# Ghanaian Universities Response to Global University Rankings: Sometimes We Compare Apples to Oranges

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#### **Abstract**

Global university rankings (GURs) capture the attention of university leaders, board members, and the public. A Dialogue on Asian Universities [1] webcast reinforced how university presidents employ GURs to benchmark their institutions' achievement of strategic objectives. GURs have influenced higher education policy and geopolitical discussions since their emergence in 2003 [2]. Ranking schemes have become tools for students, parents, institutional leaders, and governments [3]. Although GURs attracted the attention of higher education scholars who explore their impacts on students [4] and HEIs, researchers criticized these rankings for their omission of institutions from non-First World nations and an over-emphasis on research. These omissions have been addressed with more regional rankings [5],[6], [7], [8]. The objective of our study was to assess how GURs are used by HEIs in the Global South. We employed a bounded, qualitative case study to explore the strategic and tactical responses of four public universities in Ghana towards GURs. Although acceptance of GURs varied by university, each reacted to GURs by adopting strategies and tactics to improve their rankings, (inter)national status, and support. Our findings showed that Ghana's public universities' institutional leaders used GURs as tools to engage in change processes in their universities.

Keywords: rankings, Ghana, higher education.

#### 1. Introduction

Higher education institutions (HEIs) in developing nations experienced massive transformations in the past 50 years. These transformations are characterized by expansion of programmes, entrance of diverse players, massive increases in student numbers, enhanced accessibility, and participation rates, expanded research capacity, and greater public scrutiny and demands for accountability that emphasized performance and quality [9], [10], [11]. HEIs are globally competitive, actively seeking students and faculty, research funding, and prestige nationally and internationally [12].

Global University Ranking schemes allow HEIs to assess their national, regional, and international

competitiveness and prestige. The usefulness of international university rankings is apparent as stakeholders demand information on academic quality, financial transparency, and accountability and efficiency [10], [13]. Rankings allow universities to position themselves in national and global higher education marketplaces, competing for students, faculty, and financial resources [14]. However, there is a scarcity of analysis on the impact of GURs on universities in the Global South [2], [4], [8], [15], [16], [17], [18], particularly on sub-Saharan universities. Our study explored how four public universities in Ghana assessed the impact of GURs on their place locally and internationally.

# Research objectives

Given the importance of GURs to institutions, it is imperative to have accurate knowledge of how universities respond to their potential impact on strategic positioning, talent recruitment and retention, student recruitment, funding, and collaborations. Published scholarship offers few insights into the response of Ghanaian universities to global university rankings. This study addresses this lacuna by analyzing four Ghanaian public universities strategic responses to global university rankings. To answer this question, we:

- examined how public universities' leaders in Ghana understood and perceived global university rankings,
- assessed the impact of GURs on four Ghanaian public universities, and
- explored the institutional responses toward global university rankings.

# 2. Ghanaian HE Landscape

Since the establishment of its first university in 1948, Ghana's PSE sector has grown to nearly 200 public and private institutions [19]. Of these, 21 are national public universities, distributed across the nation. These numbers reflect population growth, public policy priorities for an educated civil service,

entrepreneurial leaders and a skilled workforce, and student demand. The expansion of Ghana's HE sector has widened access to tertiary education for women, rural communities, and students with special needs. Ghana's higher education transformed from an elitist system to mass universal higher education [20] [21], [22], [23]. Ghana's higher education system is focused on six policy objectives:

- equitable access to quality tertiary education,
- research in national development priority areas,
- quality and relevance in the provision of education,
- effective regulation,
- management and planning of tertiary education, science, and technology, and
- collaboration in the provision of tertiary education.

The institutions examined in this study actively support these national educational priorities.

#### **Institutional context**

Critical analyses of ranking schemes analyze their impact on the behavior, identities, and goals of HEIs [28]. Four public universities (University of Ghana, University of Gold Coast, Kwame Nkrumah University of Science and Technology, and University for Development Studies) from nearly 200 institutions were selected. Each was established to address national social and economic priorities.

The University of Ghana (UG), the first university established in British West Africa, is a research institution with over 38,000 students from over 70 countries. UG's leadership has an ambitious goal: to become a world-class, research-intensive university. To achieve this goal, UG's strategic plan was anchored on nine priorities, including research; teaching and learning; and gender and diversity. UG identified four transdisciplinary research priorities that are national and international in scope and are enabled through dedicated research centres. UG's international research partnerships enhance the visibility of UG to students, researchers, donor organizations, and universities in Africa, Europe, and North America. Until recently, UG was the only Ghanaian university to appear in Times Higher **Education and Thomson** 

The Kwame Nkrumah University of Science and Technology (KNUST) was founded as the Kumasi College of Technology, affiliated to UG. Opening in 1952, KNUST had a mandate to provide higher education in science and technology and catalyse technological, economic, and social development.

With an enrolment of 85,000 students in 2023, KNUST's strategic priorities include being globally recognized as a centre of excellence in Africa for producing graduates with knowledge and expertise to engage in SandT research and entrepreneurship for industrial and socio-economic development [72]

The University of Cape Coast (UCC) was established in 1962 as a university college to train graduate teachers for second cycle institutions such as teacher training and technical colleges. UCC fulfils a vital role in efforts to strengthen Ghana's educational sector by training educational planners and administrators, health care professionals, business administrators, and agriculturalists. With a mandate to offer teaching, research and outreach programmes that contribute to socio-economic transformation of Ghana, UCC's programs serve over 78,000 students in 2023. Only recently appearing in ranking schemes, UCC aspires to be a centre of excellence in Ghana and Africa.

Established in 1992, the University for Development Studies (UDS) emphasized the need for universities to actively address social and economic problems in the rural area. To fulfil its pro-poor mandate, UDS enables students and staff to engage in community-based studies for disadvantaged, marginalized and hard-to-reach communities. As a world-class home for pro-poor scholarship, UDS' 2017-2023 strategic plan identified outcomes to build institutional capacity, enhance its institutional visibility, and collaborate with highly ranked HEIs in Africa and beyond.

# 3. Literature review

The challenges confronting HEIs in Ghana can be understood through the lens of globalization and internationalization of higher education [82]. Hazelkorn [24] argued that globalization intensified hierarchical stratification amongst HEIs. Some attribute globalization to the rise of the knowledge economy, growth of knowledge-based industries, English as the medium of scientific communication, an international market for talent, and intensified scientific research. Others record how the HE sector adopted a global agenda through massive expansion. internationalization, and governance models which emphasize performance, quality, and accountability [11]. Globalization enabled HEIs to "increase national and international visibility; leverage institutional strengths through strategic partnerships; benchmark their activities; mobilize internal intellectual resources; ... develop stronger research groups" [25]. Others cautioned that globalization is fraught with uncertainties including shifting political priorities, cost of study abroad and quality assurance frameworks.

An outcome of globalization of higher education was the emergence of global university ranking

Reuters rankings.

systems (GURs) [26]. The expansion of GURs can be linked to demands for accountability, transparency, and efficiency coupled with the forces of globalization and internationalization [26], [27]. Defined as "lists of certain groupings of institutions ..., comparatively ranked according to a common set of indicators in descending order [28]." Rankings systems evolved from nation-specific schemes to a global scale [26], [29]. Rankings surfaced as powerful signaling tools that measure outputs and impacts, enable transparent and accurate collection and presentation of comparative data [30]. Rankings are viewed as reliable information sources for the appraisal of universities and for students, parents, administrators, and politicians [27], [31]. Ranking schemes have assisted HEIs transform into strategic corporations, engaged in positional competition, balanced fragilely between their current and preferred rank [14], [32]. This is the focus of our study: how Ghanaian universities reacted to GURs and positioned themselves locally and internationally.

Rankings are not free from controversies and criticisms, whether their methodology, the validity of indicators, or the role they play in shaping institutional practices [26], [27], [30], [32], [33], [34], [35], [36], [37], [38]. Critics claim that rankings are based on flawed proxies for quality [12], [26], [39] and reenforce existing reputations that favour First World, research intensive institutions with strength in the sciences and engineering [32], [36], [40]. Critics worry that rankings schemes incentivize HEIs to turn away from missions linked to local and national social goals towards an orthodoxy that promises success in global rankings. University rankings divert policy objectives from widening access or a focus on teaching [43] to selective investments in targeted research areas.

Although criticized for their relevance, validity and methodologically accuracy [10], [12], [31], [32], [41], HEIs ignore ranking schemes at their peril. Their impact is real and they are here to stay [10] [13], [42]. League tables "offer ... stakeholders a set of simple heuristics with which to comprehend an increasingly complex but less directly knowable world" [13]. While researchers focused on ranking schemes' impact on higher education institutions in general [44], [45], [46], few studies explored the impact of rankings on individual HEIs [4], [24], [41], [47] as it is challenging to establish that an institution's place in a ranking influenced behavioural change to improve their position on GURs [24], [47]. We argue that university leaders used strategically to set goals, position their institutions in the marketplace, recruit staff, select partners, and manage outcomes [10], [14], [24], [26], [48].

Ranking schemes influence how institutions construct their identities [14], [48], [49]. An institution's aspirational position within league tables may be incorporated into their vision and mission

statements [10], [26]. Researchers have highlighted the impact of rankings on internal decision making and strategic plans of HEIs [14], [41], [50]. Lim and Øergberg [41] suggest that rankings may be directly responsible for policy actions and institutional decisions. Rankings are used by leaders as policy tools to influence organizational change, set priorities, restructure, and reallocate resources to indicator sensitive capabilities, including research [10], [14], [49].

Rankings reflect global reputations of HEIs [10], [51], although these reputational factors do not measure "the quality of institutional performance". Universities use rankings to support claims of being 'centres of excellence' and 'world classness' [11], recruit high-achieving students and form partnerships [10], [26], [47], [52] and others [53] reported that a university's position in rankings opened opportunities to partner internationally in research and faculty exchanges and to recruit and retain academic staff. Institutions adopt recruitment and promotion policies that favour academics who excel in research and teaching.

# 3.1. Strategic responses to GURs

Institutional theory explains how the choices of organizations are shaped, mediated, and channeled within their institutional environment and sociopolitical contexts [54]. Intrinsic to institutional theory is the concept of conformity or compliance to the rules, norms, values and "taken-for-granted" assumptions [32], [55], [56], [57], [58], [59]. Compliance or conformity to the dictates of the environment increases an organizations' survival and legitimacy [55], yet organizations "react to and seek ways to accommodate pressures following external scrutiny and regulation." [56] Rankings shape the higher education environment as 'third-party status' systems that measure and evaluate institutions, because they gather relevant, objective data and supply key information to HEI stakeholders. Thus, in a competitive world, universities may adopt policies and practices to improve their rankings and access to resources.

#### 3.2. Analytical Framework

We adopted Oliver's [60] strategic responses to institutional processes to understand the strategies organizations adopt by four Ghanaian universities to respond to pressures emanating from their institutional environment -- the influence of global universities ranking systems. These strategic responses (Acquiescence, Compromise, Avoidance, Defiance, and Manipulation) are reflected universities responses to GURs.

Acquiescence implies adherence to pressures emanating from the organization's environment. HEIs

adopt acquiescence as a response mechanism when they comply with established norms in their environment. By conforming to the norms created by the ranking institutions, universities may adopt the best practices of other more successful HEIs [9] or mimic those measures to improve their status [10]. In adopting a compromise strategy [60], HEIs partially comply with the expectations of their institutional environment, especially when their objectives and goals conflict with those expectations [60]. As promoters of their own interest [61], HEIs are strategic and tactical when responding to external pressures, balancing organizational goals and external expectations. HEIs have equivocal relationships with rankings, use them selectively, and adopt indicators that support their goals [26].

Avoidance [60] is used when an HEI rules out conformity and seeks to shield itself from environmental expectations by engaging in 'window dressing'. Avoidance procedures create impression of acceding to environmental demands without any intention of altering institutional processes [50], [60]. HEIs employ defiance tactics to ignore pressures from their environment. Organizations defy rules and norms when the external enforcement of rules and norms is low, or when their internal objectives conflict with these norms [60]. HEIs dissatisfied with their institutional positioning on league tables ignore or boycott rankings or seek to discredit rankings based [14]. Finally, when HEIs adopt manipulation as a strategy, they seek to change or influence the methodologies, validity, and reliability of the rankling indicators [60]. Manipulation is purposeful and opportunistic, where HEIs build coalitions to exert control, influence, and dominance over the ranking agencies with the goal of modifying or improving indicators. Manipulation enhances legitimacy by neutralizing internal opposition, demands or pressures.

# 4. Research design and methodology

A qualitative research methodology was adopted to explore responses of Ghanaian public universities to GURs. The objective was to understand institutional responses to ranking schemes. Intensive qualitative research enables the collection of relevant information from informants who provided detailed descriptions of a phenomenon [62] and rich insights into organizational behaviour [63]. This case study focused on the perspectives of institutional leaders [3]. A case study, as "an empirical inquiry that investigates a contemporary phenomenon" in a realworld context [64], explores why, how, and what of a phenomenon [65]. In 2017, Plance [32] interviewed university leaders engaged in decision-making and responding to rankings. The focus on four universities sought to strengthen the validity and reliability of the

study by documenting multiple viewpoints and areas of consensus and divergence.

# **4.1. Sample**

For each university, the senior academic administrator(s) responsible for data used by the global ranking institutions was invited to participate. A purposive sampling technique selects individuals who are "information-rich" or knowledgeable with respect to the purpose of the study [62]. When in situ, a snowball technique became necessary as some leaders had left office and could no longer speak on behalf of their universities. They referred the researcher to senior administrators who were knowledgeable of their universities' position on GURS. We had 10 informants across 4 institutions.

Table 1. Participant's Profiles

Position	Total
Vice Chancellor	1
Pro-Vice Chancellor (Research and Development)	2
Quality Assurance and Planning (Director/Officer)	3
Public Affairs/Public Relations (Director)	3

# 4.2. Interviewing and document analysis

A standardized semi-structured interview guide, with open-ended questions [62], [66], was the data collection tool. Semi-structured interviews created room for issues to arise that would have been difficult to capture using a questionnaire and enabled the PI to conduct a reliability check on a response by rephrasing questions and asking them at another stage of the interview [67]. Secondary sources such as journal articles, periodicals, websites, policy reports, annual reports, and media reports augmented and informed the primary data collection.

# 4.3. Ethical considerations

The PI adhered to institutional ethical guidelines and obtained permission to conduct the research from the universities. Each participant was informed of their rights as research subjects and received a detailed information package. Participants were given opportunities to ask questions on the study, data collection and storage, and data reporting. While pseudonyms were assigned to participants and institutions to preserve their anonymity, in limited case studies, informed readers may, 1) identify the institution and 2) infer the identity of participants.

# 4.4. Data analysis

Data were analysed systematically. Interviews were audio recorded and field notes taken. The PI transcribed, read through the responses for each item across all the respondents, and noted key themes. A cross-case approach was used to probe these data. After sorting responses into themes, analysing and interpreting item by item, data were categorized using Oliver's [60] typology of strategic responses. Data are presented with quotations to capture participants' views.

# 5. Findings and Discussion

Our first objective was to assess the perspectives of participants on the role of GURs in higher education globally. All participants showed understanding and knowledge about the influence of GURs on the HEIs. The findings indicated a spectrum from negative to positive perspectives on GURs. Respondents confirmed that rankings are instruments for "gauging competitiveness, providing transparency and accountability and aiding in benchmarking of higher education" [26].

Person A2: stated that monitoring and appraising institutions ... makes the institutions more accountable and competitive. This is good for the institution ... to see how they are compared with their peers either at the continental level, the national level, and the global level. ... You can extract vital information from them to reorganize and restructure your institution. So global rankings are good. It makes institutions aware of their strength ... [,] their weaknesses ... and what opportunities are available to them.

The above respondent reinforced rankings' usefulness as comparative devices [50] and aids to identify institutional weaknesses and strengths [68], [42]. In addition to identifying an institution's strengths and weakness, Person C3 observed that rankings serve as reference points for institutions to learn from each other.

Person C3: Ranking has become one of the ... key models by which you can determine a good university. It gives some gratification when you are ranked higher. So, for those of us at the bottom of the major ranking systems, ... their various indicators help us ... 'benchmarking' ourselves to our peers. This enables us to understand what makes an 'A' university to be ranked higher and 'B' lower. This will enable higher education institutions to identify and learn from what the highly ranked institutions have been doing or what they are current doing to occupy the top spots and to replicate such practices within their institutions.

Person C3 supports claims that GURs are useful for benchmarking purposes [21], [26] and implied that rankings measure quality and made institutions accountable and transparent [26].

While acknowledging the benefits of GURs, some leaders argued that their methodologies were unfair, subjective, and misleading.

Person A1: The only issue I see with rankings is that ... their indicators do not really present a proper picture of what a good university is. I am always concerned about their publications because I know the effects they could have on prospective students, employers, governments, and universities in general. How many people really ... [look] at the various methodologies [that have] been employed to come out with what we see in the media before using them. This is very dangerous and ... ranking institutions should engage more with the various stakeholders to find an appropriate way of coming out with a more comprehensive and detailed publication that will be concise to satisfy the needs of various stakeholders without misleading them.

The methodological flaws associated with ranking systems made participants believe that ranking agencies are engaged in "equating the unequal". Person D1 did not hide his frustration about GURs methodologies.

Person D1: What are the criteria for ranking? that is what we don't understand. Whether these ranking systems are fair or not is a matter of discussion. Because sometimes you compare apples to oranges ... Looking at Ghana, you are ranking [University D] which is 24 years old to a 60-year-old university like [University A], is it fair? ... what you get [at University A] in terms of academic staff and the number of professors, etc., you won't get them here at [University D]. Generally, ranking is just like comparing Manchester United to Wa All Stars. ... Do Wa All Stars have a 10th of the resources Manchester United have, but they are all football teams. It's just not a fair system.

Persons A1 and D1 captured the views of those dissatisfied with GURs' methodologies. While every university has its core strength, for them the question which must be addressed is: What crosscutting indicators are used to determine the best university?

To these participants, there were no such crosscutting indicators. Such negative perceptions of GURs are not new. Critics of ranking schemes have raised concerns about their methodologies and suggest that adopting cross-cutting indicators is impossible because of the complexities of HEIs: "the vastly different national context[s], underpinned by

different value systems, meeting the needs of demographically, ethnically and culturally diverse populations, and responding to complex and challenging political economic environments" [26]. Participants' reservations about the proxies for quality could be an outcome of their institutions' absence in ranking schemes and concern that rankings influence stakeholders' opinions.

Although Ghanaian HE leaders had mixed views toward GURs, they agreed that their universities were attentive to GURs and how to respond to their respective positions.

Person A2: University A... we are interested because it helps us to see how we are doing. But you know, in every ranking ... these things can be abused. ... we are very cautious as an institution on how we interpret and use their publications.

Person B1: University B... it's obvious, every ranking brings about competition for students, renowned researchers and professors and research grants. ... [S]uch publications coming from different [agencies] ... have impact[s] on the applicants, the employers and ... on the reputation of our institutions. So, as a university that aspires to be a centre for excellence in ... Science and Technology, we are very much concerned about how we are ranked. We ... take these [rankings] seriously although we are a bit worried about the emergence of several types of ranking systems and not allowing such publications to dictate to us.

Person C1: University C...the issue ... is ... what you pay attention to. What are the areas which are critical? ... there are some that one will pay attention to and some others that one will not pay attention to ....

Person D1: University D... is interested in rankings because whether we like it or not, whether we have the resources or not, these ranking agencies will continue to do what they know how to do best, and the ultimate impact will be on us. As a result, we are concerned about their processes, indicators as well as the respective weighting associated to them.

These responses signified that a common trend dominated across institutions. Ghanaian universities were cautious and preferred not to be dictated to by GURs, yet incorporated GUR metrics into their universities' priority setting.

#### 5.1. Impact on Ghanaian public universities

We explored what impact GURs have on these Ghanaian universities, based on interviews of institutional leaders. Research has shown the difficulty involved in exploring the impact of rankings

on HEIs globally [24], [41], [47]. The impact of rankings may be most apparent on institutions' strategic positioning and planning, staffing and organization, quality assurance, resource allocation, fundraising, admissions, financial aid, institutional collaborations, and institutional identity. Based on these elements, we compared how the universities responded to GURs across six parameters (see Table 2).

Table 2. GURs across six parameters Plance [32]

Impact of rankings according to respondents					
Parameter	А	В	С	D	
Strategic planning and positioning	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	
Institutional Identity	<b>√</b>	х	x	х	
Quality assurance	✓	✓	✓	✓	
Resource Mobilization and Allocation Recruitment and Promotion	x 🗸	x 🗸	x 🗸	x 🗸	
Collaborations and Partnership	<b>√</b>	х	<b>√</b>	<b>√</b>	
Admissions	✓	✓	✓	✓	

Key: ✓: Respondent acknowledged impact

X: Respondent referenced no impact

X✓:No impact on one aspect, an impact on the other

Table 2. Impact of rankings according to respondents

Overall, respondents reported that GURs affected key aspects of HEIs: strategic planning, admissions and positioning, quality assurance, and institutional collaborations. While participants conceded GURs impact on the resource allocations from donor agencies, they did not agree on how GURs affected government allocations and internal allocations of resources to units of their respective universities.

# 5.2. Strategic positioning and planning

Our findings revealed that informants acknowledged the impact of GURs on their strategic planning and positioning decisions. As expected, the degree of impact varied among universities. Three universities (A, C and D) admitted direct impacts on strategic positioning and planning, while University B indicated an indirect and minimal impact. Person A3 illustrated a direct impact of GURs.

Person A3: Rankings obviously have shaped the way we think and the decisions we make as an institution. ... how can we determine that we are a world-class research-intensive university if there is no means of ...

evaluating what we do here by a third party? We could aspire to be just a world class university and not a world-class research-intensive university. But our focus should tell you where we want to see ourselves by the end of 2024. Our decision is to be a globally recognized as a research-oriented university, and ... rankings have a role in that.

This point of view was shared by universities C and D and reinforced research on GURs' influence on the strategic positioning and planning decisions. Lim and Øergberg [41] caution that an overemphasis on ranking made HEIs assume a business-like corporate nature constantly engaged in positional competition. Participants were apprehensive about allowing too much influence to be placed on ranking schemes According to Person B2, institutions must take measures to avert the negative impacts of ranking.

Person B2: As a concerned university which exist[s] in [a] global world at a time of intense competition for major resources, we need to assert ourselves to be relevant. So, we are trying to change things in a way to be able to go up in the ranking systems even though we would say that we are careful not to allow the ranking systems to dictate to us what we should do. We are still looking at how they work, how they operate and what are the things they are looking out for in improving our systems. Once we are satisfied, we will come out with concrete policies to enable us respond positively and ultimately improve our positioning.

The above approach was confirmed by participant D2 who, while noting the direct impact of rankings on strategic planning and positioning decisions, insisted that their university had taken measures to ensure that rankings do not dictate overall institutional strategy and served only as a guide towards arriving at decisions on the strategic directions.

#### **5.3.** Institutional identity

Several scholars reported that GURs influence institutional identities globally. Yet only University A embraced this impact. The remaining universities dismissed the notion that rankings had positive or negative impacts on their institutional identities. University A participants indicated that, because of a proliferation of universities in Ghana, University A needed to strategically distinguish itself as a player on the global stage.

Person A1 explained: it's time for [University A] to focus on research[.] ... others can ... decide whether to continue combining teaching and research ... [We] have a lot of private universities ... and majority of these ... are predominantly teaching oriented. They don't do so much research. So, they can focus on the teaching ... we can concentrate on research that are

productive to the nation and ... international world. So that is the reason why we are going that way.

University A had shifted its core from the liberal arts to the sciences, from teaching to research, and increased the ratio of postgraduate to undergraduate students. Its strategic plan confirmed that University A was carving out an identity as a research-intensive, world-class university. Specifically, the goal was to "grow the numbers of graduate students, especially at the PhD level, to ensure a ratio of 50:50 (undergraduate/graduate) by the end of the plan period." University A's incentive structures highlighted the university's desire to develop a strong research focus. Highlighting the significance of research funding to university rankings, University A's research report reinforced this strategic direction.

Our findings support Hazelkorn's [14] claim that the biggest changes in HEIs resulting from the influence of rankings are apparent in rebalancing teaching and learning, shifting emphasis from undergraduate to postgraduate studies, and allocating resources toward fields that are likely to yield the greatest results and that are sensitive to the ranking indicators. University A's identity has been affected by rankings because of its desire to be among the top 20 universities in Africa.

In contrast, participants from University B, C and D indicated that rankings had no impact on their institutional identity. A common thread of these three institutions' reactions illustrated a commitment to core values.

Person B1: We were established as a science and technology university, and this has always been our focus. I don't think [that] at the time the university was established there was anything like ranking of universities. So, our focus to become the centre of excellence in science and technology in Africa and beyond has nothing to do with rankings.

Person D2: [A]ny attempt to ... alter the focus of the university from its initial mandate will be an affront to the tenets for establishing the university. So, I don't think rankings has impacted our identity in any way. We remain a home of world class pro poor scholarship.

Person D2 maintained that their university's pro-poor philosophy meant that research outputs should be geared towards solving the problems of communities within its vicinity. Responses from University B, C and D suggest that these universities' strategic plans are guided by their core mandates and not by rankings.

#### **5.4.** Quality assurance

Researchers argue that regardless of how well rankings accurately measure quality, HEIs' decisionmaking regarding quality is influenced by rankings [47]. The responses from universities leaders in Ghana were in line with this observation. Participants admitted that rankings shifted their attention to issues of quality and performance. Person B1 noted rankings' impact on the quality assurance processes of his university.

Person B1: ... whether we like it or not, rankings are ... tools measuring the quality and performance of most universities. Students, employers, the media and even the state authorities ... believe in their publications as a true reflection of the quality that institutions provide. Although from within, we can say that some of the indicators ... do not have anything to do with the measurement of academic quality, we are guided by that impression created by rankings and try to enhance our quality of teaching, research ... and publications.

Similarly, Person D2 indicated that the quality assurance processes have been influenced by rankings because stakeholders, especially donors, rely on ranking schemes to assess quality.

Person D2: Rankings is a tool used by most stakeholders to check how various institutions are performing. We are in a competitive field and ... from the Ghanaian perspective, the competition level among the public universities for students might ... be low, donors rely heavily on such publications. They will want to know what level of quality we provide as an institution before they provide resources for us to undertake certain research tasks .... As a result, rankings ... play a role. So, we are committed to improving our quality. We have the quality assurance unit ... that constantly gives the opportunity to students to appraise their lecturers. From these surveys, we ... evaluate our staffs and organize periodic training programmes for them to improve.

The data indicated that quality assurance processes are anchored on specific principles. These were identified as rigorous and comprehensive coverage in evaluations, internal and external peer review, staff and student involvement, effective feedback, and evidence-based assessment. Whilst these standards were acknowledged by all, a closer analysis revealed the degree to which assessments of the quality of teaching staff, students for admission, teaching and student evaluation of teaching were not uniform. Differences in resource levels accounted for these institutional differences.

#### 5.5. Resource mobilization and allocation

It is claimed that GURs have an impact on the mobilization and allocation of resources and that there is a positive relationship between rankings and resource mobilization – the higher the university's

ranking, the more likely it will attract resources from government, donors, and research agencies [40], [43]. In Ghana, that this claim was more profound for resource mobilization from donor agencies than it was from government is summed up by Person B2: "For donor agencies, yes because they focus on reputation, capabilities, skills, systems, and structures of an institution before deciding to support." Other participants questioned whether rankings influenced resource mobilization from the government and were concerned that the government did not invest in its universities while expecting higher performance levels.

Moving from external resource allocation to internal resource allocation, the discussion was how external allocations are internally disbursed. Several studies suggested that rankings skew internal allocation of resources to fields which have the potential of enhancing their institutional positioning. An analysis of findings supports this assessment of impact only at University A. Person A2 indicated that the university had invested heavily in targeted areas: "I can tell you that two years ago we invested very heavily internally, ... a lot of money was pumped into science equipment and our laboratories. Something which is unprecedented in the history of this university". The rationale behind the emphasis on science is foundational to University A's focus on becoming world-class, research-intensive a university. Other universities dismissed the impact of ranking on internal allocation of funding. The reason was simple: internal allocations are based on student number in each department.

# 5.6. Student recruitment

Research shows that rankings inform student and parental choice of institutions. Some researchers illustrated how rankings influenced the recruitment and admissions processes of institutions [22], [47]. Our findings suggest that the impact on student choice is more profound on international recruitment. According to Person C2, "on international student admissions, ... it plays a role. We are trying to increase the international diversity of our university and our programmes. This is one of the key indicators used for Times Higher Education rankings". Five out of ten informants agreed that rankings played a significant role in their universities' recruitment of international students.

Respondents held divergent opinions on the impact of rankings on the recruitment of local students, although all institutions had similar admission criteria for admitting local students. Two universities confirmed the impact of rankings on the admissions of local students. However, participants from universities A and B dismissed the impact of rankings on the admission behaviour and process of their universities. Person B1 posited that, "We have

our standards which we call cut off points and that ensures that the students selected are of good academic standing. These standards are not in any way shaped by rankings". An explanation why the admissions processes of University A and University B might not be affected by rankings is students' perception that these universities were the best in the country. Our findings demonstrate that the influence of rankings is well known by public universities in Ghana, but their impact varies across institutions and the impact is informed by institutional history, focus, and core programmes.

# 5.7. Structural responses to rankings

This study explored how public universities in Ghana responded to the growing influence of GURs. Although our findings reveal that the impact of rankings varied from university to university, interview data suggest that these universities consciously adopted structural measures to better position themselves in GURs. Such behavioural responses could be categorized as acquiescence strategy [60]. Although acquiescence was the dominant strategy adopted, compromise was used by some situations. Five structural tactics were common across these institutions:

- establishment of special monitoring and evaluation units or committees,
- enforcement of recruitment and staffing policies,
- enhancement of internationalization policy,
- establishment of institutional research repositories, and
- focus on publications in high impact journals.

# 5.8. Monitoring and evaluation units

Three out of the four universities said GURs' impact led to the establishment of special units to monitor, collect, and analyse institutional data. According to respondents, their universities had specialized units to monitor performance and advise the leadership on issues relating to rankings.

Person A2: We have [the] Institutional Research and Planning Office (IRPO) which puts our basic statistics together. That unit works with all the units of the University to get information that will be made available for rankings purposes. Because of its desire to be among the top 20 universities in Africa by 2024, University A established the IRPO and the Office of Research, Innovation and Development. According to Person A1, the IRPO's role was "to monitor ... [rankings] publications, do a serious review of their indicators and suggest to the university what the way

forward is. So, if a committee has been setup purposely for rankings, then it tells you how important University A has come to accept them.

Universities B and C also made efforts to collect data and assess performance against ranking schemes criteria.

Person C2: University [C] has a Directorate of Research, Innovation and Consultancy (DRIC) as well as Academic Quality Assurance Unit (AQAU) which ... have been tasked to monitor the various ranking schemes and then get the community informed about their criteria, what they use so that it will ... inform our strategies. [The DRIC and AQAU] look at the ranking's indicators [,] ... analyse them and communicate to us for the way forward."

Person B1: Currently there is a committee that has been set up to look at the various ranking systems and advise the university on what to do to improve on its work as well as positioning on these ranking systems. This committee has been established under the office of the pro vice chancellor ... [who] serves as the chairperson.

These responses support Hazelkorn's [26] claim that institutional responses to GURs led to the establishment of specialized units to collect and analyze institutional data. Our findings indicated that these units focused on specific ranking systems. Universities A and B highlighted the Times Higher Education Supplement (THES), the Quacquarelli Symonds, and Webometrics as ranking systems with which the universities would work. All four universities identified THES and Webometrics as the preferred ranking schemes.

In contrast, while acknowledging the potential influence of GURs in the shaping of higher education policy and resource allocations, University D had not established a unit to monitor the performance in ranking schemes and to advice institutional leaders.

Person D1: We are far behind in terms of the physical infrastructure development ..., so that is our major priority though we desire to be ranked high. However, we need to take things one at a time, and taking things [one] at a time means we ... get our priorities right. ... [R]anking is our priority, but we have other far more pressing issues that deserve immediate response from us.

Person D1: Suggested that rankings remained a priority, but the university's infrastructure deficit was more pressing. University D could not afford to establish a special unit. While other universities employed the acquiesce strategy, University D adopted the compromise strategy in responding GURs in terms of establishing a special unit.

#### 5.9. Recruiting high caliber academic staff

All institutions consciously sought to recruit high calibre academic and teaching staffs. All participants indicated that their universities recognized the importance of having top notch academic and teaching staffs, as their research and teaching affects institutional rank. Participants noted that the processes had become more rigorous and all were enforcing their policies, which required a minimum academic requirement (PhD) for academic staffs, a requirement that had not been strictly enforced because of a dearth of teaching and research staffs.

The renewed focus on recruiting high calibre academic and research staffs was linked to the potential of enhancing the teaching and research output of the university. Three of the universities (A, C, and D) admitted that GURs had played a significant role in reforming recruitment and staffing policies. Participants indicated that their universities had revisited such policies and now enforced them.

Person A1: What we are doing is to recruit highly experienced and qualified academic and teaching staffs. Although this is not something new in terms of our recruitment policy, it has become necessary because of the new vision of the university. So, what this basically means is that if you don't have a PhD, the university is not going to recruit you for a teaching and research position ... and that goes to one of the ranking indicators. ...

The above view was shared equally by other participants. Our findings indicated that universities were looking at the publications and experience of the staff they recruited.

Person C2: Most of the time we look at ... your publications, teaching experience .... A panel will be constituted, and you will deliver a lecture to demonstrate how good you are. ... Because whatever you do in that lecture, it is an epitome of how your class sessions will look .... And so, if it emerges that you are not suitable although you have met our minimum requirement, you will not be recommended.

Justifying the motive to revisit the policy, Person A2 maintained "that any forward-looking institution will ... [look] to bringing in academic staffs who ... add value to [the] service it delivers as an institution." The response shows the deliberateness of University A to improve its institutional ranking. This behaviour aligns with the acquiescence strategy [60] and confirms that in responses to GURs, HEIs are most likely to reassess their recruitment and promotion policies [14], [26]. Person A1 also gave an example of how academics with master's degrees were given a deadline and sponsorship to complete PhD programmes before returning to their teaching and

research duties. This example revealed how strict these universities have become about such a requirement.

Person A1: [University A] revisited our recruitment policy. Although this policy had been in existence for a long time stipulating the basic requirement for employment, it was reluctantly enforced until the university decided to pursue its new focus on becoming a world-class research-university. This means that ... to become a member of our academic staffs, you needed to have ... a PhD degree.

Person A1's view accepts that universities, in their quest to attain high ranking status, revisit dormant policies as a step toward recruiting high calibre teaching and research staff. Person C1 acknowledged how GURs inform their staffing and recruitment policies.

Person C1: The metrics ... want to find out how many PhD staffs you have, how many full and part time professors you have, and other factors that impact on your academic output. ... [T]hese things ... indirectly influenced us ... the idea is that, if you raise the bar of recruitment to PhD holders, then you are getting people who can contribute to research and publications which could possibly enhance your positioning and visibility.

Person C1 suggests that an over-emphasis on research by most rankings publications guides which academic staff these Ghanaian universities recruit. These comments confirm research findings on the extent to which HEIs will go to reform their recruitment and staffing policies to be regionally and globally competitive [14], [15], [26], [52], [53], [69]. Research claimed that rankings have implications for the promotions of academic staffs [53], [70], a position confirmed by Person D2, "publication [was] a prerequisite for promotion [and that] academic staffs will not ... get promoted unless they engage in more publications". This statement suggests the more an academic publishes the greater the reward.

In contrast to the claims of universities A, C and D on the impact on staffing and recruitment policies, University B participants suggested that rankings played no role in their recruitment and staffing policies.

Person B2: ...[for] teaching and research in a university, you need certain calibre of staffs, so you go in for those ones provided you have the resources to pay them. You ought not to wait for rankings schemes to be published first before you start looking for qualified lecturers. ... [T]he more professors you have, the better the quality of education which encapsulates the teaching process, research, and a better impact on the communities. So, ... one cannot

be dictated to us by ranking agencies.

Although this participant underplays the impact of GURs on University B's staffing policies, they recognized that other Ghanaian HEIs do have an eye on GUR indicators when recruiting academic staff.

Apart from relying on qualifications, publications and teaching expertise, most participants noted the commitment of the universities to attract international staff as visiting or permanent scholars. Person A2 highlighted that the university encouraged visiting professors from highly reputable HEIs. "[O]ur visiting scholars come from institutions of high repute as far as ranking is concerned. ... [S]ome visiting lecturers ... come from Cape Town University and University of Stellenbosch which are leading on the continental level". Person A2 recognized the contributions of such a measure in improving the international diversity criteria of the ranking schemes. Not all respondents acknowledged that these measures were deliberate efforts to improve their position in the rankings. This approach falls under the acquiescence strategy [60] where the actions may be either deliberate or unconscious.

# 5.10. Research repositories and high impact journals

All universities consciously established an institutional research repository and encouraged academic and research staff and graduate students to publish in high impact journals [71]. The objectives for creating institutional research repositories were to enable the universities to collect, preserve scholarly writings from their staff, and make scholarly outputs visible to a world audience. Participants summarized the findings on institutional repositories:

Person D1: What we are doing now is to publish all master's and PhD theses online [and]... put on the university's repository. This is what people will cite. ... Moving on to this [online] system will make us visible.

Person B2: As a university, we are ... concerned about our research work and how they are made available online. We have ... a research repository in our library ... [W]e are more serious with collating and getting the various departments to submit their research works to ... the repository and made available in ... open access systems where other researchers and students could have access to them.

Tactical measures like an institutional repository boosted the research visibility of the university which in turn boosted its ranking position by making its research findable. Person D1 stated, "... we know that publications and citations are a key parameter used by these ranking systems, so the idea of a repository will

make visible our research work out there which will ultimately improve our citations". These HEIs encouraged academic staff to publish in high impact journals and attend international conferences to present their research. In some institutions, academic staff were encouraged to publish in high impact journals; in other institutions encouragement came as a directive [52].

Person A1: Because most of the ranking institutions use Scopus. ... you look at journals that are indexed in Scopus database because ..., we hope with time, as we keep publishing in this target high impact factor journals linked to Scopus, that will ... help shoot our publication output and our citations as well.

Person C2: ... one of the things that have come out now is the vision of the vice chancellor. Every faculty must be visible on Google Scholar. ... [The VC] thinks that, and then we ... decided that every faculty must be hooked onto the university's website. And then we should use official emails as a way of getting ourselves visible and I think in all universities there are now a targeted monitoring scheme. ... every university wants to be seen as moving up the ladder.

Establishing a research repository and encouraging publication in high impact journals confirm an acquiescence strategy at work [60]. These reactions were conscious decisions by senior leadership to address specific ranking indicators. This finding corroborates previous studies that institutions' responses to rankings focus on improving the visibility of their research output by encouraging publication in high impact journals [8], [26], [47].

# 5.11. Enhancing internationalization

The final measures we considered were the efforts to enhance their internationalization profile. While internationalization had been the priority before their focus on GURs, all institutions indicated that the commitment to internationalization changed. Respondents noted the "coincidental" relationship of institutions' international focus with the indicators used by rankings. The rationale behind these changes aimed to enhance the visibility and reputation of the university internationally. Institutional measures to achieve internationalization goals included program collaborations, targeted research partnerships, and student and staff exchanges.

All institutions sought to create strategic relationships with reputable, highly ranked HEIs in Africa and beyond. Person A1 remarked that the University A "had a lot of MOUs ... [that] address areas such as faculty and students exchange". According to this participant, such institutional exchange programmes made the university visible to the world. She noted that peer to peer

recommendations based on these collaborations enhanced the reputation of the university especially when students experience the academic environment. To support international collaborations and attract international students, the university designed 'special admissions' and 'occasional admissions' programmes for short-term visiting international students (Person A2).

Informants highlighted University D's initiatives focused on research staff and student exchanges that were designed.

Person D2: "to enhance our international reputation and visibility. This is one important way we can be globally recognised. We have a lot of institutional partnerships and collaborations with focus on joint research programmes and student exchanges. The few international students we have here are as a result of such agreements."

Another informant reiterated that having collaborations with highly reputable international institutions is a key factor considered by ranking institutions:

Person B2: They equally look at the presence of students and academic staffs within your institution. ... [T]hey want to know how international your institution is. These are very key ... factors used in ... the rankings... [We] ... encourage our faculties and academic members ... to have collaborations and invite international scholars to either come to work with us permanently or to come for a short period. Some may be on fellowships, we ... encourage them to come and when they come, we make sure that they will enjoy their stay and they will also encourage or convince others to come as well.

The above respondents confirmed that HEIs' responses to rankings take the form of enhanced collaboration and partnership efforts with high status institutions [10], [26], [47].

However, while universities were committed to increasing international student numbers, others' efforts were limited because of inadequate infrastructure and resources.

Person C1: The centre for international education ... is trying to make sure that structures are put in place for foreign students. One of the challenges we had was decent accommodation for our international students, but now we have this new hostel where it is fairly decent to be used by them.

This concern was echoed by participants from Universities B and D. Person D2 asserted that inadequate accommodation undermined efforts to pursue a rigorous internationalization campaign. He

re-emphasized what was said about comparing oranges to apples and indicated that, though the desire might be there, those with adequate resources and infrastructures are able to succeed more on this indicator of prestige.

# 6. Conclusions

Our research study shows that Ghanaian HEI leaders were aware how GURs shape higher education locally and internationally. GURs shaped institutions' planning, positioning, international collaborations, and quality assurance. These four HEIs responded strategically to GURs by establishing monitoring and evaluation units and research repositories, embarking on internationalization initiatives, and recruiting high calibre academic professionals.

Global university rankings are instrumental tools shaping the global higher education landscape. Rankings are transforming and comparing "apples to apples." Rankings provide consumer information to students and parents, governments, and HEIs. Yet, scholars debate GUR indicators' reliability, impact on student choice, and impact on HEIs. Research on the institutional level has demonstrated the complexity of GURs' effects on the strategic decision-making of HEIs. Our study revealed that institutional leaders adopted strategic measures to respond to rankings and used rankings in institutional goal setting processes. Closing the lacunae in research on the impact of GURs on institutions in the Global South led the researchers to consider university leadership perceptions of GURs. Given the complexity of the subject, this bounded case study approach selected informants who were in leadership positions with direct involvement with GURs. Participants demonstrated high levels of understanding of global university rankings and their role in shaping higher education globally.

Our findings showed mix perceptions amongst Ghanaian universities leadership towards GURs. We found that participants who perceived rankings as positive, issues such as benchmarking, competition, student choice, and quality delivery of services informed those perceptions. Those who expressed misgivings pointed out methodological inaccuracies and biases to buttress their claims. They did not comprehend why GURs seek to compare higher education institutions from diverse backgrounds. To them, GURs likened "oranges to apple".

Despite the divergent views, our findings indicate that Ghana's public universities were attentive to GURs and that GURs informed institutional priority setting. Some participants minimised GURs' impact on strategic foci in their institutions, but acknowledged how GURs informed strategic positioning and planning, recruitment and promotion, quality assurance, resource allocation, admissions,

and institutional collaborations. We found that the impact of GURs was most profound on strategic positioning and planning, institutional identity, institutional collaborations, resource mobilization and quality assurance.

We assessed the strategic responses of the universities towards GURs with the aid of Oliver's typology of institutional responses [60]. Evidence showed that these universities responded to global university rankings by taking specific policy directions. These policy tools included the establishment of specialized units to monitor, evaluate and advise institutional leaders on how to improve their institutional positioning. Secondly, the study's finding revealed that all four universities, in their quest to improve their institutional positioning, resolved to target high caliber academic and research staffs. By so doing, all four universities revisited and enforced their policies on recruitment of teaching and research staffs. A third response to rankings was collating, assessing, and making visible teaching quality, research performance, and scientific publications. Specific steps such establishing institutional repositories, increasing graduate intake, and sponsoring faculty research were consciously adopted. Similar responses promoted accountability and quality assurance through peer review, admitting high performing students, and increasing international student numbers. All agreed that efforts to collaborate with reputable universities had intensified.

Though rankings were interpreted differently by each university, the evidence in this study suggests that university leaders see rankings as reflections of quality. It is argued that these leaders recognized that rankings are partial in scope, have inherent biases, and are purpose driven. In practice, Ghanaian university leaders conceded that rankings altered the context in which they functioned and that it was important to

improve performance in ways measured by rankings. Our study demonstrated that rankings incentivized universities to improve by making them aware that they must live up to the practices of similar institutions elsewhere in the world. Rankings encouraged Ghanaian universities to provide evidence of their performance in key areas to show how they were positioned in continental and global contexts. Ghanaian public universities developed systems to assess the quality of learning and teaching which incorporate best of class global practices while ensuring that local and national needs are met. These practices bore fruit as more Ghanaian universities are ranked more highly in global and continental rankings.

#### 7. Future research

Our study has limitations. First, the study was undertaken at a particular point in time (2017). Institutions have evolved and ranking schemes have become more sensitive to institutions on the periphery (MENA and Sub-Saharan Africa) [37] and publish regional comparisons. Secondly, the study explored only four public university perspectives and not those of private universities. Some private universities are ranked higher than most public universities. Thirdly, the views of lecturers, administrators and students need investigation to validate whether they differ significantly from the ways in which university leaders perceive ranking schemes [7]. Finally, future studies should explore the viewpoints and attitudes of the state leadership, elected officials, and civil service on how GURs inform public policy and influence resource allocation and accountability measures.

2019 2020 2021 2022 2023 2024 World Ghana World Ghana World Ghana World Ghana World Ghana World Ghana UG 801-801-1 1000+ 1 1001-1001-2 1001-2 1000 1000 1200 1200 1200 **KNUST** 1001-3 1001-3 1001-3 1200 1200 1200 UCC 301-351-1 601-1 1 350 400 800 UDS n/a 4 4 1500+ 4 n/a

Table 3. Ghanaian universities and GUR rankings (2019 and 2022/23)

Postscript: We reviewed how Ghanaian universities fared in the GUR derby since 2017 (Table 3) and argue changes in the rankings demand followon analysis. Of particular interest is the rapid transition of the University of the Cape Coast to the upper echelons of HEI rankings in Ghana and Africa. In 2017, UCC embarked on its 3rd strategic plan and

proposed specific actions to influence their position in the rankings. Analysis of the specific priorities, tactics and organizational changes would be a useful case study for Global South universities seeking to improve their position in the GURs while serving local and national communities. Such an analysis may confirm our findings that Ghanaian universities' responses to GURs were compromise and acquiescence, not resistance, manipulation, or defiance [57]. These responses conform to emergent practices amongst South African universities. UCC's practices i) prioritized their place in global rankings, ii) sought to balance the local and the global "sensitive to rankings but make clear their interest in remaining contextually relevant," and iii) acknowledged the importance of [global] peer recognition ... but ... bring a distinct local focus to their decision making [68]."

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