

only Turkish institution that was previously in the top 200, Bogazici University, jumped 60 places to 139th. Istanbul Technical University rose from the 201–225 band (below 200, *Times* does not offer specific ranks but rather sensibly places institutions in bands) to 165th. Middle East Technical University rose from the same band to 85th, while Sabanci University went from being unranked to 182nd position.

So why are Turkish universities suddenly hot? Richard Holmes, who runs the University Ranking blog, provides a cogent answer. He has pointed out that a single paper (the widely cited “Observation of a new boson...” in *Physics Letters B*, which announced the confirmation of the Higgs Boson) was responsible for most of the movement in this year’s

But good rankings—i.e., rankings that reflect the reality that quality in higher education is something built over decades, not years—simply do not provide a lot of movement from year to year.

rankings. This paper had over 2,800 coauthors, including from those suddenly big Turkish universities. Because the *THE* does not fractionally count multiple-authored articles, each institution which has a coauthor on the paper gets to count all of the citations. And since the *THE*’s methodology on citations is structured to in effect give many “bonus points” to universities located in countries where scientific publications are low, this blew some schools’ numbers into the stratosphere and not just in Turkey. Other examples of this are Scuola Normale di Pisa in Italy, which came from literally out of nowhere to be ranked 65th in the world, or Federica Santa Maria Technical University in Chile, which managed this year to become the 4th ranked university in Latin America.

A TREND OR A FLUKE?

So basically, the entire factual basis for this year’s “rise of Asia” story was based almost entirely on the fact that a few of the 2,800 coauthors on the “Observation of a new boson...” paper happened to work in Turkey. That makes it a statistical quirk and nothing whatsoever to do with the long-term rise of universities in rising economies in China and the rest of East Asia. Indeed, many of these institutions seem to have gone into reverse, leading one to question if there are any circumstances under which the *THE* would choose not to run a “rise of Asia” headline.

The *THE*, commendably, has recently begun public

consultations to review its methodologies. Clearly, its policies on counting citations are badly in need of an overhaul. But, perhaps some thought should be given, too, to its editorial policies: the obsession with portraying a rampant Asia is not doing the paper any favors. ■

Confronting the Challenges of Graduate Education in Sub-Saharan Africa

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The colonial origins of most of African higher education resulted in graduate education being ignored at their origin. The view was that, if graduate education was needed, students could travel to the colonial motherland. Thus, the current state of graduate education in sub-Saharan Africa can rightly be described as a consequence of the deleterious impact of the past and challenges that have faced higher education since the 1970s.

CHALLENGES FOR GRADUATE EDUCATION

By the mid-1970s both the environment for higher education and its status were in decline. The effects on most graduate education programs were devastating. The economy was in crisis in most African countries, some governments had come to regard universities as bastions of unwelcome criticism and centers of opposition, costs seemed too high, faculty and student life-styles questionable, and the utility of universities and graduate programs in particular, suddenly seemed limited.

The decline in international development assistance to higher education and the shift in focus to primary education with an emphasis on “education for all” contributed to the problems. The decline in state and donor funding is starkly illustrated by the reduction in per capita public spending for higher education, which fell from US\$6,800 in 1980, to US\$1,200 in 2002, and by 2009 averaged just US\$981 in 33 African countries. This is a staggering decrease of 82 percent.

Teaching too generally declined in quality because of the rapid expansion of admissions, the overall increases in class size, elimination of tutorials in many universities, a shortage of faculty members, and the low level of qualifications of many new teachers. Enrollments grew from fewer than 200,000 in the 1970s to about 6 million today. As other developed and developing nations invested heavily in information technology, African leaders were not able to do so and thus the information technology gap between Africa and the rest of the world grew. These conditions impacted on both the ability to offer graduate training and, where it existed, limited its quality.

The overall economic news for sub-Saharan Africa recently has become somewhat brighter. The growth rate of the economy in sub-Saharan Africa rose to 6.1 percent in 2013 and is predicted to grow to 6.8 percent in 2014. After years of decline in donor funding, there are a few encouraging examples—including a recent World Bank US\$200 million project *Strengthening Tertiary Education in Africa* through African Centers of Excellence. It focuses on several critical areas of higher education—including science technology, engineering, mathematics, health, and agriculture. The Carnegie Corporation has provided substantial funding for higher education in its multimillion dollar programs—focusing on graduate training, increasing the quality and number of faculty with PhDs, and fostering research and publications.

The data we have on enrollment growth of graduate education in recent years are spotty. Graduate enrollments between 1997 and 2007 show a total of 169,275 graduate students studying for master's degrees and PhDs, or 6.9 percent of the total enrollment. Data from 2010–2013 shows an increase to a total of 294,339 now 9.3 percent of the total enrollment at these institutions, an increase of 73.9 percent. While this is a quite substantial increase over approximately five years, slightly more than half of it is reflected in the increase in graduate students in South Africa. Of this total, approximately 20 percent were studying at the PhD level, 80 percent at the master's level.

Graduate programs have in general suffered from faculty shortages. The average age of faculty members is growing due to lack of recruitment, increasing losses as older faculty members retire. The shortage of faculty members with PhDs is worsening. Five years ago 50 percent of academic staff had PhDs. The total today is lower with our data showing an average of 38 percent PhDs; a recent World Bank estimate was less than 20 percent. This has resulted in lack of adequate supervision of graduate students in many programs.

HIGH-QUALITY GRADUATE EDUCATION TO NATIONAL DEVELOPMENT

Research has shown that no nation moves into the realm of developing economies without a high-quality higher education system, and that includes graduate education. Development comes in many forms ranging from research into critical national problems to contributions to knowledge. Universities are the only national institutions with the self-renewing knowledge producing capacity essential to sustain and expand growth.

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South Africa and Ghana are exceptions to the general decline in graduate education. New enrollments in South African master's programs have grown from 9 percent in 2000, to 16 percent in 2005, with 70 percent coming from other African countries. Half of these were from the Southern African Development Community (SADC) countries. That growth reflects South Africa's generosity to its SADC neighbors by allowing them to pay the same tuition as South African students. Master's graduates in public institutions increased by 56 percent from 2000 to 2009. At the doctoral level, graduates grew from 2000 to 2009 by 67 percent.

The clearest measure of the low level of research in sub-Saharan Africa can be seen in the limited number of publications by its scholars. Even in relative terms the numbers of publications for sub-Saharan Africa are low with the exception of South Africa.

RECOMMENDATIONS FOR IMPROVEMENT

The most critical tasks are to reestablish the culture of teaching, learning, and research at African universities. At the best universities it is important to improve or establish first-rate graduate programs. Also essential is the recruitment of more well-trained PhD faculty members, a reduction in the teaching load, and adequate remunerations so that faculty members do not need second jobs to survive financially.

New sources of funding must be found for graduate education. With improvement generally in the economies of sub-Saharan Africa, there are opportunities for increased

government support. Additional donor support is also essential. Fees, too, may need to be increased in those cases where they are low or nonexistent.

Regional graduate centers need to be encouraged. South Africa has become a major regional center for graduate education. Hopefully, the new Pan-African University, established by the African Union, will fill part of that need. It is designed to focus on graduate education in targeted areas, beginning with five regional campuses. Other possibilities for regional centers might be Senegal with its long history of regional activity and Ghana that has greatly improved graduate programs.

A major effort needs to be made to expand faculty PhD training, because the number of PhDs in sub-Saharan African universities has declined markedly. We applaud the efforts of the Carnegie Corporation in that area and encourage other donors to join in that effort.

THE FUTURE

A key goal for the future is to maintain and expand high-quality graduate education. Successes will not come without major new investments in graduate education by those governments that recognize the benefits of high-quality graduate programs, from faculty members who make a commitment to high-quality research and teaching, from students who have the intellectual capacity for intensive study, and from contributions from foreign governments, donors, and international organizations. Such commitments will help revive stalled national development in much of sub-Saharan Africa and create the conditions for a revival of contributions by African graduate education to national development and knowledge production. ■

Private Twilight: Wither Private Universities in Kenya

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In the latest sign all is not well in Kenya's private university sector. The International University of Professional Studies (IUPS) is on the auction block as auctioneers have seized the main campus and other assets over a Ksh. 280 million (US\$3.1 million) debt. Strangely, another private university, Mount Kenya University has offered to purchase

IUPS assets as part of its aggressive expansion strategy. These improbable events point to two contradictory dilemmas in Kenya's private university sector: while the sector is on a downward trend, there are pockets of silver linings in the looming dark clouds.

In the 1990s, private universities were promoted as the antidote to the comatose university public sector. With decreasing state subventions, the institutions were bursting at the seams: overcrowding, dilapidated facilities, poorly resourced libraries, and a critical shortage of academic staff. Neoliberal policies of privatization and commercialization, it was expected, would simultaneously generate additional revenues to the system, while continuing to meet demand through overall system growth. The 1990s and early 2000 represented the golden age of private university growth in Kenya, as numerous private universities were established to provide an alternative avenue for higher education. Two decades later, there has been a reversal of fortunes; private universities are in dire straits, while public universities have registered a robust resurgent.

Kenya's university enrollment reached 324,560 students in 2014. Around 244,560 (75%) are enrolled in public institutions while 80,000 (25%) are in private ones. The total number of universities stands at 67, of which 31 (46%) are public institutions (22 chartered and 9 affiliate university colleges) while 36 (54%) are private (17 chartered, 6 affiliated university colleges, and 13 with Letters of Interim Authority to operate). The major surge in public universities occurred in 2012, when 22 universities and university colleges (71%) were established. Though the number of private universities supersedes the public ones, in absolute enrollment they are a distant second. The conundrum besetting private universities is a trilogy of three interrelated factors namely, the loss of distinct identity, shift in government policy on higher education, and the resurgence of the public university sector.

WE ARE ALL THE SAME: IDENTITY CRISIS

The growth in private universities in the 1990s was driven by Christian churches. This first wave of private university growth saw all the major Christian denominations establish private universities, with the denominational nomenclature proudly declaring the religious affiliation of the institutions—Catholics, Methodists, Nazarene, Presbyterians, Pentecostals, Seventh Day Adventists, and other protestant groups. These religious universities have marketed themselves as providing a distinct brand of higher education, one with religious fervor. At 58 percent, Christian universities today make up the bulk of private universities. The only major religious group that has not established a university is the Muslim community.