

**Comparative Analysis of Next Generation of
Academics Indicators**

DRAFT

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INTRODUCTION

While academic staff recruitment and retention remains a challenge across the globe, the situation in many African countries appears to be particularly strident. University leaders on the continent acknowledge the devastating impact of staff shortage on the mission of institutions of higher education and warn that if something is not done very soon to address the problem, the African academy will not only lose its ability to produce the requisite number of personnel to support the countries' human resource needs, but the quality of intellectual life will continue to erode. As noted recently by Akilagpa Sawyerr, the immediate past Secretary General of the Association of African Universities, "the most significant human element is absence of sufficient highly qualified academics. A 'pandemic of enrolment explosion' had taken place in recent years without commensurate growth in faculty numbers. Sawyerr told a conference in Dublin City University in 2008 that one consequence, for instance, was that for the first time teaching positions in the University of Dar es Salaam were being filled by staff with only a bachelor's degree" (Walsh, 2008).

It is in the context of the preceding concerns that this report seeks to analyze the staffing situation in various universities that are members of the Partnership for Higher Education in Africa. The purpose is not only to ascertain the extent of the problem in these institutions, but also to examine their ability to develop the next generation of academics in order to combat the decline. Furthermore, the report hopes to provide a concrete context for discussions about what can be done to ensure the regeneration of academic staff capacity and, by extension, intellectual life that will enable these institutions to discharge their mandates with the requisite levels of quality.

STUDENT ENROLMENT

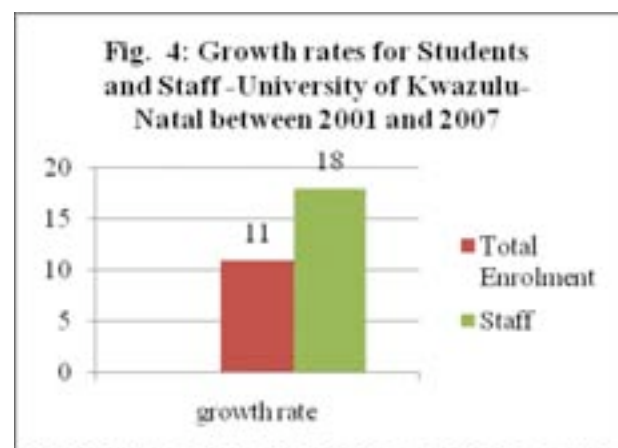
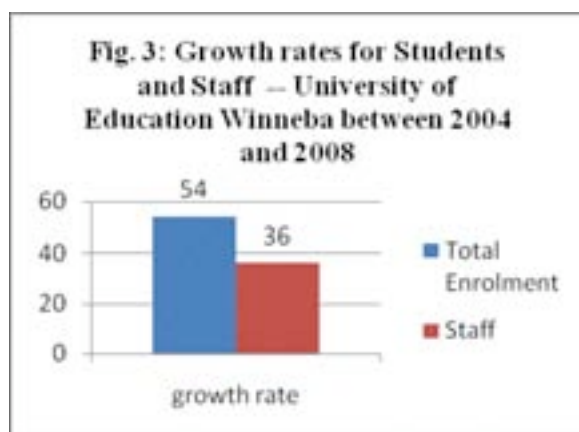
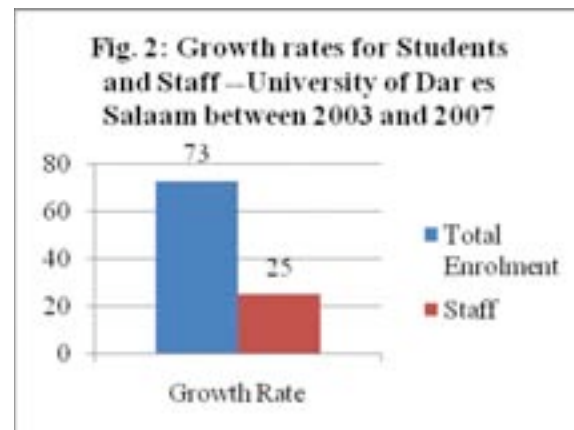
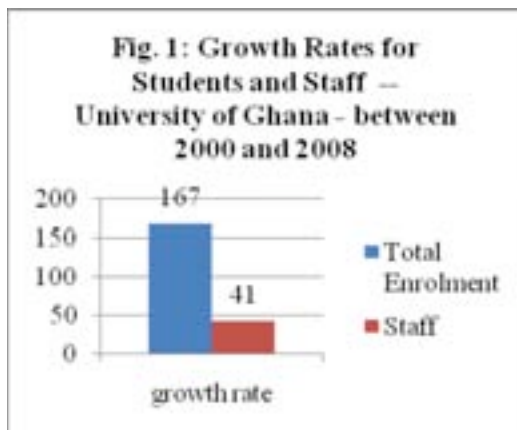
Over the last decade, student enrolment in African universities has grown by significant amounts to absorb the increasing demand on higher education. According to UNESCO's *Education for All Global Monitoring Report 2008*, "participation rates are rising and there was a dramatic hike in student numbers in Sub-Saharan Africa in the six years to 2005: from 2.1 to 3.5 million. Mauritius has the highest gross enrolment ratio in the region, 17%, followed by South Africa, while Nigeria's tertiary student numbers nearly doubled to 1.3 million during the six-year period" (MacGregor, 2008).

These developments are reflected in preliminary data captured in Table 1. Enrolments at Stellenbosch University, for example, jumped from 20,421, in 2000, to 23,439, in 2007 – an increase of over 15% in 7 years. Makerere University saw a four-year increase of 22% from 27,420, to 33,488, between the 2002 and 2007. The statistics for the University of Dar es Salaam (UDSM) are even more striking, as student numbers exploded by 73%, from 8,439, in 2003, to 14,637, in 2007. The growth rate for the University of Ghana, between 2000 and 2008 was an astronomical 167%. The only institutions that registered negative growth in student numbers (for the period between 2000 and 2008, for which data is available) were the University of Ibadan (-21% between 2001 and 2006) and Nelson Mandela Metropolitan University (-2% between 2005 and 2006).

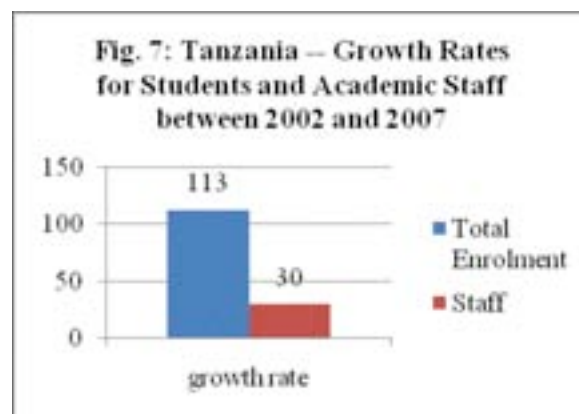
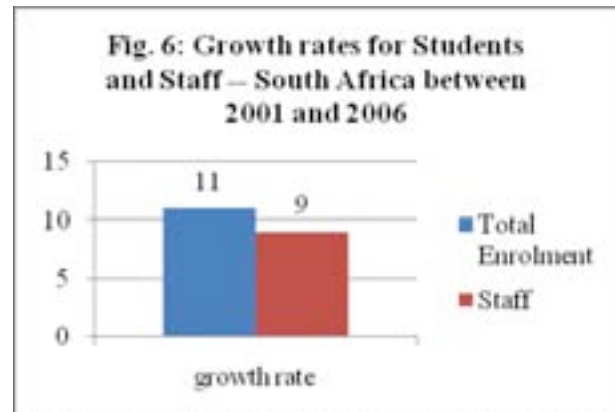
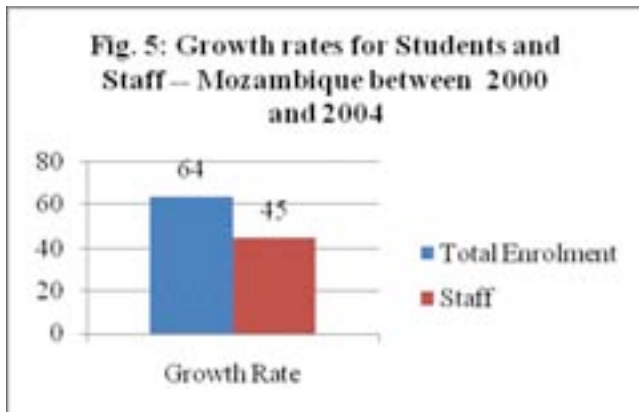
Comparison of enrolment figures at the national level indicates trends, similar to the general picture for institutions. In Kenya, for example, enrolment expanded significantly from 59,195, in 2001, to 91,541, in 2005 -- a growth rate of 55% (see Table 2). Table 2 also shows huge jumps in annual enrolment growth in Uganda between 2000 and 2006, where the number of students registered in universities and colleges expanded by 54% from 60,000 to 92,605. In Mozambique and Tanzania, the respective growth rates were 64% between 2000 and 2004, and 173 between 2002 and 2007 (Table 2).

STUDENT AND STAFF GROWTH

The pressure of enrolment growth on the capacity of universities to provide quality education is, undoubtedly, dire, especially as there is no commensurate expansion in academic staff numbers in most institutions. It is clear that total academic staff growth has generally lagged behind student enrolment growth (see figs. 1-7). Thus, while student numbers at the University of Ghana went up by 167%, between 2000 and 2008, staff numbers only went up by 41% (fig. 1). At UDSM, student numbers grew by 73% between 2003 and 2007, compared to a 25% growth in staff numbers (fig. 3). The only exception to the general trend was at Nelson Mandela Metropolitan University where staff growth outstripped student growth between 2001 and 2007 (fig. 4).



National level data reflects the general trend found in institutions, as illustrated by Mozambique, South Africa, and Tanzania (figs. 5-7).



Student-Staff Ratios

Table 12 shows that the student-staff ratios in various countries have generally gone up over the years. In Mozambique, the ratio increased from 26:1 in 2000 to 32:1 in 2004 (fig. 12). The comparative ratio for South Africa is 45:1, in 2001, and 46:1 in 2006 (fig. 13). In Tanzania, the ratio went from 15:1 in 2003 to 24:1 in 2007 (fig. 14).

There were variations, however, at the institutional level. For example, Student-staff ratios increased at the University of Ghana (fig. 8) and Stellenbosch University (fig. 9), decreased at the University of Cape Town (fig. 10), and remained constant at the University of Ibadan (fig. 11). Table 11 and 12 show the ratios for several institutions and countries. In 2008, the ratio at the University of Education was 47:1 while the figure for Ghana was 39:1 in 2007. Nigeria had a student-staff ratio of 40:1 in 2007 whereas South Africa's was 46:1 in 2006.

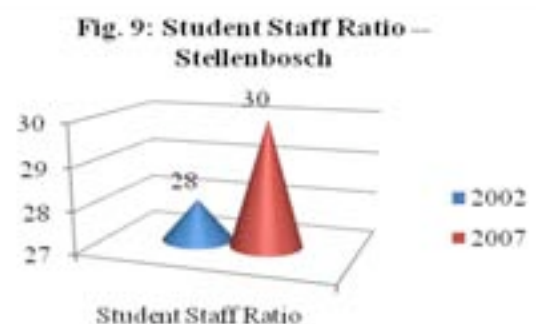


Fig. 10: Student Staff Ratio – University of Cape Town

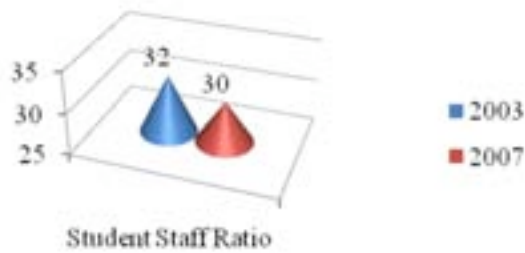


Fig. 11: Student Staff Ratio – University of Ibadan



Fig. 12: Student Staff Ratio – Mozambique

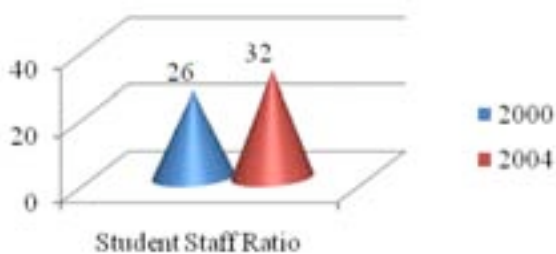


Fig. 13: Student Staff Ratio – South Africa

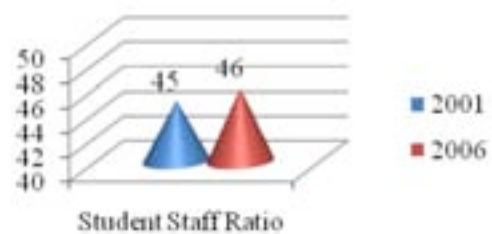
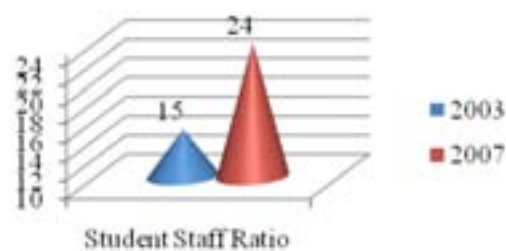


Fig. 14: Student Staff Ratio – Tanzania



Incommensurate staff and student growth rates, as well as high and increasing student-staff ratios put a tremendous burden on academic staff, a factor that has been noted to discourage people from entering the academy, thereby creating a vicious cycle. It must be pointed out that institutional and national ratios tend to belie the fact that there are variations across institutions, faculties and disciplines and so the problem may be more serious in some units (see Institutional Profiles).

The student-staff ratios provided in fig. 11, above, for the University of Ibadan may give the impression of a very positive situation, but such an impression will not take cognizance of other developments. This is because the steady ratio has been achieved

as a result of the university authorities refusing to expand intake in the context of crumbling infrastructure, dwindling staff numbers, and inadequate budgetary support from government. In fact, what has happened is a reduction in student numbers over several years (see Institutional Profile), as authorities at the institution strive to maintain a modicum of quality education. The University of Ghana (UG) made a similar decision in 2006.

While the strategy of reducing, or freezing, enrolment might help address the needs of specific institutions at particular moments, the implications at the national level are, obviously, portentous. This is because, notwithstanding the expansion in the number of students attending Africa's institutions of higher education, the enrolment ratios on the continent are significantly lower than that of any other region of the world, with only one out of 20 young Africans having the opportunity to pursue tertiary education (UNESCO, 2008). With increasing demand for tertiary education and the need for requisite human resources, for socio-economic development at home and global competitiveness in a variety of areas, reductions in intake will be a disaster over the medium- to long-term.

However, the ability of existing or new institutions to absorb the increasing numbers will depend, to a very large extent on an adequate pool of instructors, something that is not available in Africa countries. Julius Okojie, Executive Secretary of Nigeria's National Universities Commission (NUC), lamented recently that "universities in Nigeria lack the needed qualified manpower [sic] to steer the academic system to a level where they could produce quality graduates" (This Day, 2008).

Postgraduate Enrolment

Postgraduate students constitute the pool from which the next generation of academics will be drawn. It is important, therefore, to evaluate not only their overall numbers but, more critically, how many of them are registered at levels that are necessary to ensure a high caliber future professoriate, i.e., Masters and doctoral levels. While it is encouraging that most institutions have seen an increase in the proportion of postgraduate students, relative to undergraduates, the trend in others is toward a reduction in that proportion (see Table 1). For example, the University of Ibadan has increased the percentage of postgraduate students from 18% of the total student population in 2001 to 35% in 2006 (fig. 15), whereas the University of Ghana has seen a 50% reduction in that proportion from 14% in 2000 to 7% in 2008 (fig. 16). The University of KwaZulu-Natal also saw a drop in the proportion of postgraduates from 32% in 2000 to 26% in 2007 (fig. 17).

Fig. 15: Postgraduates as a Proportion of Total Enrolments – University of Ibadan (2001 and 2006)

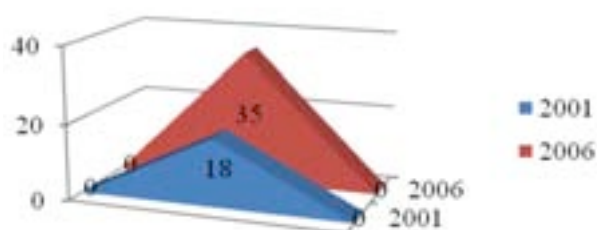
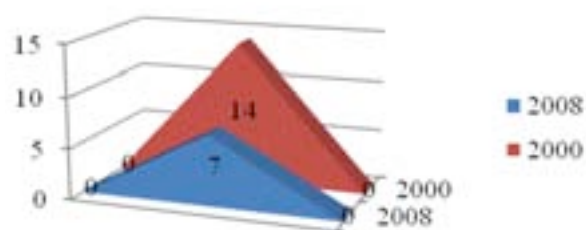
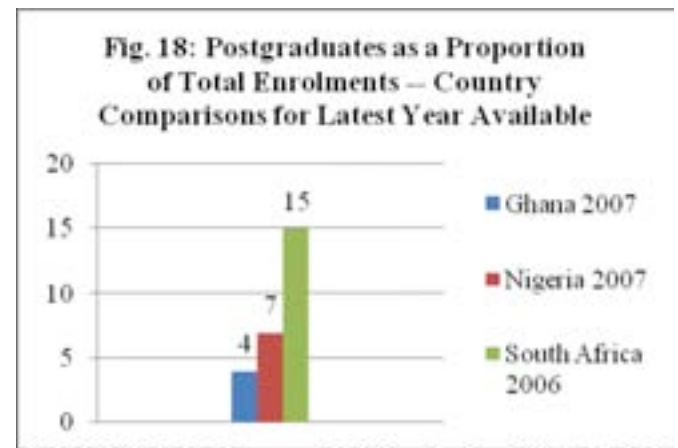
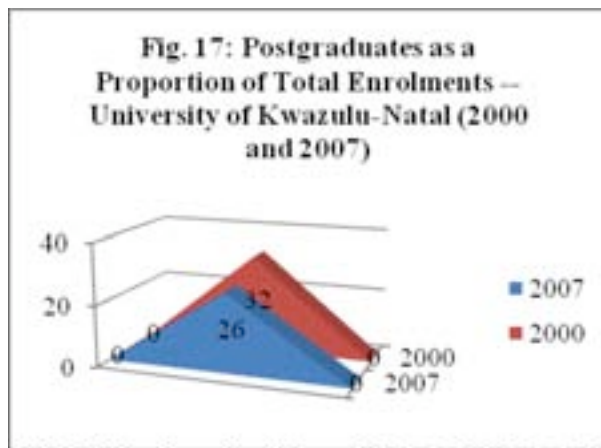


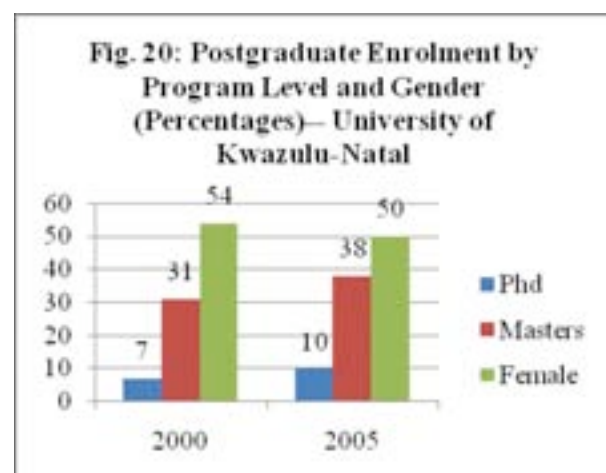
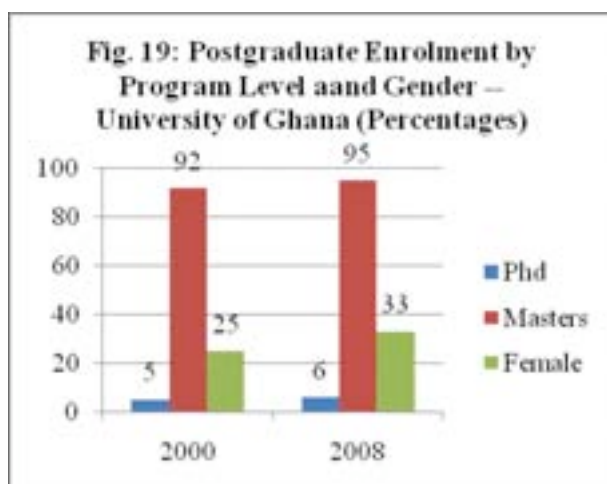
Fig. 16: Postgraduates as a Proportion of Total Enrolment – University of Ghana (2000 and 2008)

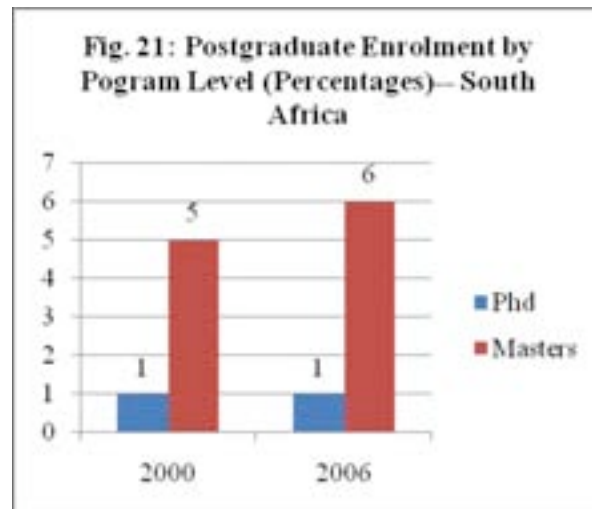




The proportion of postgraduates across various countries was generally low -- with Ghana, Nigeria and South Africa showing figures of 4%, 7% and 15%, respectively (fig. 18).

When postgraduate students are disaggregated according to masters and doctoral enrollees, an instructive picture emerges. Only 5% of postgraduate students at the University of Ghana were enrolled in doctoral programs in 2000, with their numbers increasing marginally to 6% in 2008 (fig. 19). The proportions for the University of KwaZulu-Natal were 7% and 10% in 2000 and 2005, respectively (fig. 20). National data for South Africa shows that only 1% of postgraduate enrolments were at the doctoral level in 2000 and 2006 (fig. 21). Table 3 shows that Masters enrolments have increased over the years. However, as data from South African universities show (Table 3), the combined proportion of masters and doctoral enrollees make it clear that the percentage of postgraduate students constituting the potential pool from which to generate the next generation of academics is still very limited. They constitute less than half of the total postgraduate student complement at the University of KwaZulu-Natal, and less than 2/3 at Nelson Mandela University and the University of Cape Town. Their proportions are higher at Witwatersrand where they make up around 3/4 of the postgraduate complement.





Another important consideration, beyond the level at which students are enrolled, is the programs in which they are enrolled. The kinds of programs in which students are enrolled provide a good indication of whether graduates are likely to complement the existing pool of the professoriate in the future. The institutional profiles show that the majority of postgraduate students are pursuing programs at levels, and in fields, that are meant to provide them with opportunities for career advancement outside of the academy, with little potential to regenerate the professoriate by a significant factor. A significant number of postgraduate enrolments, over the past decade, has, for example, been in professional business and management programs (eg. MBA).

Postgraduate Enrolment by Gender

Available data show that postgraduate enrolments are dominated by males, even though South African institutions are closer to parity. At the University of Ghana, females made up 25% of postgraduate enrolments in 2000, growing to 33% in 2008 (fig. 19). The University of KwaZulu-Natal saw a reduction in the proportion of postgraduate females, between 2000 and 2005, from 54% in 50% (fig. 20). Hopefully, the UKZN trend will recover upwards, instead of going further down. Any hope of increasing the low proportion of females in the academy has to start with efforts at improving their numbers in postgraduate programs.

Post-Graduate Completion and Drop-Out Rates

While postgraduate enrolments are a useful proxy for determining the potential pool of future academics, an even more crucial determinant is the percentage of those enrollees who complete their programs. While we do not have data for all the institutions and countries studied, the following illustration from the University of KwaZulu-Natal is instructive in alerting us to the need for such data and its importance for any strategic plans at growing the number of future academics.

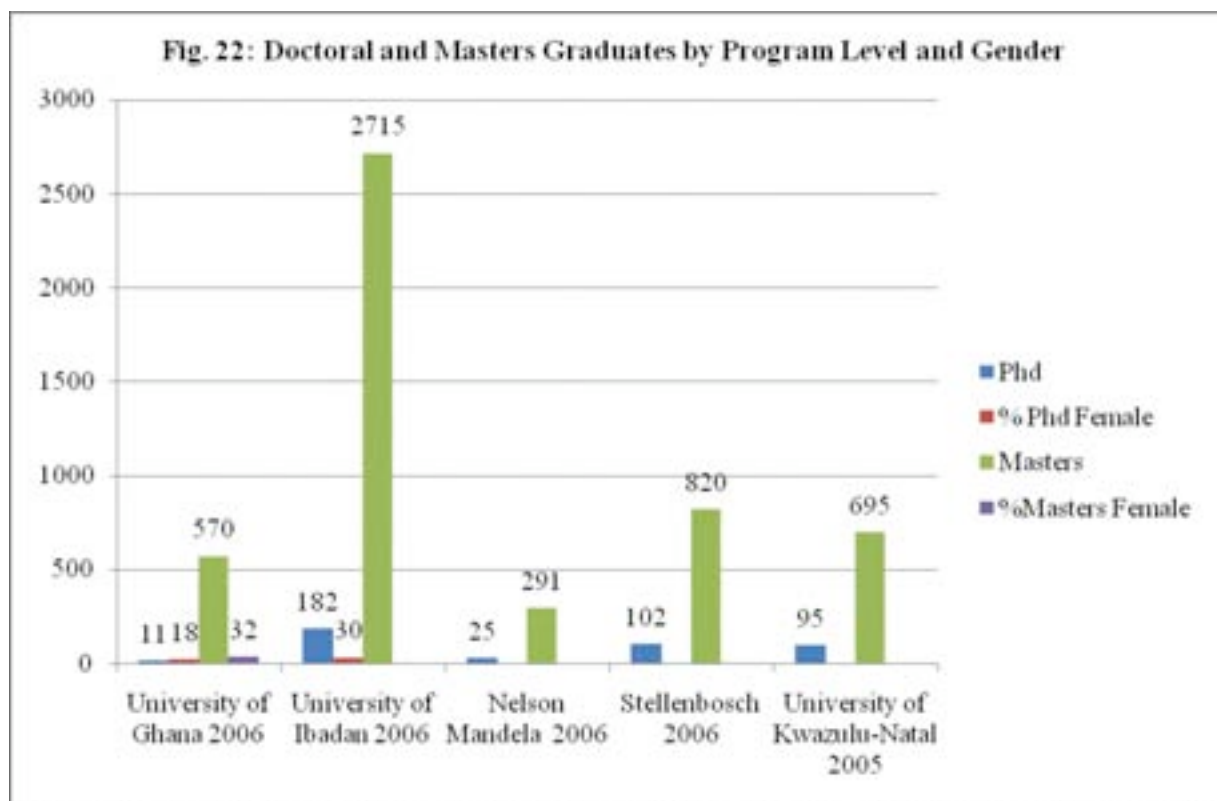
In the Faculty of Health Sciences, at UKZN, the average drop-out rates for thesis-based Masters students, for 2000-2006, was about 56% while the corresponding

figure for their doctoral counterparts was about 35% (Table 22). With more than half of Masters students and over a third of doctoral students dropping out of their programs (Fig. 48), the potential pool of the next generation of academics is significantly impacted in a negative direction.

The statistics are even more worrisome when the related indicator of completion rates is assessed. The rates for thesis-based masters and doctoral students average about 11% and 10% , respectively, for the 2000-2006 period (Table 50). With only a tenth of these cohorts graduating (Table 23), there is obviously a huge disconnect between intake and output, with serious implications for replenishing the professoriate with requisite numbers and appropriate levels of training.

Postgraduates with Masters and Doctoral Degrees

While enrolment figures are useful in telling us about the potential pool from which we can draw future academics, they do not provide good insights into how many bodies are actually qualified and available to fill places in the academy.



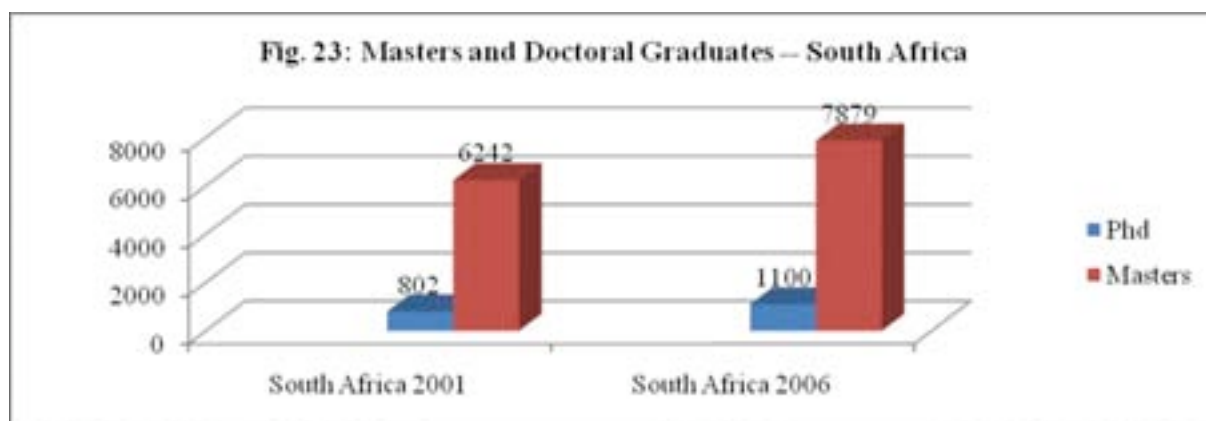


Fig. 22 shows the number of graduates at doctoral and masters levels for several institutions. It illustrates the fact that only 11 of the graduates at the postgraduate level received doctorate degrees at the University of Ghana in 2006. This represents 2% of the graduates (Table 7). Of these, only 18% were female. The number of masters graduates was higher at 570, but only 32% of them were female. Only 30% of the 182 doctoral graduates at the University of Ibadan, in 2006, were female. It is clear that the proportion of doctoral graduates, relative to their masters counterparts, is quite small. Only 6% and 1% of postgraduates from Nelson Mandela Metropolitan University, in 2006, obtained masters degrees and doctoral degrees respectively. The corresponding proportions for Stellenbosch University, in the same year, was 14% and 2% (Table 7). Fig. 23 illustrates the number of doctoral and masters graduates produced by South African institutions in 2001 and 2006. Of the total number of postgraduate degrees given, just a quarter were for masters program and only a mere 1% were for doctoral programs (Table 8).

ACADEMIC STAFF

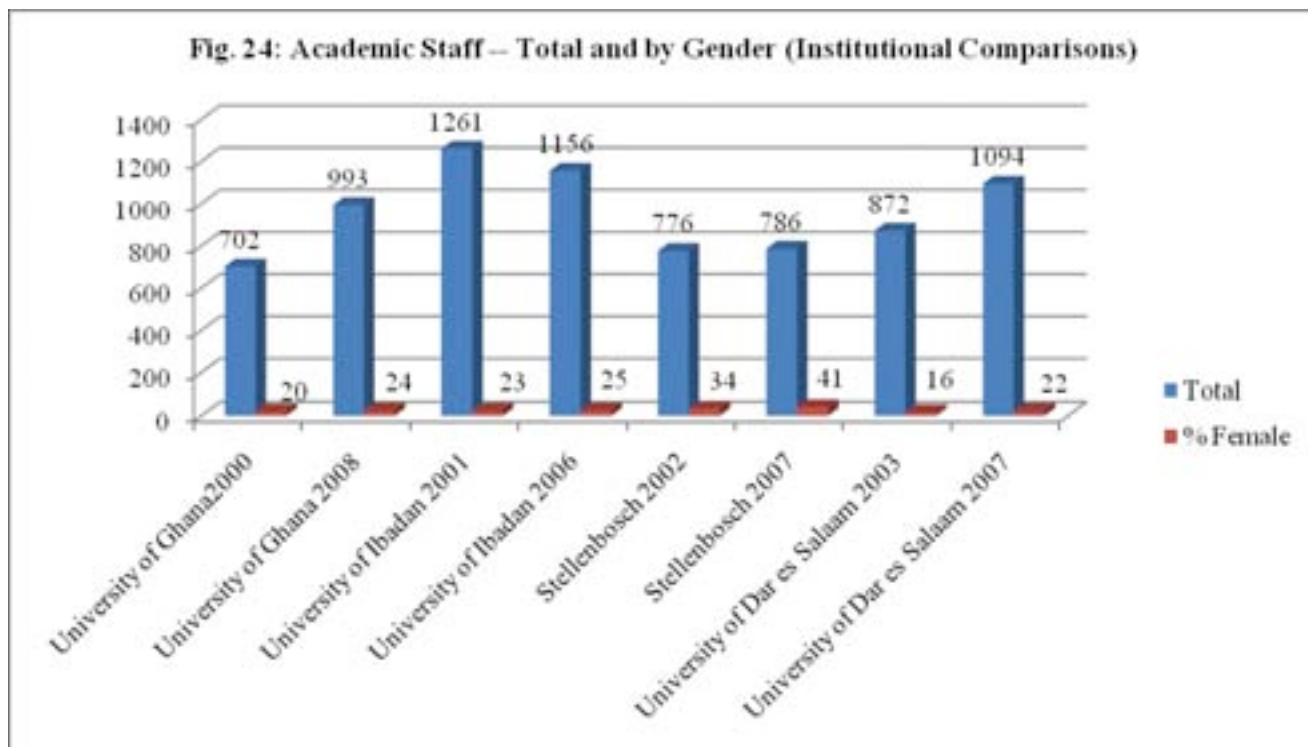
Establishment and Vacancies

The difference between staff establishment and vacancies is a very good indicator of gaps in human resource capacity and the extent to which existing academic staff are able to meet the institution's own assessment of the complement of staff it needs to carry out its research and teaching responsibilities. Unfortunately, while anecdotal evidence from all the institutions suggest that they do not have a full complement of staff needed to carry out their academic missions, we did not get the relevant information except for one institution – Makerere. Many institutions indicated that the establishment levels that they have were put in place many years ago and have not caught up with the reality of rapid growth in student numbers over the last couple of decades. The inability to provide up-to-date figures is another manifestation of the dearth of data collection capacity in African institutions, with negative implications for strategic planning around recruitment and retention of staff.

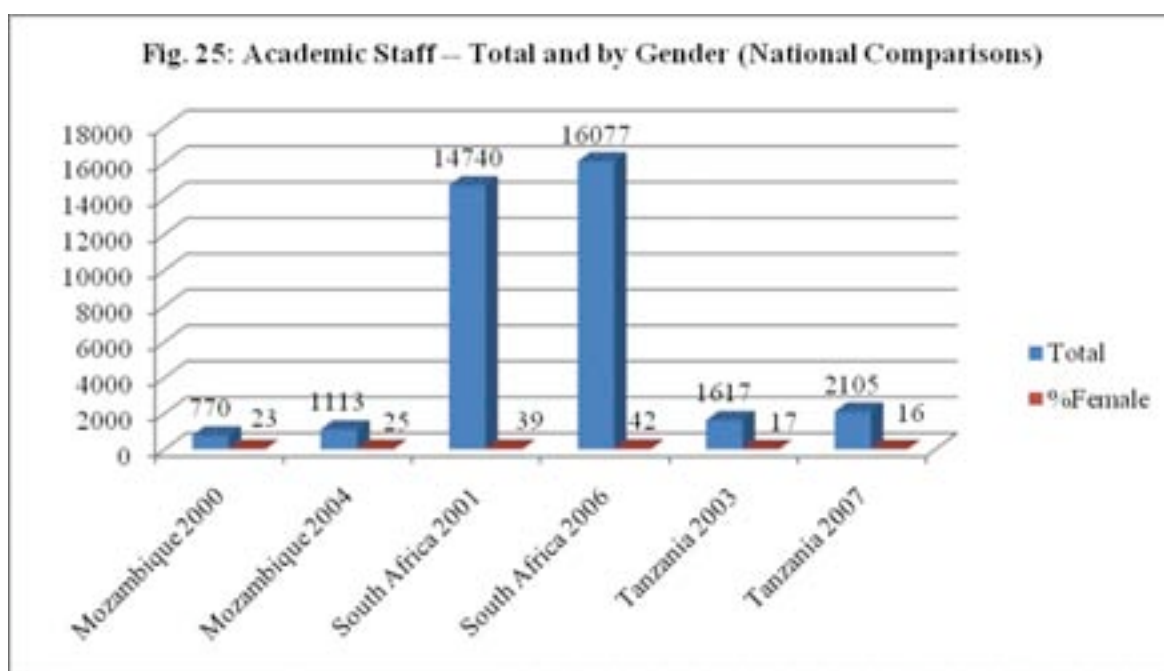
Analysis of the Makerere data is, therefore, based on very conservative numbers. Those numbers are, nevertheless, very significant. The fact that the institution cannot even meet outdated establishment levels says a lot about the depth of the problem. While the establishment for the university in 2004/2005 was 1796, the actual number of staff stood at 1052, showing a deficit of 41%. The deficit is much higher for particular units such as Public Health, Medicine, EASLIS, and Psychology with deficits of 54%, 57%, 62%, and 62%, respectively (See Institutional Profile).

Academic Staff By Gender

One of the gaps that African Universities need to close, as they struggle with staff shortages and think about regenerating the professoriate, is the gender gap. While the proportion of female staff in various institutions has improved over the years, it is clear, from fig. 24, that they still constitute a small fraction of academic staff. At the University of Ghana, they proportions has gone from 20% in 2000 to 24, in 2008. At the University of Ibadan (UI), the respective numbers were 23% and 25% in 2001 and 2006. Stellenbosch University saw a significant jump in female staff proportion, and sat at 41% in 2007. Available national-level data corroborates the evidence from the institutional data (see. fig. 25). Females made up only 23% and 25% of academic staff in Mozambique, in 2000 and 2004 respectively. In Tanzania, the proportions even dropped, from 17% in 2003 to 16% in 2007. The trend in South Africa is very encouraging with the percentage of female staff going up from 39% in 2001 to 42% in 2006.

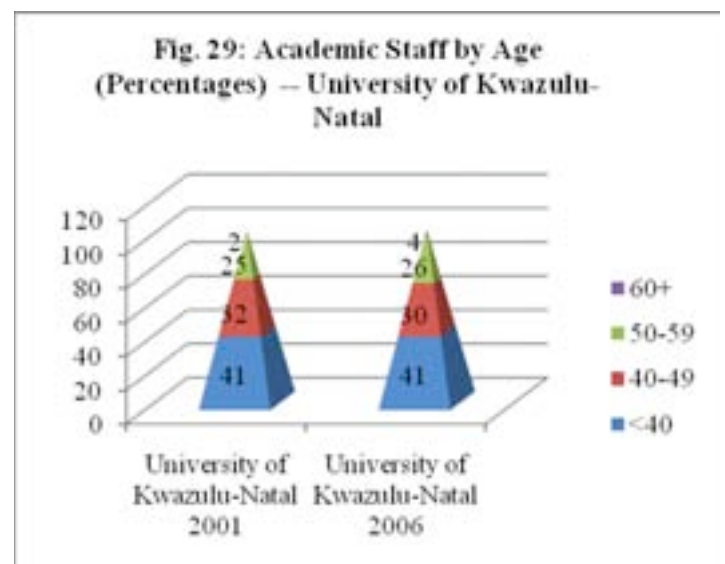
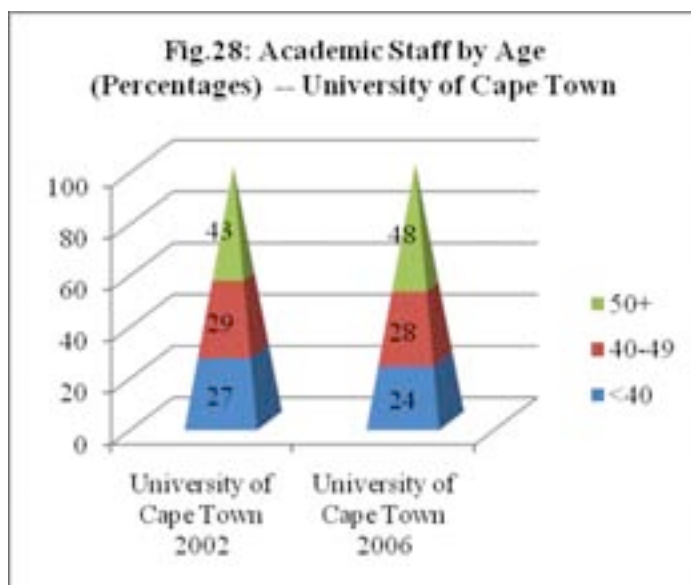
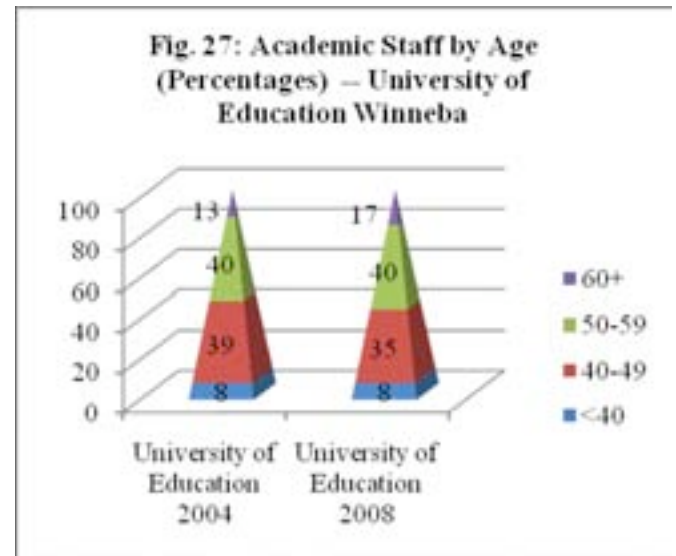
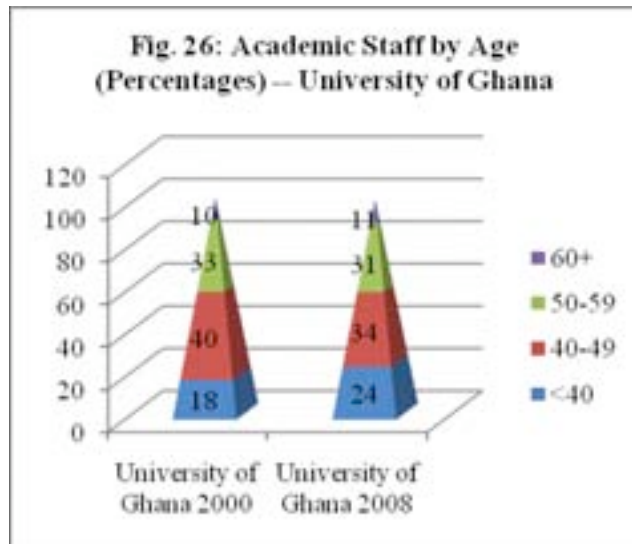


The gender gap is significant for a variety of reasons, not the least of which is the fact that a potential source of academic staff is not being tapped. Some of the reasons for this problem will be discussed later when we address post-graduate student enrolment and A second significance of the gender gap, which is also related to graduate student output, is the fact that there are not enough females in the professoriate to serve as role models who can attract prospective female academics or mentor those already in their institutions. The disparities between male and female staff numbers are brought into sharper relief when we look at certain faculties or fields of study. For example, only 6% of academic staff at both the Business School and the Faculty of Engineering Sciences, at the University of Ghana, are female (University of Ghana Basic Statistics 2006).



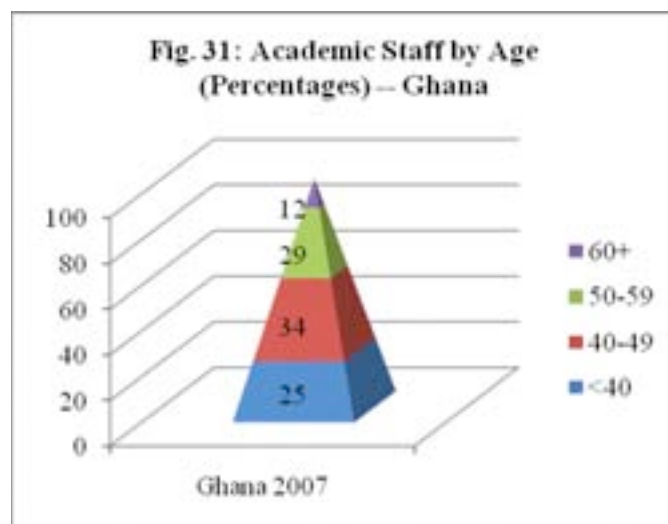
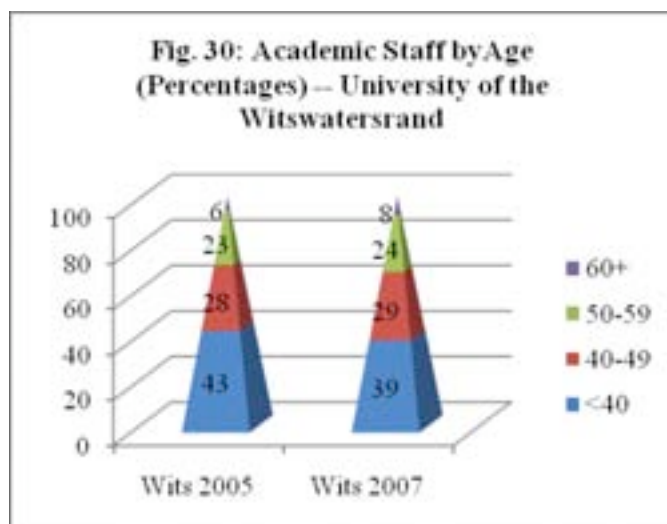
Academic Staff by Age

The urgency of the need for initiatives that help to build the next generation of academics in African universities is made clear by the fact that the current crop is aging very fast, with no commensurate expansion in the numbers of young scholars entering the profession (see Tables 13 and 14). Only 20% of Obafemi Awolowo University's staff in 2006/2007 were 40 years old or younger, compared to 39% over 50 years old. In view of the fact that the retirement age is 60, these figures give cause for concern about the future of the academy. The fact that over 11 percent of staff at OAU, in the two years for which data is available, were past the retirement age just amplifies the extent of the problem. Figs. 26-30 provides illustrations of academic staff by age in various institutions over specific periods. Data for University of Education – Winneba (UEW) is even more disheartening, as only about 8% of staff are under 40 years of age, while a little over 57% were above 50 years of age in 2008 (fig. 27).



The number of UDSM staff under 40, in 2007, might look encouraging, at 43% (Table 13). It must be noted, however, that that number got swollen because of the fact that a significant number of staff (47%) are below the rank of lecturer (Table 17) and so hold only a first degree. A similar situation obtains at UKZN, where 41% of staff is under 40 years (fig. 29). The fact that 42% of academic staff here have less than a Master's-level qualification (Table 15) requires that we relate positive age-related numbers to the qualification of academic staff. After all, increased numbers, without the requisite quality and level of training, is not enough to build the capacity necessary to provide appropriate instruction and training for students, thereby ensuring a suitable caliber of next generation academics needed for the 21st century. Expansion in bodies without attention to staff development, to ensure quality, does not augur well for the future. Witwatersrand University is better positioned, with almost 40% of staff under 40 years of age in 2008, and a significant number of staff with masters or higher degrees. It is important to point out, however, that about a third

of staff (32%) were over 50 years. This means that a significant number of senior scholars will be retiring in the next decade. National-level data for Ghana echoes the general concern with an ageing professoriate, with 41% of staff over 50 years (fig. 31).



In the midst of these staff shortfalls, it is worrying that institutions are losing current staff through resignations, mostly, in order to explore better employment opportunities elsewhere. Data for the University of the Witwatersrand for 2006 and 2007 show a worrying pattern where most of the resignations are by staff who are under 40 years of age (see Institutional Profile). About two-thirds of those who resigned in 2006 and 2007 were under 40 years of age. In view of the fact that the people in this age category constitute the relatively new scholars, their departure raises questions about the ability of the institutions to attract and retain the next generation of African scholars if the trend continues.

Academic Staff by Qualification

The quality of any higher education system is determined, not only by the number of people teaching in it, but even more importantly, by the qualifications of its academic staff. One significant measure of the capability of the professoriate to provide quality research and instruction is doctoral level certification.

Fig. 32 shows that most universities had relatively fewer doctoral degree holders than masters degree holders. Only 19% of staff at the University of Education -- Winneba have doctorates. It is instructive that in 2006, masters and doctoral degree holders, together, constituted only 58% of the total staff complement. In view of the analysis above, regarding the qualification of UDSM staff, it seems that the data provided by the institution for Table 15, on the basis of which fig. 32 was generated, may have included non-masters degree holders in the calculation of masters degree holders.

There were exceptions to the above pattern of more masters, than doctorate, holders. These were Rhodes University in 2005, with 49% of staff having doctorates; University of Cape Town in 2006, with 49%; and University of the Witwatersrand in 2007, with 53%. Clearly, all these institutions have to redouble their efforts to ensure that they are staffed by academics with the highest terminal degrees in their fields.

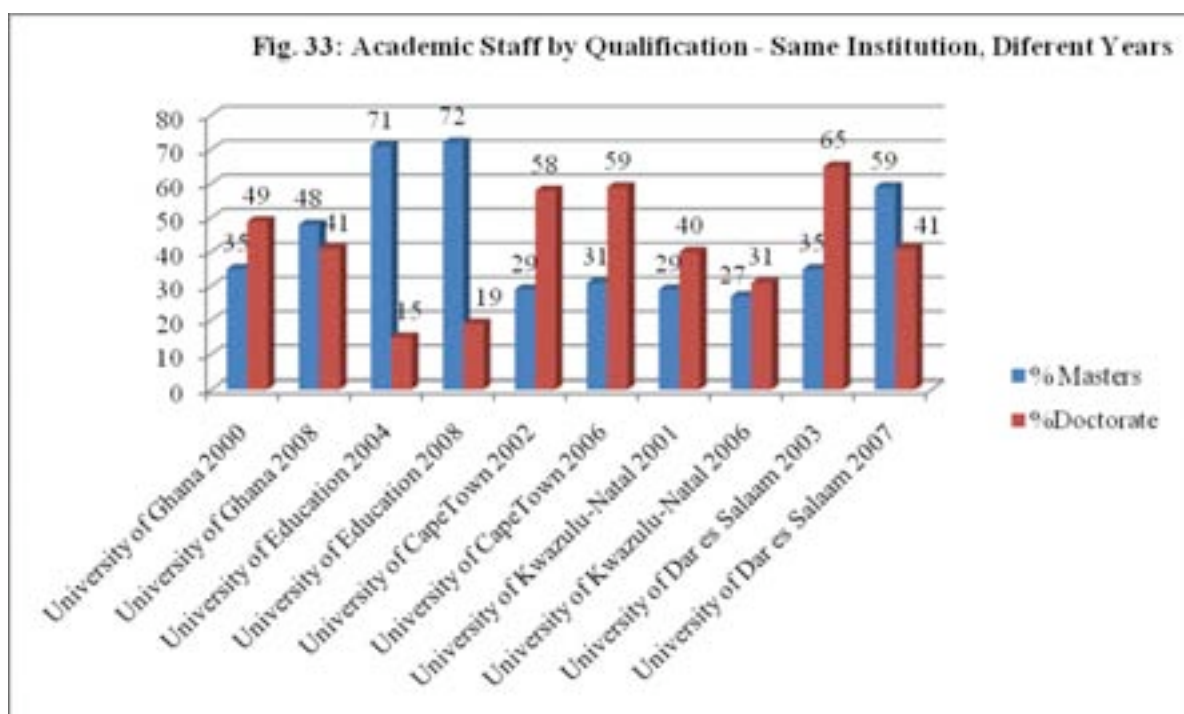
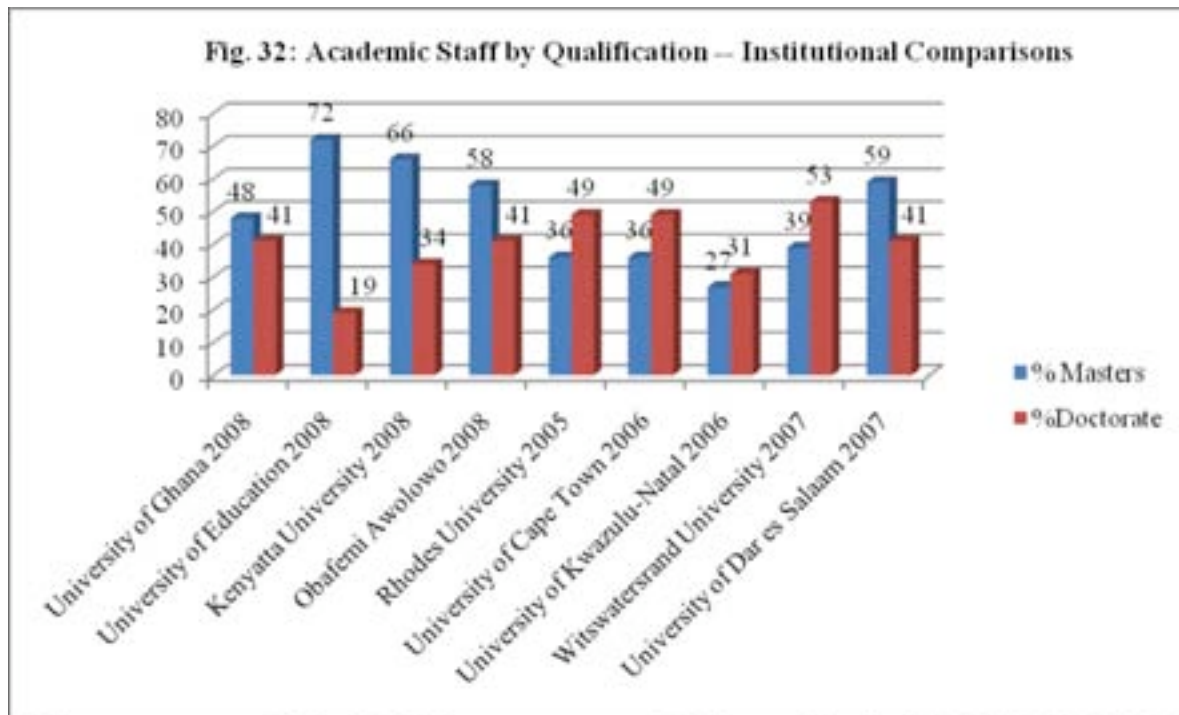
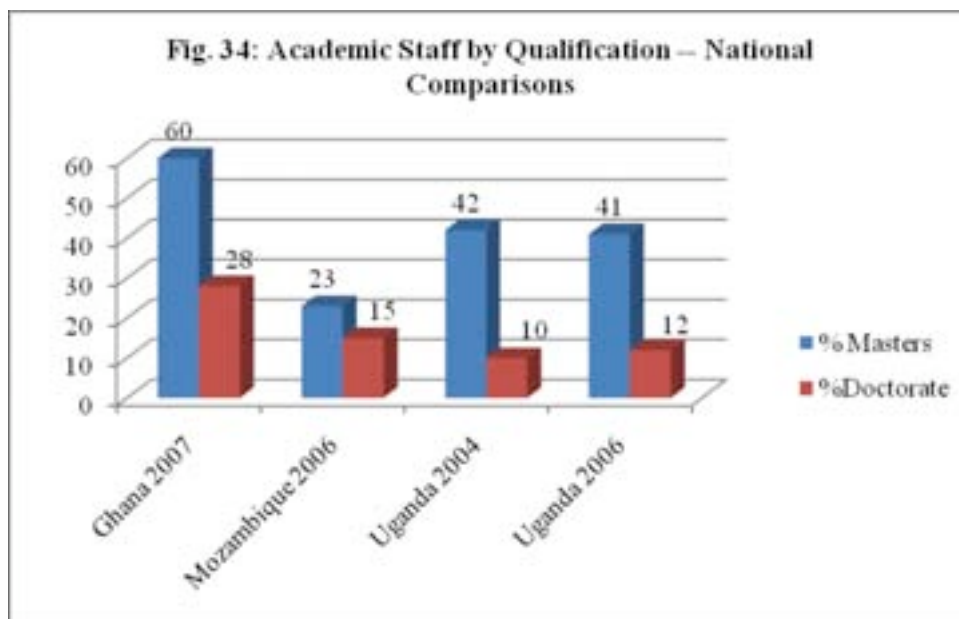


Fig. 33 allows us to see trends in the proportion of staff with different qualifications. It shows some worrying trends. The University of Ghana, for example, saw the percentage of staff with doctorates go down from 49% in 2000 to 41% in 2008. In the same vein, the University of KwaZulu-Natal registered a drop from 40% in 2001 to 31% in 2006. the University of Dar es Salaam also experienced a downward slide from 65% in 2003 to 41% in 2000.

There are, at least, three significant implications to these trends. The first is that there is a new generation of staff being hired who do not have the best possible qualifications to undertake their teaching and research mandates. The second is the potential for these trends to perpetuate a vicious cycle whereby institutions in these countries are incapable of training many doctoral level students, because they do not have the human resource capacity to do so, or do a poor job if they try to. Either way, the quality of the next generation of the professoriate may be compromised in some way, especially since many of these institutions are not in a financial position to train many of their potential members abroad. Finally, the potential for intra-regional doctoral training is severely handicapped by the fact that, apart from Witwatersrand, there is no institution with a doctoral complement of, at least, half of its staff.

The picture is even more sobering when we analyze staff qualifications at the national level. Only 28% , 15%, 12 % of staff in Ghana, Mozambique and Uganda had doctorates in the latest year for which data is available (fig. 34)



Qualification of Academic Staff by Gender

It is clear from Tables 11 and 12 that the numbers and, therefore, proportions of males with masters and doctorate degrees have been consistently higher than those of females with such degrees (fig.35), even though the proportion of the latter has been increasing as

illustrated by the University of Ghana and the University of KwaZulu-Natal. In the former, females made up 27% and 13%, respectively, of masters and doctorate holders in 2000. By 2008, these proportions had increased to 29% and 20%. In the case of the University of KwaZulu-Natal, the percentage of masters degree holders who were female went up from 42% in 2001 to 45% in 2006. The percentage of doctorate staff who were female also improved marginally from 26% to 28% during the period. The implications of the relatively low proportions of female staff with these degrees are similar to those discussed in relation to the skewed gender distribution of academic staff as a whole.

Academic Staff by Rank

As we discuss the next generation of academics, we should not lose sight of the fact that a reasonable distribution of scholars across the various ranks helps to build a solid community of scholarship. Established scholars mentor younger/newer ones, thereby helping to build or maintain a culture of excellence within a institution. Julius Okjoie, Executive Secretary of National Universities Commission of Nigeria, points out the consequences of not having this reasonable distribution of ranks:

“Today we are talking of the issue of the quality of teachers in the system, a survey which is the pyramid structure, revealed that the system is deformed. Today, we are expecting 20 per cent of the staff to be reader and above, 45 per cent to be senior lecturer and others, lecturer grade 1 and below, but what do we have, 61 per cent are lecturer grade 1 and below, so how can you fight a battle with scout masters?” he said (This Day, 2008).

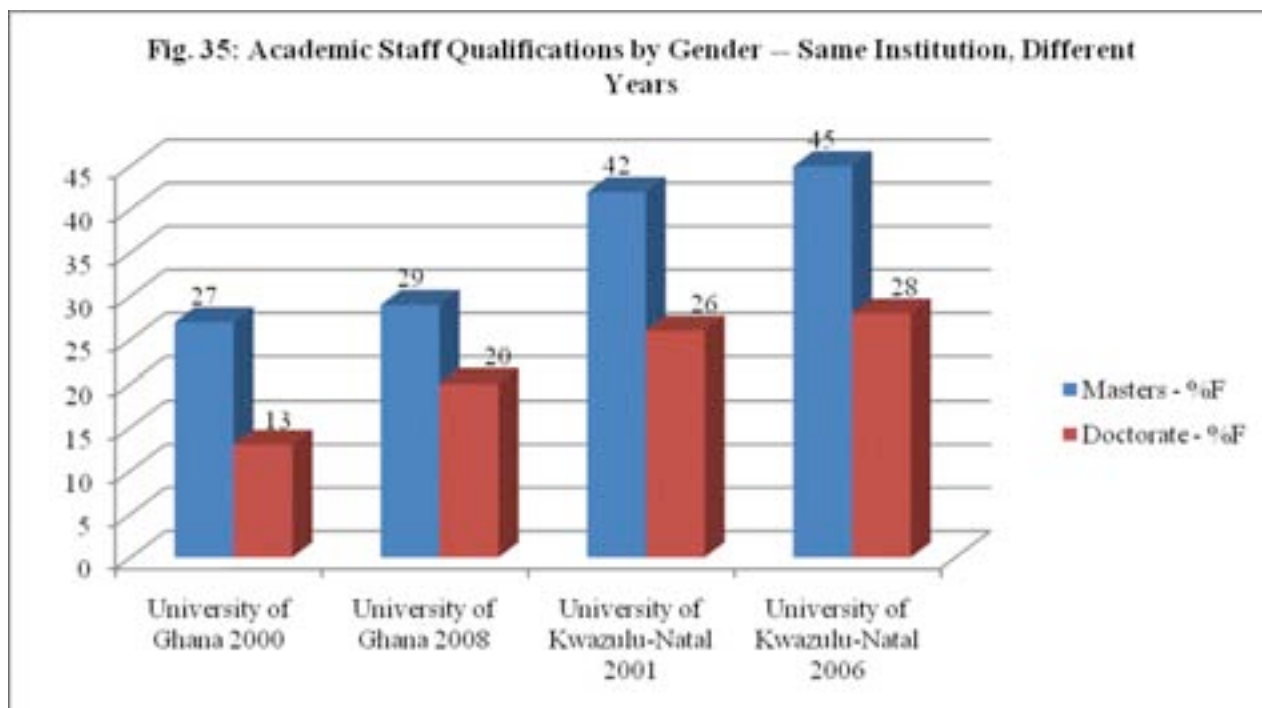
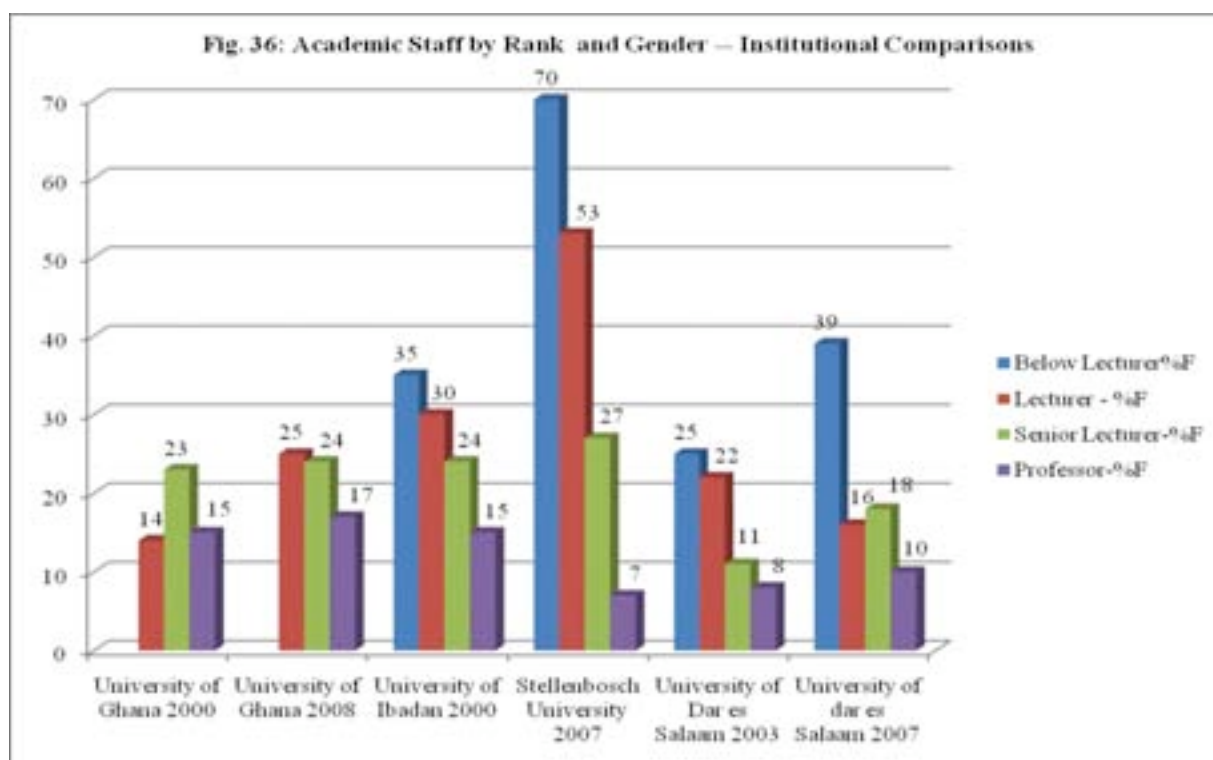


Table 17 shows the distribution of staff, by rank, in various institutions. In all the institutions for which data is available, apart from UDSM, lecturers made up the majority of staff. At the University of Ghana, 48% of staff, in 2008, were at the rank of lecturer. The figure at the University of Ibadan, in 2006, was 43%, whose those for Rhodes and UKZN were 38% and 36%, respectively. At UDSM, the majority of staff (47%) was made up of those below the rank of lecturer. Table 18 shows that, in 2007, those below the rank of lecturer constituted 56% of academic staff in Nigerian universities, a picture that, obviously, explains the concern expressed above by Okojie.

Another significance of looking at rank is to get a sense of how it correlates with gender. As noted earlier, there is value to having female academics in universities to serve as role models and mentors. Even more important is the need for them to be established in their professions. This gives them the clout to push for gender-sensitive initiatives and to provide leadership on a variety of fronts. Furthermore, if upward mobility for female staff is seen as a difficult proposition, there is a strong likelihood that women will not see academia as a career worth pursuing, further diminishing the capacity of these institutions to increase the number of qualified staff. Table 19 provides the distribution of female staff at each rank, across various institutions. Fig. 36 vividly portrays the extent to which women at various institutions are consistently under-represented within all ranks, but especially so at the Professorial ranks. The latest data show that only 17%, 15%, 7%, and 10% of staff at the professorial ranks were female at the Universities of Ghana, Ibadan, Stellenbosch and Dar es Salaam.

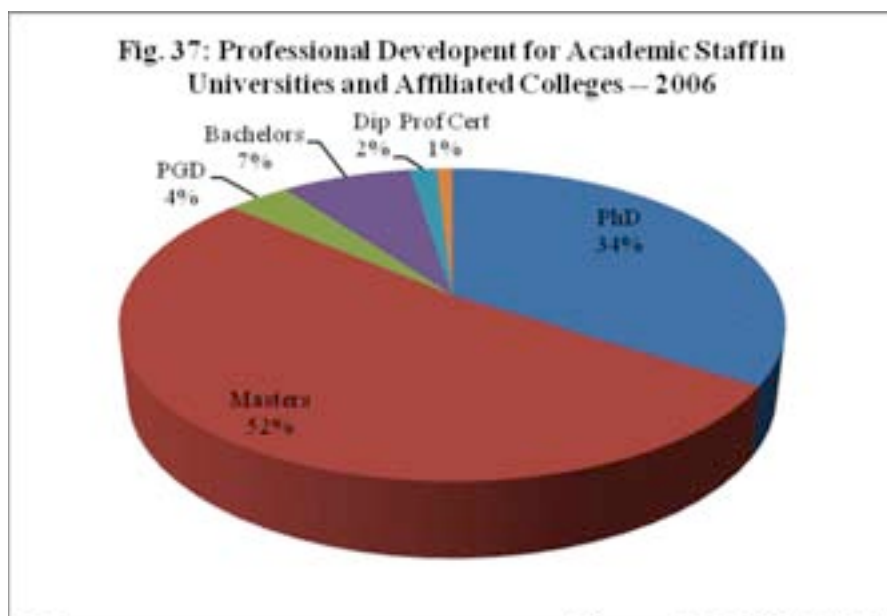
It is interesting to note that their highest proportion is at the level below lecturer, for those institutions that have this rank. It was most staggering at the University of Stellenbosch in 2007. This pattern suggests that females are either unable, for whatever reasons, to gain upward mobility from this rank, or that institutions are making strenuous efforts to increase the pool of female staff by providing them with



the opportunity to enter the academy at this level. Further research is needed to ascertain which of these scenarios is reflected by the data.

Academic Staff Pursuing Graduate Programs

Various universities have staff development initiatives that are meant to cultivate the next generation of academics and to improve on the qualification of staff in general. Fig. 20 shows that Kenyatta university had 191 of its staff enrolled in doctoral programs in 2006. of which 33% were female. In 2005, 2006, and 2007, 10%, 12% and 10%, respectively, of all staff at the University of the Witwatersrand were undertaking doctoral programs at the institution while 18%, 19%, and 22% of staff were enrolled in masters programs at Wits, in 2005, 2006, and 2007, respectively (See Institutional Profile). 15 staff members were enrolled in doctoral programs at UDSM in 2007, of which 20% were female, while 27 and 128 Makerere staff were undertaking masters and doctoral programs in 2006 (Table 21). Table 24, showing national-level data for staff development in Uganda, indicates that 52% were in masters programs compared to 34% in doctoral programs (fig. 37).



TABLES

STUDENT ENROLMENTS

Table 1: Student Enrolments - Institutional Comparisons

GHANA												
	UNIVERSITY OF GHANA						UNIVERSITY OF EDUCATION					
	2000			2008			2004			2008		
Enrolment	Total	% F	% PG	Total	% F	% PG	Total	% F	% PG	T	% F	% PG
	10784	32%	14%	28831	41%	7%	10015		0.1%	15378		3%
Growth Rate				T	F	PG				T	F	PG
				167%	241%	28%				54%		1893%
KENYA												
	KENYATTA UNIVERSITY											
	2007			2008								
Enrolment	Total	% F	% PG	Total	% F	% PG	Total	% F	% PG	T	% F	% PG
	19454	42%		21509	41%							
Growth Rate				T	F	PG				T	F	PG
				11%								
MOZAMBIQUE												
	CATHOLIC UNIVERSITY											
	2000			2007								
Enrolment	Total	% F	% PG	Total	% F	% PG	Total	% F	% PG	T	% F	% PG
				3270	37%							
Growth Rate										T	F	PG
NIGERIA												
	UNIVERSITY OF IBADAN						OBAFEMI AWOLOWO UNIVERSITY					
	2001			2006			2002			2006		
Enrolment	Total	% F	% PG	Total	% F	% PG	Total	% F	% PG	T	% F	% PG
	22468	40%	18%	17891	39%	35	21517		14%	28758	36%	11%
Growth Rate				T	F	PG				T	F	PG
				-21%	-24%	52%				34%		
SOUTH AFRICA												
	NELSON MANDELA METROPOLITAN UNIVERSITY						RHODES UNIVERSITY					
	2005			2006			2000			2003		
Enrolment	Total	% F	% PG	Total	% F	% PG	Total	% F	% PG	T	% F	% PG
	24896		12%	24413		11%	5426	57	17%	7425	59%	17%
Growth Rate				T	F	PG				T	F	PG
				-2%		-8%				37%		37%

Table 3: Postgraduate Student Enrolment- Institutional Comparisons

GHANA																
UNIVERSITY OF GHANA									UNIVERSITY OF EDUCATION							
2000					2007											
Enrolment	T	% F	% Ph D	% Mas	T	% F	% PhD	% Mas	T	% F	% Ph D	% Mas	T	% F	% PhD	% Mas
	1551	25%	5%	92%	2299	33%	6%	95%								
Growth Rate					48%	92%	72%	102%								
KENYA																
KENYATTA UNIVERSITY																
2000					2008											
Enrolment	T	% F	% Ph D	% Mas	T	% F	% PhD	% Mas	T	% F	% Ph D	% Mas	T	% F	% PhD	% Mas
Growth Rate																
MOZAMBIQUE																
CATHOLIC UNIVERSITY																
2000					2008											
Enrolment	T	% F	% Ph D	% Mas	T	% F	% PhD	% Mas	T	% F	% Ph D	% Mas	T	% F	% PhD	% Mas
Growth Rate																
NIGERIA																
UNIVERSITY OF IBADAN									OBAFEMI AWOLOWO UNIVERSITY							
2001					2006				2003				2006			
Enrolment	T	% F	% Ph D	% Mas	T	% F	% PhD	% Mas	T	% F	% Ph D	% Mas	T	% F	% PhD	% Mas
	4084	31%			6196	35%			2978	28%			3088	30%	13%	
Growth Rate					51%	75%							4%			
SOUTH AFRICA																
NELSON MADELA METROPLITAN UNIVERSITY									RHODES UNIVERSITY							
2005					2006				2000				2003			
Enrolment	T	% F	% Ph D	% Mas	T	% F	% PhD	% Mas	T	% F	% Ph D	% Mas	T	% F	% PhD	% Mas
	2874		9%	51%	2654				948	50%			1298	59%		
Growth Rate					-8%				37%							
STELLENBOSCH UNIVERSITY									UNIVERSITY OF CAPE TOWN							
2000					2007				2003				2007			
Enrolment	T	% F	%	%	T	% F	%	%	T	%	%	%	T	% F	%	%

Table 4: Postgraduate Student Enrolment - National Comparisons

	GHANA								KENYA							
	2000				2008											
Enrolment	T	% F	% Ph D	% Mas	T	% F	% Ph D	% Mas	T	% F	% Ph D	% Mas	T	% F	% Ph D	% Mas
Growth Rate (%)																
	MOZAMBIQUE								NIGERIA							
	2000				2008											
Enrolment	T	% F	% Ph D	% Mas	T	% F	% Ph D	% Mas	T	% F	% Ph D	% Mas	T	% F	% Ph D	% Mas
Growth Rate (%)																
	SOUTH AFRICA								TANZANIA							
	2000				2008											
Enrolment	T	% F	% Ph D	% Mas	T	% F	% Ph D	% Mas	T	% F	% Ph D	% Mas	T	% F	% Ph D	% Mas
	97333		1	5	111237		1	6								
Growth Rate (%)					14											
	UGANDA															
	2000				2008											
Enrolment	T	% F	% Ph D	% Mas	T	% F	% Ph D	% Mas	T	% F	% Ph D	% Mas	T	% F	% Ph D	% Mas
Growth Rate (%)																

ACADEMIC STAFF –COMPARISONS

Table 9: Academic Staff By Gender -- Institutional Comparisons

	GHANA								KENYA				MOZAMBIQUE			
	UNIVERSITY OF GHANA				UNIVERSITY OF EDUCATION				KENYATTA UNIVERSITY				CATHOLIC UNIVERSITY			
	2000		2008		2004		2008				2008				2007	
Academic Staff	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F
	702	20	993	24	240	12	326	17			830	30%			269	
Growth Rate (%)			41	69			36									
NIGERIA																
	UNIVERSITY OF IBADAN				OBAFEMI AWOLOWO UNIVERSITY											
	2001		2006		2007		2008									
Academic Staff	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F
	1261	23	1156	25	1008	17	1029	17								
Growth Rate (%)			-8	0.3			0.08	2								
SOUTH AFRICA																
	NELSON MANDELA METROPOLITAN UNIVERSITY				RHODES UNIVERSITY				STELLENBOSCH UNIVERSITY				UNIVERSITY OF CAPE TOWN			
	2000		2007		2000		2005		2002		2007		2002		2006	
Academic Staff	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F
		39		43	282		303		776	34	786	41	641	28	713	32
Growth Rate (%)							7				1					
SOUTH AFRICA																
	UNIVERSITY OF KWAZULU-NATAL				WITWATERSRAND UNIVERSITY				UNIVERSITY OF DAR ES SALAAM				MAKERERE UNIVERSITY			
	2001		2007		2005		2007		2003		2007		2000		2006	
Academic Staff	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F
	1292	35	1531	43	1206	48	1188	48	872	16	1094	22			1038	25
Growth Rate (%)			23				-2				25					

Table 10: Academic Staff By Gender -- National Comparisons

	GHANA				KENYA				MOZAMBIQUE				NIGERIA			
	2000		2007						2000		2004					
Academic Staff	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F
			2357	15					770	23	1113	25				
Growth Rate											45%					
	SOUTH AFRICA				TANZANIA				UGANDA							
	2001		2006		2003		2007				2006					
Academic Staff	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F	T	% F
	14740	39	16077	42	1617	17	2105	16			3927	19*				
Growth Rate			9				30	26								

*: The figure is at least 19%. We are not certain about the actual number because the data does not provide the gender of all staff

Table 11: Student-Staff Ratios -- Institutional Comparisons

	GHANA				KENYA		MOZAMBIQUE	
	UNIVERSITY OF GHANA		UNIVERSITY OF EDUCATION		KENYATTA UNIVERSITY		CATHOLIC UNIVERSITY	
	2000	2008	2004	2008		2008		
Ratio	15	29	42	47		26		
NIGERIA								
	UNIVERSITY OF IBADAN		OBAFEMI AWOLOWO UNIVERSITY					
	2001	2006	2000	2006				
Ratio	15	15		24				
SOUTH AFRICA								
	NELSON MANDELA METROPOLITAN UNIVERSITY		RHODES UNIVERSITY		STELLENBOSCH UNIVERSITY		UNIVERSITY OF CAPE TOWN	
	2000		2001	2004	2002	2007	2003	2007
Ratio			19	18	28	30	32	30
SOUTH AFRICA								
	UNIVERSITY OF KWAZULU-NATAL		WITWATERSRAND UNIVERSITY		UNIVERSITY OF DAR ES SALAAM		MAKERERE UNIVERSITY	
	2001	2006	2005	2006	2003	2007	2000	2007
Ratio	27	25	19	20	10	13		32

Table 12: Student-Staff Ratios -- National Comparisons

	GHANA		KENYA		MOZAMBIQUE		NIGERIA	
	2000	2007			2000	2004		2007
Ratio		39			26	32		40
SOUTH AFRICA								
	SOUTH AFRICA		TANZANIA		UGANDA			
	2001	2006	2003	2007		2006		
Ratio	45	46	15	24		24		

Table 14: Academic Staff By Age -- National Comparisons

	GHANA								KENYA							
	2000				2007											
Age	<4 0	40- 49	50- 59	60 +	<4 0	40- 49	50- 59	60 +	<4 0	40- 49	50- 59	60 +	<40	40- 49	50- 59	60+
%					25	34	29	12								
<hr/>																
	MOZAMBIQUE								NIGERIA							
	2000				2008											
Age	<4 0	40- 49	50- 59	60 +	<4 0	40- 49	50- 59	60 +	<4 0	40- 49	50- 59	60 +	<40	40- 49	50- 59	60+
%																
<hr/>																
	SOUTH AFRICA								TANZANIA							
	2000				2008											
Age	<4 0	40- 49	50- 59	60 +	<4 0	40- 49	50- 59	60+	<4 0	40- 49	50- 59	60 +	<40	40- 49	50- 59	60+
%																
<hr/>																
	UGANDA															
	2000				2008											
Age	<4 0	40- 49	50- 59	60 +	<4 0	40- 49	50- 59	60 +	<4 0	40- 49	50- 59	60 +	<40	40- 49	50- 59	60+
%																
<hr/>																

Table 16: Academic Staff By Qualification -- National Comparisons

	GHANA								KENYA							
	2000				2007											
	Masters		Doctoral		Masters		Doctoral		Masters		Doctoral		Masters		Doctoral	
Academic Staff	%T	%F	%T	%F	%T	%F	%T	%F	%T	%F	%T	%F	%T	%F	%T	%F
					60		28									
Growth Rate																
	MOZAMBIQUE								NIGERIA							
	2000				2006											
	Masters		Doctoral		Masters		Doctoral		Masters		Doctoral		Masters		Doctoral	
Academic Staff	%T	%F	%T	%F	%T	%F	%T	%F	%T	%F	%T	%F	%T	%F	%T	%F
					23		15									
Growth Rate																
	SOUTH AFRICA								TANZANIA							
	2000				2008											
	Masters		Doctoral		Masters		Doctoral		Masters		Doctoral		Masters		Doctoral	
Academic Staff	%T	%F	%T	%F	%T	%F	%T	%F	%T	%F	%T	%F	%T	%F	%T	%F
Growth Rate					T	F	T	F					T	F	T	F
	UGANDA*															
	2004				2006											
	Masters		Doctoral		Masters		Doctoral		Masters		Doctoral		Masters		Doctoral	
Academic Staff	%T	%F	%T	%F	%T	%F	%T	%F	%T	%F	%T	%F	%T	%F	%T	%F
	42		10		41		12									
Growth Rate																

*These are figures for the Higher Education system as a whole and is not limited to Universities and Colleges

Table 17: Academic Staff By Rank -- Institutional Comparisons

GHANA																
UNIVERSITY OF GHANA								UNIVERSITY OF EDUCATION								
2003				2008												
Rank	<L	L	SL	P	<L	L	SL	P	<L	L	SL	P	<L	L	SL	P
%		46	32	22		48	31	21								
KENYA																
KENYATTA UNIVERSITY								MOZAMBIQUE								
2000				2008								CATHOLIC UNIVERSITY				
Rank	<L	L	SL	P	<L	L	SL	P	<L	L	SL	P	<L	L	SL	P
%																
NIGERIA																
UNIVERSITY OF IBADAN								OBAFEMI AWOLOWO UNIVERSITY								
2001				2006												
Rank	<L	L	SL	P	<L	L	SL	P	<L	L	SL	P	<L	L	SL	P
%	11	39	26	24	5	43	26	27								
SOUTH AFRICA																
NELSON MANDELA METROPOLITAN UNIVERSITY								RHODES UNIVERSITY								
2000				2008				2004				2005				
Rank	<L	L	SL	P	<L	L	SL	P	<L	L	SL	P	<L	L	SL	P
%									8	37	18	33	5	38	20	33
STELLENBOSCH UNIVERSITY																
2000								2008								
Rank	<L	L	SL	P	<L	L	SL	P	<L	L	SL	P	<L	L	SL	P
%																
UNIVERSITY OF KWAZULU-NATAL																
2001				2006								WITWATERSRAND UNIVERSITY				
Rank	<L	L	SL	P	<L	L	SL	P	<L	L	SL	P	<L	L	SL	P
%	9	34	27	28	4	36	23	24								
TANZANIA																
UNIVERSITY OF DAR ES SALAAM								UGANDA								
2000				2008								MAKERERE UNIVERSITY				
Rank	<L	L	SL	P	<L	L	SL	P	<L	L	SL	P	<L	L	SL	P
%	19	29	31	21	47	19	18	16								

Legend:

<L=Below Lecturer

L=Lecturer

SN=Senior Lecturer

P=Professor + Associate Professor/Reader

Table 18: Academic Staff By Rank -- National Comparisons

	GHANA								KENYA							
	2000				2008											
Rank	<L	L	SL	P	AL	L	SL	P	<L	L	SL	P	AL	L	SL	P
%																
	MOZAMBIQUE								NIGERIA							
	2000				2008				2007							
Rank	<L	L	SL	P	AL	L	SL	P	<L	L	SL	P	<L	L	SL	P
%													56		24	20
	SOUTH AFRICA								TANZANIA							
	2000				2008											
Rank	<L	L	SL	P	AL	L	SL	P	<L	L	SL	P	AL	L	SL	P
%																
	UGANDA															
	2000				2008											
Rank	<L	L	SL	P	AL	L	SL	P	<L	L	SL	P	AL	L	SL	P
%																

Table 20: Academic Staff Pursuing Graduate Programs

GHANA															
UNIVERSITY OF GHANA								UNIVERSITY OF EDUCATION							
2000				2008											
Masters		Doctoral		Masters		Doctoral		Masters		Doctoral		Masters		Doctoral	
T	%	T	%	T	%	T	%	T	%	T	%	T	%	T	%
	F		F		F		F		F		F		F		F
Academic Staff															
KENYA															
KENYATTA UNIVERSITY								MOZAMBIQUE							
2000								2006							
Masters		Doctoral		Masters		Doctoral		Masters		Doctoral		Masters		Doctoral	
T	%	T	%	T	%	T	%	T	%	T	%	T	%	T	%
	F		F		F		F		F		F		F		F
Academic Staff								191	33						
NIGERIA															
UNIVERSITY OF IBADAN								OBAFEMI AWOLOWO UNIVERSITY							
2000				2008											
Masters		Doctoral		Masters		Doctoral		Masters		Doctoral		Masters		Doctoral	
T	%	T	%	T	%	T	%	T	%	T	%	T	%	T	%
	F		F		F		F		F		F		F		F
Academic Staff															
SOUTH AFRICA															
NELSON MANDELA METROPOLITAN UNIVERSITY								RHODES UNIVERSITY							
2000				2008											
Masters		Doctoral		Masters		Doctoral		Masters		Doctoral		Masters		Doctoral	
T	%	T	%	T	%	T	%	T	%	T	%	T	%	T	%
	F		F		F		F		F		F		F		F
Academic Staff															
STELLENBOSCH UNIVERSITY								UNIVERSITY OF CAPE TOWN							
2000				2008											
Masters		Doctoral		Masters		Doctoral		Masters		Doctoral		Masters		Doctoral	
T	%	T	%	T	%	T	%	T	%	T	%	T	%	T	%
	F		F		F		F		F		F		F		F
Academic Staff															
UNIVERSITY OF KWAZULU-NATAL								WITWATERSRAND UNIVERSITY*							
2000				2008				2005				2008			
Masters		Doctoral		Masters		Doctoral		Masters		Doctoral		Masters		Doctoral	
T	%	T	%	T	%	T	%	T	%	T	%	T	%	T	%
	F		F		F		F		F		F		F		F
Academic Staff								613		345	43	773		370	48
TANZANIA								UGANDA							
UNIVERSITY OF DAR ES SALAAM								MAKERERE UNIVERSITY							
2003				2007								2006			
Masters		Doctoral		Masters		Doctoral		Masters		Doctoral		Masters		Doctoral	
T	%	T	%	T	%	T	%	T	%	T	%	T	%	T	%
	F		F		F		F		F		F		F		F
Academic Staff	0		16	25	0		15	20					27		128

* = Only those enrolled at Wits

**Table 22: Post-Graduate Drop-Out Rates by Qualification
Health Sciences at UKZN**

Qualification	2000	2001	2002	2003	2004	2005	2006	Average
PG Diploma	-	63.60%	66.70%	-	-	-	-	65.20%
Honors	9.10%	18.20%	5.40%	14.70%	35.50%	24.00%	8.30%	16.50%
Masters - Coursework	45.50%	45.90%	41.70%	45.50%	55.30%	41.20%	30.00%	43.60%
Masters - Thesis	46.70%	61.90%	66.70%	75.00%	73.30%	46.20%	23.10%	56.10%
Doctoral	0.00%	33.30%	28.60%	33.30%	83.30%	44.40%	25.00%	35.40%
TOTAL	36.70%	44.70%	30.50%	35.20%	53.30%	35.90%	18.40%	36.40%

Table 23: Post-Graduate Completion Rates – Health Sciences at UKZN

Qualification	2000	2001	2002	2003	2004	2005	2006	Average
PG Diploma	-	36.40%	33.30%	-	-	-	-	34.80%
Honors	90.90%	68.20%	94.60%	76.50%	61.30%	76.00%	89.60%	79.60%
Masters - Coursework	13.60%	13.50%	25.00%	27.30%	18.40%	5.90%	16.70%	17.20%
Masters - Thesis	26.70%	4.80%	8.30%	0.00%	13.30%	15.40%	7.70%	10.90%
Doctoral	0.00%	0.00%	28.60%	33.30%	0.00%	11.10%	0.00%	10.40%
TOTAL	34.70%	26.60%	50.50%	46.50%	31.10%	35.90%	47.60%	39.00%

**Table 24: Academic Staff Development in Universities and Affiliated Colleges,
Uganda (2006)**

PhD	Masters	PGD	Bachelors	Dip	Prof Cert	Total
232	356	25	51	11	6	681