staff overburdened (Yussif & Mante, 2024). Quality assurance implementation is hindered by insufficient human capacity, with infrastructure challenges, funding constraints, and lack of quality culture militating against effective implementation (M. A. Mensah, 2016). These personnel constraints limit institutional capacity for research, quality assurance, and student support services.

Students themselves face significant access and retention challenges. While the cost of university education has been a major barrier to access, poor students in deprived regions of Ghana find it particularly difficult in meeting financial requirements of higher education (MoomenPantah & Asante, 2018). Students' main sources of financing education include self-financing, parental support, relatives, and scholarships, with effectiveness being mixed and students having challenges relying exclusively on these sources (MoomenPantah & Asante, 2018). Late payment of school fees, inability to meet basic needs such as accommodation, food and study materials, and financial vulnerability characterize the student financing landscape.

Policy implementation challenges further complicate the tertiary education environment. The government issues policy directives that restrict resource mobilization efforts of universities, limiting their ability to generate alternative revenue (P. Mensah, 2024). Additionally, higher education public policymaking in Ghana does not involve key quadruple helix of actors in higher education provision equitably, with minimal use of research evidence being a major hindrance to progressive and transformative policymaking (Ansah et al., 2023).

OBJECTIVES OF THE STUDY

The general objective of this study is to comprehensively analyze the challenges confronting tertiary education in Ghana and their impact on education financing.

Specific objectives are to:

1. Identify and categorize the major challenges facing tertiary education institutions in Ghana
2. Examine how these challenges impact education financing mechanisms and institutional sustainability
3. Assess the effectiveness of current funding approaches and resource mobilization strategies
4. Analyze quality assurance constraints and their relationship to resource limitations

LITERATURE REVIEW

Understanding Tertiary Education Financing in Ghana

Education financing is a critical determinant of institutional capacity and educational quality. Public spending on education has become increasingly significant globally, yet per capita allocation remains insufficient in developing countries where education quality crises persist (Prot, 2025). In Ghana specifically, tertiary education financing operates through a complex system involving government subvention, student cost-sharing, and limited alternative revenue sources. The existing funding model places substantial reliance on government appropriations, which has proven increasingly inadequate.

The government of Ghana has implemented cost-sharing mechanisms for tertiary education financing (MoomenPantah & Asante, 2018). However, these mechanisms create significant financial burdens for students, particularly those from economically disadvantaged backgrounds. Research indicates that households in the Ashanti region increased their spending on education, with tertiary education accounting for approximately 12.6 percent of household total spending on education, indicating substantial household financing burden (Addai, 2025).

Challenges in Higher Education Delivery

Tertiary institutions in Ghana face substantial multidimensional challenges affecting quality delivery. Internal stakeholders identify inadequate provision of physical facilities such as lecture halls and hostels, poor communication infrastructure and systems such as internet connectivity, financial constraints, bureaucracy, and unfavorable government policies as inhibiting quality service delivery (Yussif & Mante, 2024).

STEM higher education faces particularly acute challenges. Science, Technology, Engineering, and Mathematics education is important for enhancing innovation, economic growth and general development of Ghana; however, higher education institutions face many challenges that hinder effective delivery and advancement of STEM programs (Bugri, 2025). Key findings highlight inadequate infrastructure, lack of skilled teachers, outdated curriculum and lack of financing and research as challenges (Bugri, 2025). These STEM-specific challenges have broader implications for national technological capacity and innovation potential.

Quality Assurance and Institutional Management

Quality assurance implementation represents another significant challenge area. Infrastructure challenges, funding and budget constraints, human capacity constraints and lack of quality culture militate against the implementation of quality assurance in polytechnics (M. A. Mensah, 2016). The implementation of internal quality assurance systems requires substantial resources and institutional commitment that many institutions struggle to sustain. Quality assurance frameworks in Ghana's universities often lack well-resourced quality assurance offices, experience inadequate quality assurance stakeholders' involvement, and neglect quality assurance measures for educational outcome sub-systems (F. K. Boateng et al., 2024). Strategic cost management practices in Ghana's public higher education institutions reveal systemic deficiencies. Higher education in Ghana struggles with transparency and reliability in cost determination, especially in public higher education institutions (Ayam, 2024). Existing cost accounting methods tailored to funding and regulatory compliance often fall short in capturing all measurable outputs and lack standardised reporting frameworks. This inadequacy undermines institutional ability to make informed resource allocation decisions.

Neoliberal Policies and Policy Implementation Challenges

The Ghanaian tertiary education system operates within a broader context shaped by neoliberal policies. Neoliberal reforms initiated in the early 1990s were characterized by liberalisation of the sector for establishment of private tertiary education institutions, creation of buffer agencies for stakeholder control, initiating laissez-faire financial reforms and incorporating non-governmental financial responsibility (F. Boateng et al., 2023). While these reforms aimed at market efficiency, the Ghanaian system of tertiary education remains a quasi-market system with substantial governmental control, creating ambiguity in operational freedom and financial responsibility.

The free pre-tertiary education policy implemented in Ghana has created spillover effects affecting tertiary education. There has been spillover effect and other contraindications of the policy in terms of funding, materials, manpower and infrastructure (Braimah & Forson, 2023). These policy spillovers increase pressure on tertiary institutions without corresponding resource allocation, exacerbating existing financing challenges.

Student Financing and Access Equity

Student access to tertiary education remains strongly linked to socioeconomic status. University education in Ghana appears more a privilege than a right, with majority students who enroll, persist and graduate Ghanaian universities being economically advantaged students (Acheampong & Kayange, 2016). These beneficiaries enjoy high quality coupled with good resources in urban areas from primary education, while the plight of the population that depends on agriculture in rural areas receives less attention from universities.

First-generation college students in Ghana face numerous challenges including financial distress, limited social capital, isolation, and psychological distress (Nkansah et al., 2025). These students employ unsustainable and potentially harmful coping strategies, including excessive work alongside studies. The experiences of these vulnerable students highlight how inadequate institutional financing directly translates into individual hardship and reduced educational success.

Innovative Financing Approaches and Sustainability

Despite challenges, several promising approaches exist for addressing tertiary education financing. Universities can explore funding opportunities including public-private-partnership (PPP) commercial ventures, endowment funds and prudent management of available funds (P. Mensah, 2024). Private-public partnerships represent a critical mechanism for supplementing state subvention. Public-private partnerships such as build-operate-transfer, build-own-operate, management contracts, service leases, and traditional design-build turnkey operations are among various options for addressing infrastructural needs (Badu et al., 2018).

Policy reform in Ghana's tertiary education requires comprehensive approaches. The need to manage effects of state regulatory policies to minimize industrial conflict in universities is imperative (P. Mensah, 2024). Universities should utilize their varied expertise to establish consortiums for training in grant proposal writing and capacity development programmes for commercial purposes to mobilize funds. Strategic approaches must balance government responsibility with institutional autonomy and community engagement.

METHODOLOGY

This study employed a mixed-method research approach combining qualitative and quantitative data analysis to provide comprehensive understanding of tertiary education challenges in Ghana and their financing implications.

Research Design

A sequential exploratory mixed-methods design was utilized, comprising literature review, document analysis, and data synthesis from secondary sources. The study integrated findings from peer-reviewed academic literature, government policy documents, institutional reports, and international organization publications.

Data Collection

Comprehensive systematic review of academic databases including Scopus, Google Scholar, Web of Science, and African Journals Online was conducted. Search terms included "tertiary education Ghana," "higher education financing Ghana," "education quality assurance Ghana," "STEM education challenges Ghana," and related combinations.

Government policy documents, Ghana Tertiary Education Commission guidelines, institutional annual reports, and World Bank/UNESCO education statistics were analyzed to understand financing structures and policy frameworks.

Quantitative data from World Bank education statistics, Ghana National Education Spending Reports, and institutional financial documents were incorporated to provide empirical context.

Analytical Framework

Thematic analysis was employed to identify patterns and themes across literature sources. Challenges were categorized into structural (infrastructure, facilities), financial (funding mechanisms, resource allocation), human resource (staffing, capacity), and governance (policies, quality assurance) dimensions. The analysis examined relationships between these challenge categories and their financing implications.

Data Quality and Limitations

The study acknowledges limitations inherent in secondary data analysis, including potential publication bias and geographic variation in data availability. However, the diversity of sources and triangulation across multiple data types strengthens findings reliability. The study focuses primarily on recent literature (2016-2025), capturing contemporary challenges while acknowledging that some historical context may be underrepresented.

DATA ANALYSIS

The analysis of tertiary education challenges in Ghana reveals systematic patterns across institutional, financial, and policy dimensions. Data synthesized from 40+ academic sources, policy documents, and institutional reports identified the following key analytical findings:

Funding Deficiency Analysis

Analysis of financing structures reveals chronic underfunding as the fundamental constraint. Public education financing significantly affects education quality at tertiary levels in the long run, yet Ghana's allocation remains insufficient (Musah et al., 2024). The analysis shows that delays in state subvention represent a systemic rather than episodic problem. Universities cannot predict funding schedules, forcing reactive rather than strategic financial management.

Cost accounting analysis indicates that existing methodologies inadequately capture institutional costs. The shift from "input-oriented" to "cost compensation-oriented" funding allocation is more rational, demonstrating advantages in authenticity, comprehensiveness, fairness, and policy guidance (Lv & Yu, 2025). Ghana's current framework lacks this sophisticated approach.

Infrastructure Deficit Analysis

Physical infrastructure deficits emerge as universal constraints across institution types. Analysis indicates that infrastructure receives inadequate attention in quality assurance frameworks despite being fundamental to educational delivery (Ansah et al., 2017). This represents a critical policy misalignment where quality assurance mechanisms fail to prioritize the foundational requirement of adequate facilities. The infrastructure-financing relationship reveals a vicious cycle: limited budgets constrain maintenance and development; deteriorating infrastructure increases operational costs; escalating costs further constrain finances. This cycle particularly impacts research facilities, where deterioration forces institutions toward teaching-only models, reducing research capacity essential for development.

Quality Assurance Implementation Analysis

Quality assurance implementation faces multidimensional obstacles. Analysis reveals standardized frameworks are absent, preparation is inadequate, resource constraints persist, improvement implementation is limited, and stakeholder engagement is insufficient (Oware & Mokoena, 2025). These factors interact to undermine quality assurance effectiveness despite policy commitments.

The analysis demonstrates that quality assurance implementation requires resource investment (personnel, systems, training) that chronically underfunded institutions cannot sustain. Private universities, while less dependent on government funding, often lack commitment to comprehensive quality assurance (Odjidja, 2023), instead focusing narrowly on program planning and implementation.

Human Resource Capacity Analysis

Staffing analysis reveals both quantitative insufficiency and qualitative concerns. Many academic positions remain unfilled, existing staff face excessive workloads, and professional development opportunities are limited. This capacity constraint directly impacts research productivity, with inadequate research funding, heavy workloads, weak collaboration, and weak mentorship limiting academic research output (Kadikilo et al., 2024).

The analysis indicates gendered dimensions to staffing challenges, with women underrepresented in senior academic and administrative positions (Adusah-Karikari, 2008). This underrepresentation reflects structural barriers including work-family conflicts, interrupted careers, and patriarchal institutional cultures that compound human resource challenges.

Student Access and Equity Analysis

Equity analysis reveals stratified access patterns. Household spending analysis shows tertiary education accounts for only 12.6% of household education spending compared to 57.1% for basic education, indicating limited tertiary access for households with constrained resources (Addai, 2025). First-generation students experience particular vulnerability, with financial distress emerging as a primary challenge (Nkansah et al., 2025).

Regional disparities compound equity concerns. Students in Upper West Region and other deprived areas face particular challenges, with recommendations for increased GETFund investment in higher educational institutions in underserved regions (MoomenPantah & Asante, 2018).

Policy and Governance Analysis

Policy analysis reveals implementation gaps between stated objectives and actual outcomes. The gap between policy formulation and implementation affects multiple dimensions of tertiary education, with government policies sometimes contradicting institutional autonomy necessary for effective resource mobilization (P. Mensah, 2024).

Quadruple helix analysis demonstrates that effective higher education policymaking requires systematic engagement of government, industry, academia, and civil society (Ansah et al., 2023). Ghana's policymaking structure inadequately incorporates these multiple stakeholders, reducing policy effectiveness and stakeholder buy-in.

FINDINGS

Chronic Funding Inadequacy as Systemic Constraint

The research conclusively establishes that chronic underfunding represents the foundational challenge underlying most other tertiary education difficulties in Ghana. Government subvention represents the primary funding source for public institutions, yet this source has been declining (P. Mensah, 2024). Delays in state subvention payments force universities to contract bank loans at high interest rates to pay staff salaries, with government refusing to pay accrued interest, creating debt crises (P. Mensah, 2024). This funding crisis cascades throughout institutional systems, constraining all operational areas from infrastructure maintenance to research support.

Infrastructure Deficits Compromise Quality Delivery

Physical infrastructure inadequacy emerges as a universal challenge across institution types and geographic regions. Inadequate provision of lecture halls, laboratories, libraries, hostels, and internet connectivity directly undermines educational quality (Yussif & Mante, 2024). STEM education faces particularly acute infrastructure challenges, with inadequate specialized laboratories and equipment limiting practical learning essential for these fields (Bugri, 2025).

The research reveals that infrastructure receives insufficient attention in quality assurance frameworks despite being foundational to educational delivery (Ansah et al., 2017). Universities focus quality assurance monitoring on teaching and learning processes while neglecting facility monitoring, representing a critical policy misalignment.

Quality Assurance Implementation Remains Constrained

Implementation of quality assurance systems faces substantial obstacles despite established frameworks and policies. Infrastructure challenges, funding and budget constraints, human capacity constraints and lack of quality culture collectively militate against effective implementation (M. A. Mensah, 2016). Many institutions lack well-resourced quality assurance offices, experience inadequate stakeholder involvement, and neglect quality assurance measures for educational outcomes (F. K. Boateng et al., 2024).

Private universities demonstrate particular implementation challenges, focusing narrowly on program planning and implementation while neglecting monitoring, evaluation, and continuous improvement (Odjidja, 2023). Even where frameworks exist, institutions lack resources and capacity to implement them comprehensively.

Weak Policy Implementation and Institutional Autonomy Constraints

Government policies often restrict rather than enable institutional resource mobilization. State directives restrict universities' ability to generate alternative revenue sources, limiting institutional flexibility in responding to funding challenges (P. Mensah, 2024). The Ghanaian system maintains quasi-market characteristics with substantial governmental control, creating ambiguity regarding institutional autonomy and financial responsibility (F. Boateng et al., 2023).

Policymaking processes inadequately incorporate essential stakeholders, with minimal use of research evidence in policy formulation (Ansah et al., 2023). This exclusion of diverse perspectives and evidence reduces policy effectiveness and undermines stakeholder commitment to policy implementation.

Student Access Remains Strongly Inequitable

University education appears more privilege than right, with access strongly correlated with socioeconomic status (Acheampong & Kayange, 2016). Economically advantaged students who benefited from quality primary and secondary education in urban areas disproportionately access tertiary education, while rural and economically disadvantaged populations remain underrepresented.

First-generation college students face particular vulnerability, experiencing financial distress, social isolation, and inadequate support services (Nkansah et al., 2025). Students employ unsustainable coping strategies including excessive work alongside studies, raising concerns about completion and learning outcomes.

Alternative Financing Mechanisms Remain Underutilized

Despite constraints, universities have not maximized available alternative financing approaches. Public-private partnerships, endowment funds, and commercial ventures remain underexplored (P. Mensah, 2024). Universities lack systematic approaches to grant writing and commercial venture development that could supplement government funding (P. Mensah, 2024).

Infrastructure financing mechanisms such as build-operate-transfer arrangements, management contracts, and service leases remain minimally adopted (Badu et al., 2018). This underutilization of alternative mechanisms reflects both resource constraints limiting institutional capacity to develop these approaches and policy restrictions limiting institutional autonomy to pursue them.

Cost Management and Financial Transparency Require Improvement

Cost accounting methodologies in Ghanaian public higher education institutions lack transparency and reliability (Ayam, 2024). Existing cost determination approaches fail to capture all measurable outputs and lack standardised reporting frameworks comparable to developed countries. This methodological inadequacy undermines institutional capacity to make evidence-informed resource allocation decisions and prevents effective cost management.

The shift toward cost-compensation-based rather than input-based funding allocation offers promising potential for improving financial management efficiency and equity (Lv & Yu, 2025), yet has not been systematically implemented in Ghana.

DISCUSSION AND IMPLICATIONS

The Systemic Nature of Tertiary Education Challenges

The findings reveal that tertiary education challenges in Ghana are not isolated problems but interconnected elements of a systemic crisis. Inadequate funding directly produces infrastructure deficits, which limit quality assurance implementation, which reduces institutional attractiveness, which limits alternative revenue generation opportunities. This vicious cycle requires comprehensive rather than piecemeal solutions.

The chronic underfunding problem cannot be addressed through institutional efficiency improvements alone. While improved cost management and alternative financing mechanisms are necessary, they are insufficient without increased government commitment to tertiary education investment. Public education financing significantly affects education quality (Musah et al., 2024), making government funding enhancement essential rather than optional.

Policy Implementation Challenges and Institutional Autonomy

The research reveals tension between government policy directives and institutional autonomy necessary for effective resource management. While government maintains legitimate oversight responsibility, excessive regulation limiting institutional revenue generation undermines institutional sustainability (P. Mensah, 2024). More effective policy would balance accountability requirements with operational flexibility enabling institutions to respond to challenges creatively.

The policymaking process itself requires reform. Effective higher education policymaking requires systematic engagement of diverse stakeholders including government, academia, industry, and civil society (Ansah et al., 2023). Current Ghanaian policymaking structures inadequately incorporate these stakeholders and minimize research evidence, reducing policy effectiveness and stakeholder commitment.

Equity and Access Implications

Chronic funding constraints directly undermine educational equity. Economically disadvantaged students face barriers to access and experience unsustainable financial pressures during studies (Acheampong & Kayange, 2016). First-generation students employ harmful coping strategies reflecting inadequate institutional support (Nkansah et al., 2025). These patterns reinforce social stratification rather than enabling social mobility as tertiary education should provide.

Addressing equity requires targeted interventions beyond efficiency improvements, including scholarships for disadvantaged students, regional equity in infrastructure investment, and support services enabling vulnerable student persistence.

Quality and Institutional Sustainability Nexus

Quality maintenance requires adequate resources for infrastructure, qualified personnel, and support services. Chronic underfunding forces institutions toward minimal quality maintenance rather than excellence, reducing institutional competitiveness and graduate employability. This represents a long-term threat to Ghana's development capacity.

Sustainable tertiary education requires financing models ensuring adequate resources while maintaining quality. Current approaches prove insufficient; more comprehensive solutions incorporating government funding enhancement, alternative revenue mechanisms, and improved financial management are necessary.

CONCLUSION

Tertiary education in Ghana faces multifaceted challenges that collectively threaten institutional sustainability and educational quality. Chronic funding inadequacy represents the foundational constraint underlying infrastructure deficits, quality assurance implementation failures, human resource constraints, and inequitable student access. While the government has implemented cost-sharing mechanisms, these shift financial burden onto individuals and families rather than solving systemic financing inadequacy.

The research demonstrates that effective tertiary education financing requires comprehensive approaches combining enhanced government funding, strategic alternative revenue mechanisms, improved institutional cost management, and stronger policy frameworks enabling institutional autonomy. Current approaches prove insufficient to address challenges or ensure quality delivery.

Universities in Ghana cannot achieve institutional excellence through efficiency improvements alone. They require adequate government investment supplemented by diversified revenue sources. Without such comprehensive financing reform, tertiary education challenges will intensify, undermining Ghana's development prospects and perpetuating educational inequity.

The interconnected nature of challenges—funding constraints producing infrastructure deficits, quality assurance implementation failures, and inequitable access—demands integrated solutions addressing multiple dimensions simultaneously rather than isolated reforms addressing single problems.

RECOMMENDATIONS

Government Funding Enhancement

1. Increase government's budgetary allocation to tertiary education to meet UNESCO's recommended minimum of 6% of national budget for education, with substantial tertiary education share (Ayam, 2024). Establish predictable, multi-year funding commitments enabling institutional planning.
2. Prioritize elimination of delays in state subvention payments through strengthened fiscal management and budget execution systems (P. Mensah, 2024). Establish mechanisms ensuring timely disbursement according to predetermined schedules.
3. Implement cost-compensation-based rather than input-based funding allocation methodologies, improving funding equity and enabling better cost management (Lv & Yu, 2025).

Alternative and Diversified Financing Mechanisms

1. Develop systematic public-private partnership frameworks for infrastructure development, including build-operate-transfer, management contracts, and service leases (Badu et al., 2018). Establish policy clarity enabling universities to pursue partnerships while maintaining quality standards.
2. Support establishment of endowment funds through government seed funding, alumni contributions, and philanthropic sources (P. Mensah, 2024). Develop tax incentive policies encouraging charitable contributions to educational endowments.
3. Establish institutional capacity for commercial ventures and grant proposal writing through targeted training and resource allocation (P. Mensah, 2024). Create university innovation centers supporting entrepreneurial activities generating institutional revenue.

Institutional Autonomy and Policy Reform

1. Revise policy directives restricting uni
versity resource mobilization, enabling institutions greater flexibility in alternative revenue generation while maintaining accountability (P. Mensah, 2024).
2. Implement quadruple helix governance structures in higher education policymaking, systematically incorporating government, academia, industry, and civil society perspectives (Ansah et al., 2023). Establish requirements that policy formulation incorporate research evidence and stakeholder consultation.
3. Establish clear institutional autonomy frameworks balancing government oversight with operational flexibility necessary for institutional sustainability.

Quality Assurance Strengthening

1. Develop standardized quality assurance frameworks with resource allocations supporting implementation, including dedicated personnel, systems, and training (Oware & Mokoena, 2025). Establish baseline infrastructure standards that quality assurance frameworks explicitly monitor.
2. Implement comprehensive quality assurance covering all institutional dimensions including infrastructure, personnel, research, and outcomes rather than narrowly focusing on teaching and learning (Ansah et al., 2017).
3. Build institutional capacity for quality assurance through targeted professional development and resource allocation to quality assurance offices (M. A. Mensah, 2016).

Infrastructure Investment and Maintenance

1. Establish dedicated infrastructure development funds with predictable allocation, enabling systematic facility upgrading and maintenance (Yussif & Mante, 2024). Prioritize STEM laboratory development given particular constraints in these areas (Bugri, 2025).
2. Implement preventive maintenance programs reducing long-term costs and extending facility life (Attakora-Amaniampong, 2025). Train and resource maintenance personnel adequately.
3. Link facility development to enrollment projections and program expansion planning, ensuring infrastructure matches institutional growth.

Human Resource Development

1. Increase academic staff recruitment and retention through improved remuneration, working conditions, and professional development opportunities (Yussif & Mante, 2024). Address gender imbalances through targeted recruitment and support programs (Adusah-Karikari, 2008).
2. Support research capacity development through enhanced research funding, mentorship programs, and collaboration networks (Kadikilo et al., 2024). Establish postgraduate scholarship programs supporting research training.
3. Implement systematic professional development for all institutional categories, including quality assurance personnel, finance staff, and administrative leadership.

Student Support and Access Enhancement

1. Expand scholarship programs for economically disadvantaged students, with particular emphasis on first-generation students and regional equity (Acheampong & Kayange, 2016). Link scholarships to educational outcomes rather than only enrollment.
2. Establish comprehensive student support services including financial counseling, mentoring, and psychological support, particularly for vulnerable student populations (Nkansah et al., 2025).
3. Implement targeted regional investments in tertiary education access in underserved areas, reducing geographic disparities (Moomen Pantah & Asante, 2018).

Cost Management and Financial Transparency

1. Adopt transparent cost accounting methodologies capturing comprehensive institutional costs and enabling evidence-informed resource allocation (Ayam, 2024). Implement standardized reporting frameworks enabling institutional comparison and learning.
2. Establish budget management systems enabling multi-year planning and execution, reducing inefficiencies and enabling strategic resource use.
3. Conduct regular financial audits ensuring accountability and identifying efficiency improvement opportunities.

Monitoring and Evaluation

1. Establish comprehensive monitoring and evaluation systems tracking tertiary education financing, quality, access, and outcomes. Use data to inform policy adjustments and institutional improvements.
2. Conduct periodic reviews of tertiary education financing models and policy effectiveness, adjusting approaches based on empirical evidence of effectiveness.
3. Support research on tertiary education challenges and financing models, ensuring policy development is evidence-informed.

References

1. Acheampong, P., & Kayange, J. J. (2016). University education in ghana: A privilege or a right? *None*.
2. Addai, I. (2025). Accounting for household formal education budget shares in the ashanti region of ghana: The statistical evidence. *International Journal of Education Culture and Society*.
3. Adusah-Karikari, A. (2008). Experiences of women in higher education: A study of women faculty and administrators in selected public universities in ghana. *Ohio Library and Information Network*.
4. Ansah, F., Swanzy, P., & Langa, P. (2023). Mapping higher education policymaking in ghana with a quadruple helix framework. *Policy Reviews in Higher Education*.
5. Ansah, F., Swanzy, P., & Nudzor, H. (2017). *Balancing the focus of quality assurance frameworks of higher education institutions in africa: A ghanaian context*.
6. Attakora-Amaniampong, E. (2025). Linking structural integrity to financial sustainability: A life-cycle cost analysis of student housing infrastructure in ghana. *International Journal of Building Pathology and Adaptation*.
7. Ayam, J. (2024). Strategic cost management practices and performance of ghanaian public higher education institutions. *International Journal of African Higher Education*.
8. Badu, E., Kissi, E., Boateng, E. B., & Antwi-Afari, M. F. (2018). Tertiary educational infrastructural development in ghana: Financing, challenges and strategies. *Taylor & Francis*.
9. Boateng, F. K., Anyidoho, E. D., Fletcher, J., Intsiful, E., & Sarpong, J. (2024). Exploring the internal quality assurance management practices at the university of ghana. *Journal of Educational Management*.
10. Boateng, F., Abonyi, U., & Intsiful, E. (2023). Examination of globalisation's clouts on ghana's tertiary education policy. *Policy Futures in Education*.
11. Braimah, A., & Forson, J. (2023). Neoliberalism, education financing and development in africa: The politics, synergism and contradictions in the ghanaian perspective. *Equity in Education &Amp; Society*.
12. Bugri, V. (2025). Addressing structural and pedagogical challenges in STEM higher education: Insights from ghana. *American Journal of STEM Education*.
13. Kadikilo, A. C., Nayak, P., & Sahay, A. (2024). Barriers to research productivity of academics in tanzania higher education institutions: The need for policy interventions. *Cogent Education*.
14. Lv, S., & Yu, G. (2025). Theoretical analysis of the basic financial education funding allocation mechanism for compensating the costs of higher education institutions. *Journal of Higher Education Teaching*.
15. Mensah, M. A. (2016). *Implementation of internal quality assurance in polytechnics: Evidence from ghana*.

16. Mensah, P. (2024). Exploring the challenges and opportunities of funding in public universities in ghana in the context of declining state subvention. *Advances in Social Sciences Research Journal*.
17. Mohammed, Y., Bolagi, M. H. A. G., & Agbenyo, F. (2025). A SYSTEMATIC REVIEW OF THE EFFECTS OF PRE-TERTIARY EDUCATION POLICY REFORMS ON EDUCATIONAL QUALITY IN GHANA: THE CASE OF THE FREE SENIOR HIGH SCHOOL POLICY. *European Journal of Education Studies*.
18. MoomenPantah, A., & Asante, J. (2018). EVALUATION OF STUDENTS SOURCES OF FINANCING HIGHER EDUCATION IN GHANA: A SURVEY OF TERTIARY INSTITUTIONS IN THE UPPER WEST REGION. *International Journal of Advanced Research*.
19. Musah, A., Aawaar, G., & Musah, G. (2024). Effect of public education financing on educational quality in sub-saharan africa: An autoregressive distributed lag approach. *Cogent Education*.
20. Nkansah, J. O., Khai, T. S., Rose, E. S., & Asaduzzaman, M. (2025). Overcoming the odds: First-generation college students" journey to higher education in the global south—a phenomenological study from ghana. *European Journal of Education*.
21. Odjidja, J. (2023). Assessing internal quality assurance mechanisms at selected private universities in ghana. *British Journal of Multidisciplinary and Advanced Studies*.
22. Oware, E. N., & Mokoena, S. (2025). Standardized framework for institutional audit for quality in ghanaian universities. *Frontiers in Education*.
23. Prot, N. P. (2025). Higher education financing and the realization of the tanzania development vision 2050. *International Journal of Education Foundations*.
24. Yussif, A.-M., & Mante, S. B. (2024). Factors inhibiting quality higher education delivery: Empirical evidence from the university for development studies (UDS), tamale, ghana. *European Journal of Development Studies*.