

Higher Education Funding and Student Access in the Global South

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Abstract

Globally, the increasing cost of university education, growing student enrolments and weak economic of nations have caused a reduction in public funding for university education. This decline in public funding seems to have increased tuition fees, caused deterioration of infrastructure, thereby affecting student access to university education. In the Global South particularly, Ghana and South Africa, there is the quest for universities to widen access. This is as a result of the perceived association of the activities of universities to socio-economic development. However, funds allocated by these governments to the sector is woefully inadequate. The study reveals that public universities in South Africa and Ghana rely on alternative sources such as fees of international students and non-traditional learners to enhance their fiscal strength but this seems inadequate owing to the financial strain that comes with the growth in domestic student numbers.

Keywords: public funding, public universities, student access, comparative, global south

Introduction

The economic development of countries has been linked to their higher education systems (United Nations Educational, Scientific, and Cultural Organization [UNESCO], 2017). The changing nature of skills required for the development of national economies has further deepened the importance of higher education (Bloom et al., 2015). As a result, many higher education systems have experienced revitalization. Chief amongst them is the opening up of the higher education

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system, which has led to a shift from elitist to mass higher education (Mohamedbhai, 2008). For example, there are now more than 140 million students worldwide pursuing higher education and this continues to expand rapidly (Altbach, 2013). Similarly, in Africa, between 2000 and 2010, higher education enrolment more than doubled, increasing from 2.3 million to 5.2 million (Africa-America Institute, 2015). This is a positive signal, but this has put a strain on the fiscal life of the higher education institutions. Currently, funding challenges confront public higher education institutions (PHEIs) both in the developed and the developing world. A report by Study International Staff (2019) states that in 2007/08, the gap between university operating expenditures and provincial grants in Canada was CA\$6.1 billion. By 2016/17, this had nearly doubled to CA\$12 billion (Study International Staff, 2019). In Australia, higher education grants for teaching and learning and research have declined from 0.7% in 1989 to 0.6% in 2017 (Universities Australia, 2019). Additionally, Australia's Commonwealth Grant Scheme (CGS) declined from 4.2% (\$11,730) per student in 1989 to \$11,240 per student in 2017 (Universities Australia, 2019). In Russia, the share of spending on education in total budget expenditure fell from 2.75% in 2015 and is expected to reach 2.45% in 2020 (Vorotnikov, 2017).

Funding challenges are severe in Africa. Government funding for the higher education sector has been reducing in real terms over the years. Teferra (2013) claims that in Zambia, the government could only allocate 20% of institutional budgets for over 3 years without taking cognizance of inflation. Similarly, Mpfu et al. (2013) mention the main issue facing Zimbabwe universities as under-funding. Tanzania is not immune to this phenomenon. Public higher education institutions (PHEIs) in the country usually obtain about 20% to 30% of their annual approved budget requests (Fussy, 2017; Kossey & Ishengoma, 2017). Equally, the higher education sector in Kenya has been reeling under a financial crisis of unprecedented proportions, raising questions about its long-term sustainability (Munene, 2019). Munene (2019) laments that public university system debt stands at US\$110 million, with the debt of the premier public university at over US\$10 million. Egypt's 2019 national budget allocated EUR 2 483 million to the university sector (Brussels Research

Group, 2019). However, the Egyptian Central Agency for Public Mobilization and Statistics (CAPMAS) claims that government spending between 2004 and 2017 had declined from 3.5 % to 2.3 % of the state budget for higher education institutions (Brussels Research Group, 2019). It is evident that government funding in real terms in most African countries is plummeting even though Africa's higher education participation rate is far less than the global average of 26% (Africa-America Institute, 2015).

In Ghana and South Africa, there is a quest for higher education institutions to widen access. In this paper, we seek to understand the funding challenges facing higher education institutions in Ghana and South Africa and how these institutions strategize to sustain access in the face of inadequate funding via a cross-national comparative approach.

Justification for selecting Ghana and South Africa

The higher education sector in Ghana comprises both public and private higher education institutions. Ghana can boast of 10 Public Universities, 8 Technical Universities, 2 Polytechnics, 44 Colleges of Education, 23 Public Nursing and Midwifery training institutions, 2 Private Nursing Colleges, and 65 Private Higher Education (National Accreditation Board, 2018). In South Africa, the sector comprises 26 Public Universities, and 124 Private Higher Education Institutions (Department of Higher Education and Training, 2017). The higher education institutions in these two countries offer an academic program at diploma, bachelor, master's and doctoral degree levels. The countries were chosen because they share some commonalities. Higher education sectors in the two countries have seen revitalization in the last two decades. Furthermore, government-funding support for their higher education sector continues to shrink in real terms while the higher education institutions experience growth in student enrolment. Lastly, Ghana and South Africa's higher education participation rate is 16.16% (Times Higher Education, 2019a) and 20.48% (Times Higher Education, 2019b), respectively, higher than Africa's average of 6% (Africa-America Institute, 2015). These common characteristics possessed by Ghana and South Africa do not imply the two countries are the same. They differ in some respects. South Africa's population is much larger, 57,398,421 in 2018

(United Nations, 2018) compared to Ghana's 29,463,643 in the same period (United Nations, 2018). Though differences exist in their higher education structure, yet we deem this study appropriate as this might give insights into how public higher education institutions in African revitalized higher education systems sustain student access in the face of inadequate funding.

Methodology

The purpose of this study is to understand how higher education institutions in Ghana and South Africa sustain access amidst limited funding. Hence, a systematic review of the literature on this subject matter was vital. We followed explicit and rigorous criteria to identify, critically evaluate and synthesize (Cronin et al., 2008) the literature on higher education funding and student access to provide a comprehensive background for understanding the knowledge produced on the issue. We searched from the University of the Western Cape's Library Educational Database, SCOPUS, ERIC, SAGE journals online, and Google scholar search. Keywords used for the search included: higher education funding, public higher education funding, declining public higher education funding, student access, university funding, debates on private financing of higher education, funding challenges in higher education, measures to sustain access in higher education, cost-sharing in higher education, Ghana and South Africa. The criteria for inclusion of an article were: the focus or an aspect of the article should fall within the scope of higher education funding and student access, and the article should be peer-reviewed. Books and government documents had the same criteria. The search resulted in the retrieval of 62 documents. This was made up of 33 articles, 9 books, 14 government documents, and 6 doctoral theses. Out of this number, 36 met the inclusion criteria. This formed the data for the study and was analysed following the preview, question, read, and summarize (PQRS) approach espoused by Gillian (1990). Through this approach, the major themes that form the findings and discussions were captured.

Findings

In this section, we present the findings in line with the themes that appeared from the literature review. These are categorized as funding challenges and measures to sustain student access and are presented below.

Ghana

In Ghana, where major higher education revitalization has taken place, funding famine persists. Table1 provides an overview of Government of Ghana funding to the public higher education institutions against the institutions' expenditure patterns from 2010-2016.

Table1

Government Funding and Expenditure Patterns of Public Higher Education Institutions (HEIs) in Ghana

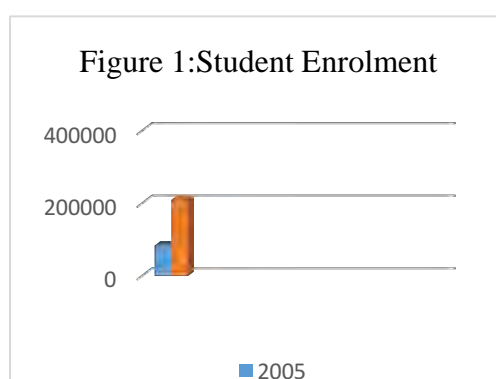
Country	Year	The amount released by Government to HEIs (GH¢)	Expenditure of the HEIs GH¢	Funding Gap of HEIs GH¢
Ghana	2010	198,889,276	231,918,186	33,028,910
	2011	208,288,251	277,350,710	69,062,459
	2012	470,619,775	590,909,180	120,289,404
	2013	490,619,775	1,852,440,128	1,361,820,353
	2014	952,675,283	1,024,275,063	71,599,780
	2015	1,932,403,802	3,153,765,103	1,221,361,301
	2016	2,051,212,109	4,275,645,094	2,224,432,985

Source: National Council for Tertiary Education, 2016

As Ghana's higher education sector experiences budget shortfalls, enrolment in the sector continues to expand. While the enrolment trends seem to be impressive, Ghana's higher education participation rate, stands at 16.16% (Times Higher Education, 2019a), and is less than the global average of 26% (Africa-America Institute, 2015). An indication that more prospective higher education students are denied access in Ghana. Figure 1 depicts Ghana's enrolment trend from 2005-2015.

Figure 1

Ghana's Enrolment Trend from 2005-2015



Source: Council on Higher Education, 2016

South Africa

Similarly, funds allocated to higher education institutions in South Africa have reduced significantly. As a proportion of GDP, public expenditure on public higher education institutions has declined from 0.82% in 1996 (Wangenge-Ouma & Cloete, 2008) to just 0.72% in 2016 (Council on Higher Education, 2016). Table 2 displays the public funding situation in South Africa.

Table 2

Government Funding and Expenditure Patterns of Public Higher Education Institutions (HEIs) in South Africa

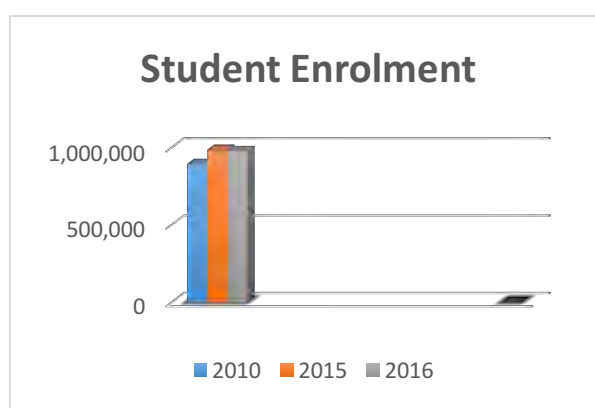
Country	Year	The amount released by Government to HEIs (R'000)	Expenditure of the HEIs (R'000)	Funding Gap of HEIs (R'000)
South Africa	2010	17 516 740	37 174 529	19657789
	2011	19 354 159	40 180 883	20826724
	2012	20 902 779	45 817 580	24914801
	2013	22 388 767	49 170 383	26781616
	2014	24 155 093	54 205 231	30050138
	2015	26 342 110	58 709 603	32367493
	2016	27 964 560	65 929 150	37964590

Source: Centre for Higher Education Transformation, 2016; Department of Higher Education and Training, 2019

Table 2 suggests that the funding gap of higher education institutions in South Africa increased every year from ZAR 19 657 789 000 in 2010 to ZAR 37 964 590 000 in 2016. This notwithstanding, the higher education sector in South Africa is experiencing outbursts in student enrolment, as depicted in Figure 2.

Figure 2

Student Enrolment from 2010 to 2016



Source: Department of Higher Education and Training, 2018

From Figure 2, it could be deduced that between 2010 and 2016, student enrolment in public higher education institutions grew by 82 901 and continues to increase after 2016. Even though the funding gap continues to increase in both systems, enrolment of students also continues to increase in the higher education sector of Ghana and South Africa. This situation seems to have compelled public higher education institutions to strategize to sustain student access.

Measures used to sustain Student Access

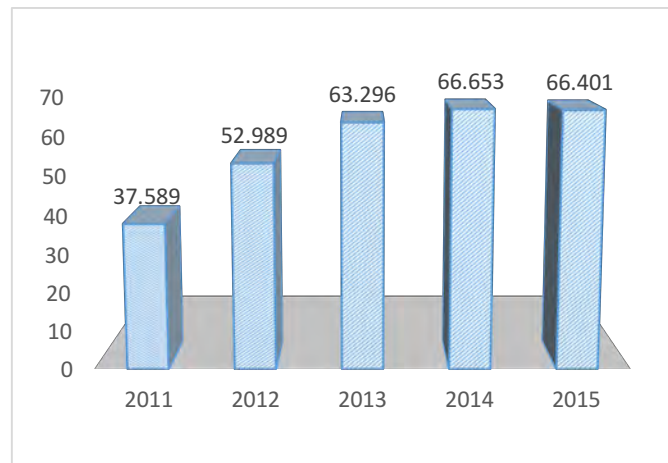
The findings reveal that the public higher education institutions in Ghana and South Africa employ two main measures to sustain student access. These measures are Distance Education provision and recruitment of International Students. Figures 3 and 4 depict the number of students enrolled in the Distance Education program and enrolment of international students in Ghana from 2011 to 2015.

Ghana

Figure 3 shows the number of students enrolled in the Distance Education program in Ghana from 2011 to 2015.

Figure 3

Distance Education Enrolment



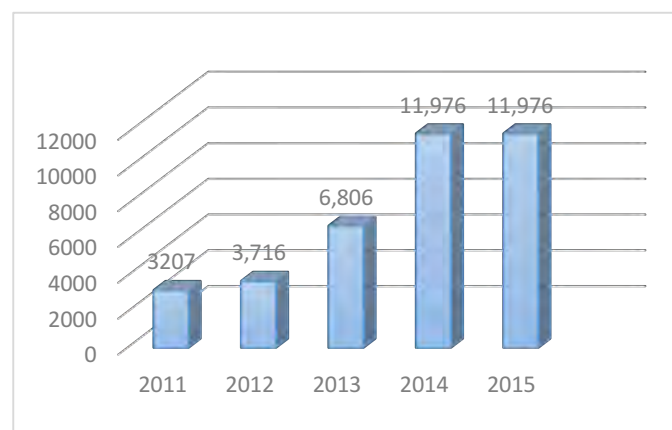
Source: National Council for Tertiary Education, 2016

Figure 3 depicts that Distance Education enrolment increased from 37, 589 in 2011 to 66, 653 in 2014. However, this decreased marginally in 2015 to 66 401, bringing the total distance education enrolment of PHEIs in Ghana from 2011 to 2015 to 286 928.

The international student enrolment trend of PHEIs in Ghana from 2011 to 2015 is presented in Figure 4.

Figure 4

International Students' Enrolment



Source: National Accreditation Board, 2018

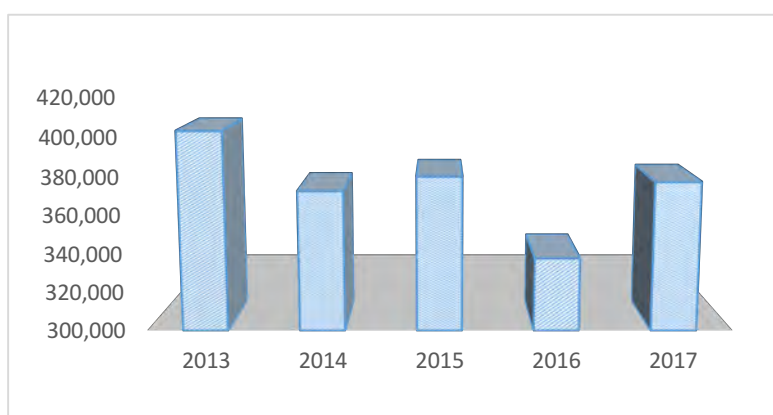
It is evident that the enrolment pattern of international students, as shown in Figure 4, suggests an increase from 3207 in 2011 to 11976 in 2015. Within this period the enrolment of international students amounted to 37 681.

South Africa

The number of students studying via distance education mode in South African PHEIs from 2013 to 2017 is shown in Figure 5.

Figure 5

Distance Education Enrolment



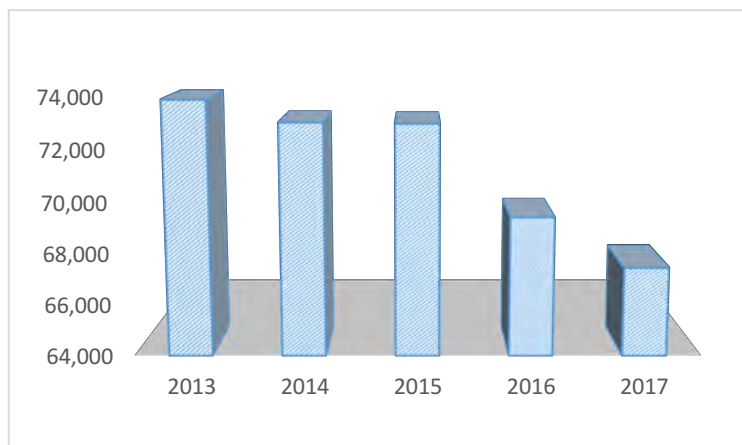
Source: Department of Higher Education and Training, 2019

From Figure 5, students who accessed higher education via Distance Education surged from 402 650 in 2013 to 379 732 in 2015. However, by 2017 academic year this figure had plummeted to 377 014.

Figure 6 shows the number of international students enrolled in PHEIs from 2013 to 2017.

Figure 6

International Student Enrolment



Source: Department of Higher Education and Training, 2018

As shown in Figure 6, the enrolment of international students was 73 856 in 2013. However, by 2017, this has reduced to 67 434.

Discussion

Public funding and expenditure, income from international fees and distance education were the major themes that emerged from the funding literature. Authors such as Wangenge-Ouma and Cloete (2008), Centre for Higher Education Transformation (2016), Department of Higher Education and Training (2018), and National Council for Tertiary Education (2016) offered a detail analysis of public expenditure on public higher education in South Africa and Ghana. They concluded that income from this source continues to plummet and as result, PHEIs are compelled to seek alternative funding support. Furthermore, Mensah & Owusu-Mensah (2002), De Villiers (2009), Fatunde (2014), Sehoole (2015), Swanzy and Langa (2017), Cassidy (2017), and Shem (2018) discuss how income generated from international student fees and distance education by PHEIs assist in absorbing the financial shock that emanates from a decline in public funding in both Ghana and South Africa. With regards to the literature on access, the Department of Higher Education and Training (2017) and the National Accreditation Board (2018) provided an overview of the total number of higher education institutions in the case countries with Times Higher Education (2019a, 2019b), and Africa-America Institute (2015) highlighting the higher education participation rate in Ghana and South Africa and the average higher education participation rate for Africa. Similarly, the data on international and distance student enrolment was deduced from the National Council for Tertiary Education (2016), and the Department of Higher Education and Training, (2018, 2019). Information on the satellite campuses and distance education centres established to widen access was supplied by Ntshoe (2004) and Swanzy et al. (2019).

An analysis (see Table 1 and 2) of the government funding patterns of public higher education institutions in the two countries in the seven years 2010-2016 shows trends that are both similar and different. The statistical analyses show that in both countries, government funding kept increasing in monetary terms in the 2010-2016 period. Another similarity is that during the same

period the funding gap kept increasing. One significant difference characterizes the two countries' government funding of higher education. While Ghana's public higher education funding gap is marked by substantial increases in monetary terms, South Africa's case is characterized by small and moderate increases. The problem of higher education funding in the two countries is, therefore, one of increases in funding gap of the institutions.

It is clear that the funding gap is compelling PHEIs to seek alternative funding mechanisms to sustain student access. For example, in South Africa, Swanzy & Langa (2017) report that fees from international students supplement the budget of PHEIs. For instance, in 2016, the University of Cape Town (UCT) semester study abroad program attracted about 1,000 participants (Cassidy, 2017). UCT charged US\$6 000 per student as tuition fees (Cassidy, 2017), contributing about USD 6,000,000 to the university's revenue vault. Moreover, research by the Academy of Science of South Africa indicates that international students manage to complete their doctorates sooner (in about 4.5 to 4.6 years) than the local students (who take an average of 4.9 years) (Sehoole, 2015). The faster the completion rate for a postgraduate degree, the more the institution gets funding from the government (Sehoole, 2015) because South Africa uses performance-based funding framework for allocations of funds to the public higher education institutions. Similarly, PHEIs in Ghana fill their funding gap with fees paid by international students. International student fees are quoted in dollars and are not subject to depreciation like domestic fees charged in Ghana's local currency. For example, it is on record that Nigerian students in Ghana contribute about US \$1 billion yearly as tuition fees and other expenses (Fatunde, 2014). It could be deduced that PHEIs in both South Africa and Ghana charge international students fees in dollars and are sometimes double the fees paid by local students. This notwithstanding differences exist. In South Africa, the completion of a postgraduate degree by an international student attracts additional revenue from the government into PHEIs revenue stream, whilst this is not the case in Ghana.

Furthermore, in South Africa, public higher education institutions have established satellite campuses precisely to enroll non-traditional students. Ntshoe (2004) explains that South African

PHEIs have established satellite campuses to reach especially working students in rural areas where there is demand for higher education, but supply is lacking. The revenue generated by PHEIs via distance education provision is enormous. For instance, currently Distance Education is subsidized by South Africa's government at 50% of the amount for contact students (De Villiers, 2009) in addition to the fees that the students pay. Equally, in Ghana, PHEIs have established distance education centers to make their services available to students living in other parts of Ghana (Swanzy et al., 2019). Academic programs offered via this mode are priced higher than those on main campuses (Swanzy et al., 2019). The practice used to be that when an institution was offering a Distance Education program, it was given an extra 2% of its regular subsidy to support its Distance Education program (Mensah & Owusu-Mensah., 2002). This trend has, however, changed. Currently, students enrolled in Distance Education pay fees, which cover full cost of their study (Mensah & Owusu-Mensah., 2002). For example, the University of Cape Coast charges USD 450 and USD 650 equivalent annually for bachelor's and master's programs, respectively (Shem, 2018) higher than similar programmes offered on regular basis. While in South Africa a chunk of the revenue generated by PHEIs from distance education comes from government, in Ghana, the students enrolled in this education mode bear full cost.

Conclusion

This paper has discussed how public higher education institutions in Ghana and South Africa sustain student access amidst inadequate funding. It was identified that the institutions rely on alternative sources such as fees of international students and non-traditional learners to enhance their fiscal strength, but this seems inadequate owing to the financial strain that comes with the growth in domestic student numbers. Given that the intent of this review is contextualized in two developing countries, the findings of the review are expected to not only benefit developing countries in terms of offering research-based data for analysis but also benefit developed countries that are exploring best practices for coping with inadequate funding to sustain student access.

Author Note

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References

- Africa-America Institute. (2015). *The state of education in Africa report: A report card on the progress, opportunities and challenges confronting the African education sector*. New York: Author.
- Altbach, P. G. (2013). *Global perspectives on higher education: International imperative in higher education*. Sense.
- Bloom, D., Canning, D., & Chan, K. (2015). Higher education and poverty in sub-Saharan Africa. *International Higher Education*, 45(7), 6-7.

Brussels Research Group. (2019). Egypt's education system by far the largest in the region.

<https://brusselsresearchgroup.org/index.php/2019/02/03/egypts-education-system-is-by-far-the-largest-in-the-region/>

Cassidy, S. (2017). *Foreign students boost Cape Town economy*. African News Agency.

Centre for Higher Education Transformation. (2016). *South African higher education performance indicators 2009-2016*. Stellenbosch: Author.

Council on Higher Education. (2016). *South African higher education reviewed: Two decades of democracy*. Pretoria: Author.

Cronin, P., Ryan, F., & Coughlan, M. (2008). Undertaking a literature review: A step-by-step approach. *British Journal of Nursing*, 17(1), 38-43.

De Villiers, P. (2009). The cost of fiscal subsidies to higher education students in South Africa: A comparison between 2000 and 2006. Stellenbosch Economic Working Papers, (13/09). University of Stellenbosch.

Department of Higher Education and Training. (2017). *Statistics on post-school education and training in South Africa: 2016*. Pretoria: Author.

Department of Higher Education and Training. (2018). *Statistics on post-school education and training in South Africa 2016*. Pretoria: Author.

Department of Higher Education and Training. (2019). *Statistics on post-school education and training in South Africa: 2017*. Pretoria: Author.

Fatunde, T. (2014). Focus on Ghana shows 75,000 Nigerians studying there.

<https://www.universityworldnews.com/post.php?story=20140529173131311> on 01-11-19.

Fussy, D. S. (2017). Policy directions for promoting university research in Tanzania. *Studies in Higher Education*, 43(9), 1573-1585.

Gillian, C. (1990). Memory. In I. Roth (Ed.), *The open university's introduction to psychology* (pp. 570–620). Lawrence Erlbaum.

- Kossey, M. M., & Ishengoma, J. M. (2017). Issues and challenges of student financing systems in Africa: The case of Tanzania. *International Journal of African Higher Education*, 4(1), 67-90.
- Mensah, S., & Owusu-Mensah., F. (2002). *Priorities and strategies for capacity building in tertiary distance education for human resources development in Ghana*. World Bank.
- Mohamedbhai, G. (2008). *The effects of massification on higher education in Africa*. University of Mauritius.
- Mpofu, J., Chimhenga, S., & Mafa, O. (2013). Funding higher education in Zimbabwe: The experience, challenges and opportunities of the Cadetship Scheme. In D. Teferra (Ed.), *Funding higher education in sub-Saharan Africa* (pp. 327-350). Palgrave MacMillan.
- Munene, I. (2019). Kenyan universities: On the brink of financial insolvency. *International Higher Education*, 97, 25-27.
- National Accreditation Board. (2018). *Tertiary education statistics report*. Accra: Author.
- National Council for Tertiary Education. (2016). *Performance of tertiary education sector: 2016 financial year*. Accra: Author.
- Ntshoe, I. M. (2004). Higher education and training policy and practice in South Africa: Impacts of global privatisation, quasi-marketisation and new managerialism. *International Journal of Educational Development*, 24(2), 137-154.
- Sehoole, C. (2015). The bleak side of studying in South Africa. <https://mg.co.za/article/2015-07-03-the-bleak-side-of-studying-in-south-africa> on 20-03-19.
- Shem, S. (2018). UCC distance education fees and courses. <https://yen.com.gh/104759-ucc-distance-education-fees-courses.html> on 15-11-19.
- Study International Staff. (2019). International students are funding Canada's universities and colleges. <https://www.studyinternational.com/news/international-students-funds-canada/> on 30-10-19.
- Swanzy, P., & Langa, P. V. (2017). Is xenophobia pushing international students away from South Africa? *Canadian and International Higher Education*.

<https://ciheblog.wordpress.com/2017/09/11/is-xenophobia-pushing-international-students-away-from-south-africa/>

Swanzy, P., Langa, P. V., & Ansah, F. (2019). Ensuring equity and inclusion in higher education provision: Ghana's approach. In J. Hoffman, P. Blessinger, & M. Makhanya (Eds.), *Strategies for facilitating inclusive campuses in higher education* (pp. 237–251). Emerald.

Teferra, D. (2013). Funding higher education in Africa: State, trends and perspectives. *Journal of Higher Education in Africa*, 1(2), 19-51.

Times Higher Education. (2019a). Study in Ghana.

<https://www.timeshighereducation.com/student/where-to-study/study-in-ghana>

Times Higher Education. (2019b). Study in South Africa.

<https://www.timeshighereducation.com/student/where-to-study/study-in-south-africa>

United Nations Educational, Scientific, and Cultural Organization. (2017). *Education for sustainable development goals: Learning objectives*. Paris: Author.

United Nations. (2018). Countries in the world by population (2018).

<http://www.worldometers.info/world-population/population-by-country/>

Universities Australia. (2019). *Higher education: Facts and figures*. Canberra: Author.

Vorotnikov, E. (2017). Government cuts 40% of state-funded university places.

<https://www.universityworldnews.com/post.php?story=20170713090747748>

Wangenge-Ouma, G., & Cloete, N. (2008). Financing higher education in South Africa: public funding, non-government revenue and tuition fees. *South African Journal of Higher Education*, 22(4), 906-919.