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## Dealing with Higher Education Exclusion in Ghana : Why the Secondary School Factor Matters

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# Dealing with Higher Education Exclusion in Ghana: Why the secondary school factor matters

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*Dealing with Higher Education Exclusion in Ghana: why the secondary school factor matters*

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## **The European Access Network**

The European Access Network encourages wider access to higher education for those who are currently under-represented, whether for reasons of gender, ethnic origin, nationality, age, disability, socio-economic status, family background, vocational training, geographic location, or earlier educational disadvantage. The EAN is the only European-wide, non-governmental organisation for widening participation in higher education. It is organised for educational purposes and operates under English Law. Membership is international and is open to all those with an interest in access, equity, diversity and inclusion. The EAN's objectives are:

- to promote effective policies and negotiate resources for wider participation in higher education
- to undertake collaborative research and development programmes on access issues
- to share information on, and provide mutual support for, access developments
- to co-operate with other international and national bodies to promote wider participation
- to analyse access philosophy within and between member states
- to share pedagogical strategies and multi-cultural curriculum approaches
- to explore professional and political issues which promote wider participation
- to encourage international exchanges among access students and staff

## Abstract

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*A great deal of positive discriminatory measures to counter unequal access to higher education (HE)<sup>1</sup> have often been initiated at the level of HE after potential talents had already been left in the 'drain' at the lower cycles. This paper which sheds light on HE exclusion in the Ghanaian context however, argues for an earlier intervention in the educational continuum, particularly at the upper secondary level where HE exclusion begins due to the undue emphasis on academic merit determined through a 'one-shot-one-off' school-leaving examination which does not differentiate between students from the rural resource-scanty schools and their urban counterparts. The selection of students into Ghana's public universities is assessed and the role of HE as a tool for socio-economic mobility highlighted. The paper concludes that affirmative action at the level of HE is both 'short-termist' and cosmetic, and that bridging the resource gap between rural and urban schools is a more enduring option.*

## Introduction

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In keeping with Article 26 (1) of the United Nations Declaration on Human Rights (UNDHR), Ghana's 1992 Republican Constitution explicitly states:

Higher education shall be made equally accessible to all, on the basis of capacity, by every appropriate means and in particular, by progressive introduction of free education....The State shall, subject to the availability of resources provide...equal access to university or equivalent education, with emphasis on science and technology. (Articles 25 (1c); 38 [3])

On 7 September, 2000, Ghana again became a Party and Signatory to the UN's International Covenant on Economic, Social and Cultural Rights (ICESCR) adopted in December 1966 by the General Assembly which came into force in January 1976<sup>1</sup>, Article 13 (2c) of which states: "Higher education shall be made equally accessible to all, on the basis of capacity, by every appropriate means, and in particular by the progressive introduction of free education"<sup>2</sup>. The afore-mentioned constitutional provision which bears very close resemblance to the UNHDR and the ICESCR has been given further impetus by UNESCO's *World Declaration on Higher Education in the 21st Century*.

To date, achievement in the upper secondary leaving examinations (The West African Senior Secondary Certificate Examinations [WASSCE]) remains the single most important criterion for entry into higher education institutions (HEIs) in Ghana based on competitive 'cut-off' points determined annually by the volume of applications.

With the increasing differentiation of urban-based upper secondary institutions as 'well-endowed' and the rural, resource-poor schools as 'less-endowed', one wonders whether the current university admissions system is supporting the role of higher education (HE) as a tool for socio-economic mobility and poverty reduction, or making it an instrument to deepen stratification of society, and perpetuate the intergenerational poverty cycle through 'gate-keeping'.

Since the country is reforming its educational system to support "a nation aspiring to build a knowledge-based economy within the next generation" (Ministry of Education and Sports<sup>2</sup>, 2004, p.3), it is imperative to identify barriers to the realisation of this goal.

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<sup>1</sup>[http://treaties.un.org/Pages/ViewDetails.aspx?chapter=4&lang=en&mtdsg\\_no=IV-3&src=TREATY](http://treaties.un.org/Pages/ViewDetails.aspx?chapter=4&lang=en&mtdsg_no=IV-3&src=TREATY)

<sup>2</sup><http://www2.ohchr.org/english/law/cescr.htm#art13>

# Educational Reforms and Implications for University Admissions

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Until 1987, pre-university education in Ghana spanned a period of 17 years comprising:

- six years of Primary School
- four years of Middle School
- five years of Secondary education leading to the award of School Certificate/General Certificate of Education – Ordinary Level (SC/GCE ‘O’ Level)
- two years of Sixth-Form leading to the award of SC/GCE Advanced (‘A’) Level

Reforms to the education sector in 1987 saw a complete ‘overhaul’ and shortening of the duration of pre-university from 17 to 12 years, and a replacement of the previous structure with this :

- six years of Primary School
- three years of Junior Secondary School (JSS) leading to the Basic Education Certificate Examination (BECE)
- three years of Senior Secondary School (SSS) leading to the Senior Secondary School Certificate Examination (SSSCE)

Thus, the 1987 structure abolished both the middle school and sixth-form education in addition to a reduction in the duration of upper secondary education from five to three years. University education which had hitherto been three years nonetheless saw the addition of another year under the new educational system. The reform further introduced the Community Day Secondary School concept which sought to de-emphasise the existing boarding school system ostensibly to make secondary education more affordable and accessible to the rural poor (Ministry of Education [MOE], 2002).

As expected, the reforms witnessed a spike in both the number of basic-level institutions and enrolments. In the year preceding the reforms (1986/87), for example, there were a total of 9,494 primary schools and 99 JSS in Ghana. By the 1987/88 academic year, the number of primary schools and JSS had increased to 9,921 and 1,444 respectively; and by 2000/01 the number of public SSS had also shot up to 474 from 240 in 1987/88 (Ansa Asamoah, 1996, p. 124; MOE, 2002, p.35).

The MOE identified among others, the following as a weakness of the 1987 Reforms in its assessment:

The Reform Programme has more than doubled the intake at the basic education level. However, access to second cycle and tertiary institutions is very limited. With only about 30% of all JSS graduates gaining access to Senior Secondary School and about 15 to 20% of them being enrolled in GES [Ghana Education Service] Technical Institutes and NVTI [National Vocational Training

Institute] Vocational Schools and other private technical and vocational schools, the vast majority are expected to work as apprentices in the informal sector or to become self-employed. What is more, of the 30% of JSS graduates that go to Senior Secondary School, only 10% gain access to tertiary institutions. Like the JSS graduates, the remaining 90% of SSS graduates enter into the professional world ill-equipped and inadequately prepared for any specific employment. (Ministry of Education, Science and Sports [MOESS] website, 2007)

The apparent weakness in the 1987 reforms prompted calls for a rethink of the educational system which culminated in the setting up of the Educational Reform Review Committee (ERRC) by the then New Patriotic Party Government in January, 2002 whose mandate was to “review the entire educational system in the country with the view to making it more responsive to current challenges”. Specifically, the Committee was tasked to examine the structure of the educational system and deliberate on issues affecting educational delivery and development, constraints to access to different levels of the educational system, issues of Information and Communications Technology (ICT) and Distance Education among others (MOEYS, 2004, p.2). The ERRC completed its work in October, 2002 and subsequently, a white paper was issued by the government based on the recommendations in 2004. The White Paper acknowledged the 60% drop-out rate between JSS 3 and SSS 1, the teaching of too many subjects at the primary and JSS levels, due to the shortage of teachers and logistical constraints, as some of the inherent weaknesses of the old system stressing that “this weakness does not enable pupils to move either to SSS level of learning and attainment of internationally competitive standards or immediately into the world of work as promised by the 1987 reforms” (ibid., p. 4). Among other things the work of the ERRC resulted in the adoption of a new educational structure whose implementation began in September, 2007

- Two years of Kindergarten
- Six years Primary education
- Three years of Junior High School (JHS)
- Four years of Senior High School (SHS)

The key points in the 2007 structure include the mainstreaming of early care and childhood education (kindergarten) into basic education, increasing the duration of upper secondary by an additional year which was largely due to calls to increase the duration to give students, particularly those in the rural schools more time to complete the syllabus and prepare for the SSSCE (now West African Senior Secondary Certificate Examination [WASSCE]). In essence, the 2007 reforms also altered the duration of pre-university education again from 12 to 15 years. The extra year added to the duration of upper secondary, coupled with the overhaul of the curricula meant a delay in the supply of textbooks and syllabi as well as inadequate physical infrastructure in the schools to accommodate the increase in enrolment due to the shortness of the period of transition from the old to the new structure. Rural, resource-poor schools and students were the hardest hit by those glitches.



Following the exit of the NPP Government which sponsored the 2007 reforms after the general elections in 2008, the successor government of the National Democratic Congress (NDC) reverted the duration of the upper secondary back to the three years barely three years into the implementation of the four-year structure when it had not even run one full cycle.

The 1987 reforms which decreased the duration of pre-university education by five years and also saw the number of public upper secondary schools double without commensurate expansion public of higher education institutions (HEIs) made university admissions in Ghana overly competitive, leaving applicants from the rural schools with a slimmer chance of entry. The lack of expansion of physical infrastructure as well as inadequate academic staff resulted in overcrowding of lecture halls, libraries, residential facilities and poor student-teacher ratios with its attendant effect on the quality of university education.

Similarly, the recent alterations to the duration of SHS education would mean that two streams of students in each school (the last batch of the four-year SHS and the first batch of the 'new' three-year SHS) would be sitting for the WASSCE at the same time in 2013. The immediate upshot of this situation is that graduates from the two streams would be competing for the limited admission slots in the universities on extremely high admission grade 'cut-off' points, a situation which has historically not favoured students from the rural schools who often end up with poor grades for obvious reasons. It will potentially create a backlog of applicants which will take a number of admission cycles to clear.

## School-leaving Examinations and Selection for Higher Education

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As noted earlier, the point of departure of this paper is that the spectacle of unequal access to HE has its roots in the lower levels of education and strongly influenced by certain pre-determined circumstances at birth such as family wealth, gender and place of origin (UNESCO, 2010; Weisskopf, 2006; World Bank, 2006). Indeed for children from advantaged origins, HE begins even before kindergarten (McDonnough and Fann, 2007, p.60). Reflecting on the Ghanaian context, Addae-Mensah (2000) aptly sums up this view:

In the system of education that has operated in Ghana for several years, a good primary education has ensured entry into a good secondary education. A good secondary education has in turn assured a person the opportunity to proceed to the tertiary level, including university or other higher institution, and thence to a lucrative and highly respectable status in society. (p.6)

It is at the level of HE, that this inequality is aggregated and made more visible. It is therefore crucial to investigate the goings-on at the lower levels for a better appreciation of the phenomenon.

Students in Ghana sit for two national, externally administered school-leaving examinations at the pre-university level. Students completing the lower secondary education (JHS) take the BECE which will qualify them for placement in upper secondary (SHS). Admission into the SHS is based on scores obtained by the candidate in the BECE which will determine whether or not the candidate will be placed in their first-choice school. A computerised school selection and placement system (CSSPS) was adopted in 2004 to facilitate the placement and reduce alleged corrupt practices of some parents influencing heads of the elite schools for placement of their wards. Since 2009, candidates compete for admission places declared by the schools annually on the basis of their cumulative raw scores obtained in five best subjects (four core subjects-English Language, Mathematics, Integrated Science and Social Studies, and any other elective subject) from the BECE. Applicants to the SHS have six school choices from a list of all the SHS ranked and categorised by the GES based on the school's geographical location, subjects offered and availability of facilities.

The undue emphasis on academic merit measured by scores obtained at the BECE for placement in SHS gives the better prepared urban students an edge over their counterparts from the rural schools where teaching and learning facilities are in a poor shape and well-trained teachers lacking. Since the school-leaving exam does not differentiate the rural, often ill-prepared student from the urban, the former stands the least chance in enrolling in the so-called well-endowed SHS. At the basic level of education in Ghana, private provision is deemed to be of a better quality than the public where there is often times overcrowding, inadequate teaching and learning facilities and poor pupil-teacher ratios. A recent World Bank report corroborates this:

Transition throughout primary levels and ultimately completion of the primary cycle has not improved over time and has even gotten worse since the introduction of the capitation grant, suggesting the grants have not been large enough to cover the costs of educating ever-growing numbers of pupils, not to mention to improve quality and implement measures (like smaller classes, tutoring, etc.) to improve transition and completion. (World Bank, 2010, p.17)

The average Ghanaian parent, these days would therefore pay any fees so long as they can afford, to enrol their ward in the best basic school since advancing to an elite SHS is almost guaranteed. Not surprisingly, the enrolment of 22% of primary students in Ghana in private schools outstrips by a significant margin the average of 8% for sub-Saharan Africa (SSA) [ibid.].

As indicated elsewhere, graduating students from the SHS take the WASSCE, a regional examination for the former British West African colonies (Ghana [then Gold Coast], Nigeria, The Gambia and Sierra Leone) independently conducted by the West African Examinations Council (WAEC) after the three/four-year upper secondary education. The SSSCE which was phased out in 2007 was national in outlook and conducted by WAEC for only upper secondary students in Ghana. The situation at the SHS is no different from what pertains at the JHS in regard to the status of the schools. There is a substantial resource gap between schools in the urban centres and the rural areas, especially the Community Day Schools established in the

1990s. The urban, well-endowed schools enrol students with the most competitive grades from the BECE and vice-versa.

Like the SHS level, admissions into the HEIs is based purely on academic merit using applicants scores from the one-shot WASSCE which does not differentiate between test-takers from the well-endowed schools and the less-endowed. Applicants to the public universities compete for admission slots in the various academic programmes based on the vacancies available where a cut-off grade point which varies year-on-year depending on the volume of applications determines who gets access. Although the minimum entry requirement for university entrance is set by the Vice-Chancellors, Ghana and reviewed periodically, each university is free to set its own admission criteria within that frame. The stiff competition for places ensures that a handful of applicants get admission on the basis of the minimum entry requirement. At the University of Ghana (UG) -- the premier university, the minimum entry requirement is a cumulative grade point of 24 (36 from 2012/13 academic year). An applicant ought to have obtained Grade A1-C6 (WASSCE) or A-D (SSSCE) in three core subjects (Core Mathematics, English Language, Social Studies and Integrated Science) in addition to credit in three elective subjects to meet the basic entry requirement to be admitted into any of the undergraduate programmes (see *Table 1* for interpretation of grades).

**Table 1: Grading Scale for WASSCE/SSSCE and Weightings for University Admissions**

WASSCE	INTERPRETATION	SSSCE	INTERPRETATION
A1	1 (Excellent)	A	1 (Excellent)
B2	2 (Very Good)	B	2 (Very Good)
B3	3 (Good)	C	3 (Good)
C4	4 (Credit)	D	4 (Credit)
C5	5 (Credit)	E	5 (Pass)
C6	6 (Credit)	F	(Fail)
D7	7 (Pass)		
E8	8 (Pass)		

*Table 2* and *3* show trends in admissions at UG and the Kwame Nkrumah University of Science and Technology (KNUST) which is the country's second oldest and largest public university. It is evident that most of the programmes in the sciences, particularly at KNUST admit applicants with a single-digit cumulative grade point from the WASSCE/SSSCE. For an applicant to be admitted to a programme with a cut-off point of aggregate 06 such as Medicine, Business Administration, Human Biology they must have scored at least Grade A1 in all the six subjects

used for the computation of the cumulative grade point, which is often a ‘mission impossible’ for students from the less-endowed schools.

**Table 2: Cut-off Aggregates for Select Programmes at UG, 2009/10 & 2011/12**

<b>Programme</b>	<b>2009/10</b>	<b>2011/12</b>	<b>Programme</b>	<b>2009/10</b>	<b>2011/12</b>
BSc (Agric.)	20	19	Pharmacy	09	08
Nursing	09	09	BSc (Admin.)	08	06
<b>Engineering</b>					
Computer Engineering	10	12	Biomedical Engineering	11	12
Food Processing	13	14	Agricultural Engineering	14	14
<b>BSc (Science)</b>					
Biological Science	14	12	Mathematical Science	16	18
Physical Science	17	18	Medicine/Surgery	-	06
<b>Bachelor of Arts (BA)</b>					
General Arts background	15	14	Science/Bus./Vocational backgrounds	09	09
BFA (Subject to interview)	21	24			

Source: Author’s construct based on data from UG website 2010 & 2012.

**Table 3: Cut-off Point for Select Programmes at KNUST, 2006/07 & 2011/12**

<b>Programme</b>	<b>2006/07</b>	<b>2011/12</b>	<b>Programme</b>	<b>2006/07</b>	<b>2011/12</b>
Dr. of Optometry	07	06	Pharmacy	07	06
Bachelor of Laws	09	07	Business Admin.	07	07
<b>Bachelor of Arts (BA)</b>					
Economics	10	12	Culture and Tourism	11	15
Publishing Studies	10	10	Sociology & Social Work	16	13
History & Political Studies	12	17/14	BFA Sculpture & Painting	16	24
<b>Bachelor of Science (BSc)</b>					
Actuarial Science	09	07	Electrical Engineering	07	07
Aerospace Engineering	07	07	Petroleum Engineering	08	06
Telecom Eng.	08	07	Development Planning	10	08
Nursing	08	08	Architecture	10	09
Human Biology	06	06	Computer Engineering	09	08
Dental Surgery (BDS)	08	07	Medical Lab Tech.	08	08

Source: Author's construct based on data from KNUST website 2010 & 2012.

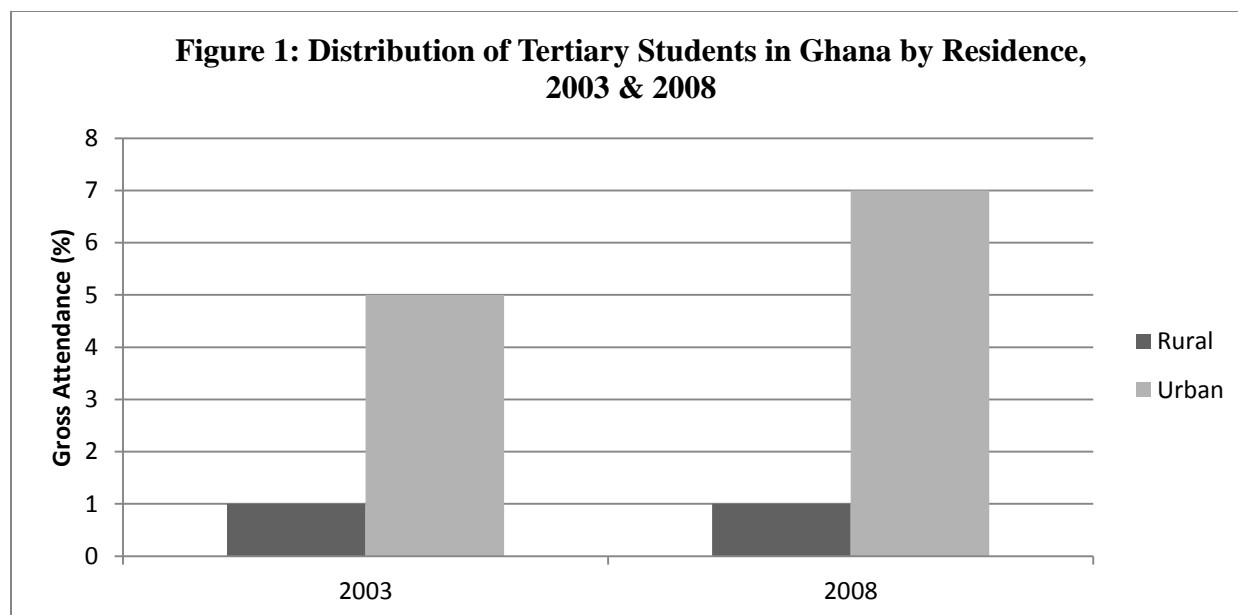
## Equity of Access

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From the foregoing it is apparent that the access playing field is uneven for students from the rural under-developed and under-resourced SHS. Indeed, as of 2000, over 70% of university entrants emerged from just 10% of the 504 upper secondary schools in existence. 50% of the 10% emerged from 4% (18) of all the schools (Addae-Mensah, 2000, p.12).

A survey of 1,500 students from the five oldest public universities further revealed persistent inequality of access. 50% of students emerged from just 29 of all the upper secondary schools in Ghana (Manuh, Budu and Gariba , 2007, p.82; Anyan, 2010). A closer inspection of the situation at the institutional level confirms the earlier findings which is indicative of the maintenance of the status quo. According to 2011 KNUST data, 100 of the over 600 upper secondary schools took up 73% of the entire undergraduate admissions at KNUST in 2008. Of the 100 schools 10 had almost a third (30%) of the admission slots. The domination of a few urban-based, well-endowed schools in admissions to the universities and its resultant stratification of the Ghanaian society is best captured by Addae-Mensah (2000, p.12) "...over 70% of our future doctors, scientists, engineers, architects, pharmacists, agriculturists, and other professionals...will emerge from just about 10% of our schools, with almost 50% of all these categories emerging from less than 4% or only 18 out of our 504 Senior Secondary Schools".

The population of residents in rural and urban Ghana is almost on a par; 51% and 49% respectively (Ghana Statistical Service [GSS], 2012), yet the share of rural residents in the distribution of HE opportunities is far from equitable as depicted by Figure 1. While urban students have increased their share in half a decade by a substantial margin, their rural counterparts have remained at the same level. Data from the MOE put the stock of all upper secondary in Ghana as of the 2008/09 academic year at 669 comprising 492 public and 177 private. Of the 492 public SHS, 253 (51%) were classified as urban-based and 239 (49%) as rural. With approximately the same number of schools in the urban and rural areas it is extremely difficult to justify the disproportionate share of urban dwellers in the distribution of HE opportunities.



Source: Author’s construct based on World Bank, 2012 data.

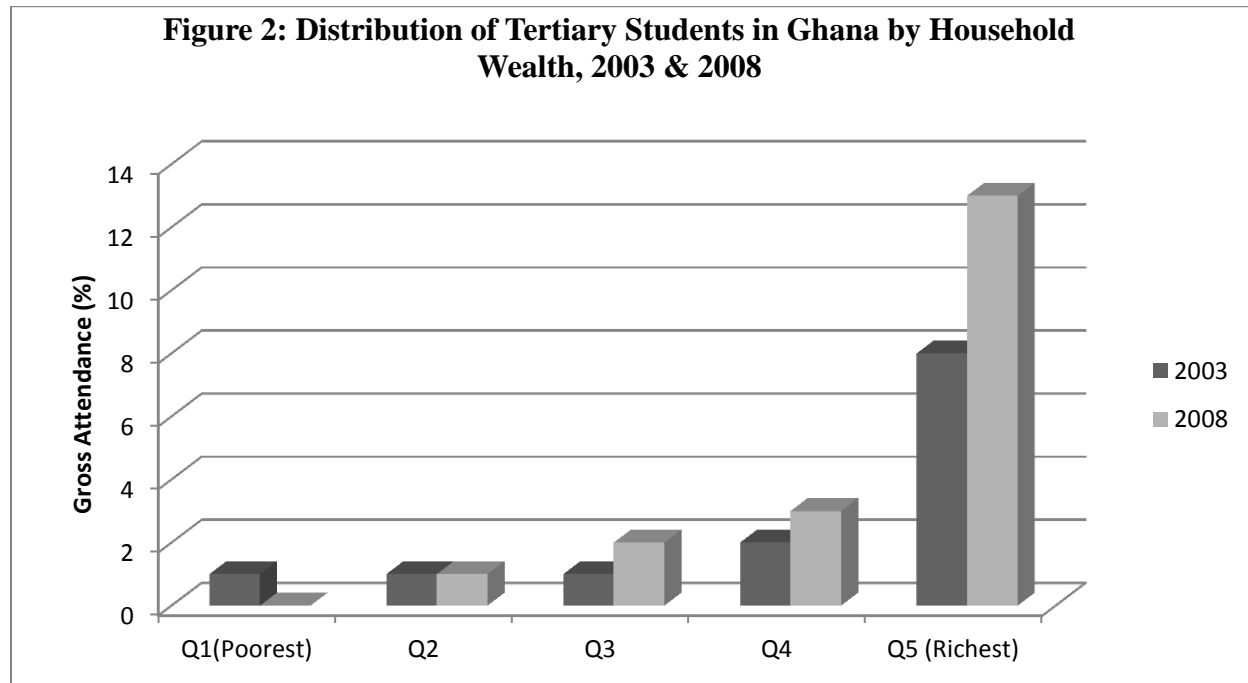
## Higher Education and Socio-Economic Mobility

The evidence that HE confers both monetary and non-monetary benefits on individuals and society at large remains irrefutable. In fact, a recent Organisation for Economic Cooperation and Development (OECD) study indicates that across the 25 OECD countries, the long-term economic advantage of obtaining a tertiary degree instead of an upper secondary education is on average over US\$ 175,000 for a man and US\$ 110,000 for a woman while taxpayers recoup over US\$ 91,000 and US\$ 55,000 on investments on a man and woman respectively (OECD, 2012, p. 1). The report therefore concludes that “the long-term economic benefits of investing in higher education have been good both for individuals and countries – and will probably remain so in the future, as long as societies need more high-level skills”(ibid. p.4). For a developing country like Ghana with a tertiary attainment rate of 7.8% for those aged 15years and above (GSS, 2012, p.61), the long-term returns can be higher for both individuals and society holding all other factors constant.

An equitable access to HE coupled with strategies for retention and success, particularly for the poor and first-generation students can thus be a powerful tool for improving life chances and upward socio-economic mobility for the historically marginalised segments of the Ghanaian society. This should help reduce the income gaps between the rich and the poor, breaking the vicious cycle of poverty. HE is undoubtedly gate-keeper for entry to managerial and professional positions in the labour market (Shavit, Arum and Gamoran, 2010). “Equitable access to quality learning contributes significantly to the development of national human resources, promotes

social justice and cohesion, enhances personal development, employability and, in general, facilitates sustainable development” ( International Association of Universities [IAU], 2008, p.1).

Conversely, skewed distribution of HE opportunities deepens further the stratification of society, perpetuates a vicious cycle of poverty for the poor and a virtuous cycle of prosperity for the rich. As *Figure 2* illustrates, the share of the poorest 20% of the Ghanaian population of the HE pie has worsened in the last five years for which data are available.



Source: Author’s construct based on World Bank, 2012 data.

## Conclusion

This paper sought to examine barriers to accessing HE in Ghana from the standpoint of status differentiation in upper secondary (the less-endowed and well-endowed divide) and how it impacts on access to HE for students from the rural less-endowed schools in a system which places greater emphasis on academic merit through school-leaving examinations for entrance into the HEIs. Although some of the universities like UG, KNUST have identified the issue of unequal access for students from the rural schools and have put in place some positive discriminatory measures to counter the situation, the move only represents an attempt to deal with the symptoms of the malady than tackling the issue from the roots. Ultimately, the onus rests on government to bridge the resource gap between the urban-based and rural schools to enable students from the latter category, to a large extent, compete on equal terms with the former.



Closing the gap between the urban rich and rural poor in regard to access and instituting measures for the retention and success of the latter should be mutually beneficial for both individuals and the larger society.

**Notes:**

<sup>1</sup> Higher education in this context refers to universities and polytechnics while tertiary education is reserved for all post-secondary institutions. The two terms are however used interchangeably as and when necessary.

<sup>2</sup> The Education Ministry in Ghana has been renamed a number of times a by successive governments. In this paper therefore, MOE, MOES, MOESS, MOEYS refer to the same entity.

## References

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- Addae-Mensah, I. (2000) *Education in Ghana: A Tool for Social Mobility or Social Stratification?* Accra: Ghana Academy of Arts and Sciences.
- Ansa, A. (1996) *Socio-economic Development Strategies of Independent Countries: The Ghanaian Experience*. Accra: Ghana Universities Press.
- Anyan, J. (2010) 'Higher Education' in *Education in Ghana, Improving Equity, Efficiency and Accountability of Education Service Delivery*. AFTED, Africa Region, World Bank Report No. 59755-GH. Washington DC: The World Bank.
- GSS (2012) *2010 Population and Housing Census: Summary Report of Final Results*. Accra: GSS.
- IAU (2008) 'Equitable Access, Success and Quality in Higher Education: A policy Statement by the IAU'. Retrieved from [http://www.iau-aiu.net/access\\_he/pdf/Access\\_Statement\\_July\\_2008.pdf](http://www.iau-aiu.net/access_he/pdf/Access_Statement_July_2008.pdf) [24 June 2010].
- KNUST (n.d.) *Admission Requirements for Candidates*. [online] Retrieved from <http://www.knust.edu.gh/downloads/14/14024.pdf> [29 October 2010].
- KNUST (2012) *Cut-off Points (2011/2012 Undergrad. Entry)*. [online] Retrieved from <http://www.knust.edu.gh/pages/sections.php?siteid=admissions&mid=451&sid=2681> [16 June 2012].
- Manuh, T., Gariba, S. and Budu J. (2007) *Change and Transformation in Ghana's Publicly Funded Universities: A Study of Experiences, Lessons & Opportunities*. Oxford: James Curry Ltd., Accra: Woeli Publishing Services.
- McDonough, P.M. and Fann, A. (2007) 'The Study of Inequality' in P.J.Gumport (ed.) *Sociology of Higher Education: Contributions and their contexts*. Baltimore: John Hopkins University Press.
- MOE (2002) *Education Sector Review (ESR): Final Team Synthesis Report*. Accra: MOE.
- MOESS (2007) *Levels of Education*. [online] Retrieved from [http://www.edughana.net/history\\_reforms1980.htm](http://www.edughana.net/history_reforms1980.htm) [28 August 2007].
- MOEYS (2004) *White Paper on the Report of the Education Reform Review Committee*. Accra: MOEYS.
- OECD (2012) 'What are the Returns on Higher Education for Individuals and Countries?' *Education Indicators in Focus-2012/06* (June): 1-4.
- Office of the United Nations High Commissioner for Human Rights (2012)

*International Covenant on Economic, Social and Cultural Rights*. [online]  
Retrieved from <http://www2.ohchr.org/english/law/cescr.htm#art13> [27 August 2012].

Republic of Ghana (2005) *1992 Constitution of the Republic of Ghana*. Accra: Ministry of Justice/ Allshore Co.

Shavit, Y., Arum, R. and Gamoran, A. (eds) (2010) *Stratification in Higher Education: A Comparative Study*. Stanford: Stanford University Press.

UG (2012) 'General Admission Requirements and Procedures'. Retrieved from <http://admission.ug.edu.gh/docs/GeneralAdmissionRequirements&Procedures.pdf> [11 June 2012].

UN (2012) *United Nations Treaty Collection*. [online] Retrieved from [http://treaties.un.org/Pages/ViewDetails.aspx?chapter=4&lang=en&mtdsg\\_no=IV](http://treaties.un.org/Pages/ViewDetails.aspx?chapter=4&lang=en&mtdsg_no=IV) [27 August 2012].

UNESCO (2010) *EFA Global Monitoring Report 2010: Reaching the Marginalised*. Paris: UNESCO.

Weisskopf, T.E.(2006) 'Affirmative Action in Higher Education. *Seminar*,569, January: 1-7.

World Bank (2006) *Equity and Development*. World Development Report. Washington D.C: The World Bank.

World Bank (2010) *Education in Ghana, Improving Equity, Efficiency and Accountability of Education Service Delivery*. AFTED, Africa Region, World Bank Report No. 59755-GH. Washington DC: The World Bank.



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