

working conditions.

TECHNOLOGY AND LABOR MARKET NEEDS

As in other developing countries, the demands of students enrolled nowadays in universities in South Sudan present a formidable challenge for university academics and administrators. Students need lecture theatres equipped with modern pedagogical equipment, air conditioning, stable electricity, and the means to commute to and from the university. Students are easily annoyed when lacking favorable conditions for learning. The faculty also face major challenges, lacking both standard equipment as well as knowledge on how to use digital resources.

The central purpose of education is to foster skills and values for individuals to successfully fit into society and engage in productive activity to earn a living. The current labor market requires a thorough understanding of modern technology, flexibility and creativity, and social intelligence. As observed above, insufficient technological tools might compromise the opportunity for university students to learn needed skills for the labor market, resulting in a mismatch of competencies and unemployment.

The most important challenge to higher education in South Sudan is the vicious circle of insecurity in both the periphery and the center of the country.

FOREIGN UNIVERSITIES AND TRANSNATIONAL EDUCATION

The increasing number of private institutions of postsecondary education in neighboring Kenya, Uganda, Ethiopia, and Sudan reflects an enormous competition for students in the region. The attraction of South Sudanese to foreign universities is probably caused by better learning environments, course duration, curriculum, level of technology, higher standard of living at low cost, integrated student support mechanisms, and the diversity of the student population, which provides unique opportunities for international exchanges. These conditions prompt students to cross borders in search of better educational conditions. Students tend to leave for foreign universities where they are certain of graduating within a specified period of time, and with better standards as compared to domestic universities.

CONCLUSION

Although higher education in South Sudan faces enormous challenges, it is moving in the right direction. Since 2013, more South Sudanese academics and staff have joined foreign universities for capacity building. If they return to the country, they will provide the much needed know-how to improve the quality of education. The recent peace deal, if it is sustained, will provide avenues for international inter-university exchanges, improvement in learning facilities, an increase in student enrollment, especially women, and resources might be invested in education. ■

Challenges to Doctoral Education in Africa

FAREEDA KHODABOCUS

Fareeda Khodabocus is director of quality assurance at the University of Mauritius and a member of the Higher Education Advocacy Network for Africa (HERANA). E-mail: f.khodabocus@uom.ac.mu.

Research is one of the three major pillars of higher education. For a university to progress and to address the needs and challenges of the knowledge industry, academics must constantly be engaged in research. For the past two decades, research universities across the United States, Europe, and developed countries at large have been placing increasing emphasis on the importance of doctoral education as an engine for growth of the knowledge economy. Along the same lines, researchers in Africa have undertaken various studies to investigate the process of universities functioning as tools for development for the African continent. Worldwide, new curricula and new jobs are emerging, replacing traditional ones. According to the US Bureau of Labor Statistics, jobs requiring a master's degree are projected to increase by 22 percent by the year 2020, while positions requiring a doctoral or professional degree will increase by 20 percent. New areas and fields of research will thus emerge, calling for universities to innovate and adjust to the needs of society.

Eradication of poverty, access to education for all, empowering the younger generation with education, minimizing the brain drain, gender equity, and encouraging African women to participate in the development of Africa, have been high on African government agendas. To contribute to the realization of the Millennium Development Goals on the African continent, African universities are encouraged

and supported to strengthen their research capacities to address the skills demands of their knowledge societies and to emerge as nodes of excellence to improve quality of life and the well-being of their citizens. Although the task is not easy given the socio-economic and cultural diversity and the political differences among countries, research policies and frameworks can be contextualized to approach solutions for the knowledge requirements of each country. This article draws on the research results of a five-year study, with yearly discussion forums, that has been carried out by the Center for Higher Education and Trust (CHET) for seven flagship universities in Africa.

This article draws on the research results of a five-year study, with yearly discussion forums, that has been carried out by the Center for Higher Education and Trust (CHET) for seven flagship universities in Africa.

TRENDS IN DOCTORAL EDUCATION

The outcomes of the study reveal that the total doctoral enrollment at seven sub-Saharan African flagship universities (namely the University of Cape Town (UCT), Makerere University, the University of Ghana, the University of Botswana, the University of Mauritius, the University of Nairobi, and Eduardo Mondlane University) for the period 2000–2001 to 2013–2014 was 3,538 doctoral graduates, with a share of 57 percent for UCT and the remaining 43 percent for the other six flagship universities. A slow growth in doctoral enrollments was observed for the six flagship universities, which contrasted with the increase in master's degree enrollments for the same period. Results indicate that not many master's degree graduates move on to enroll for a PhD after completion of their studies. There is a lack of incentives at the levels of the higher education institutions and of private and government sectors, to motivate African students to pursue higher level studies. The study found two major factors affecting the production of doctorates at the six flagship African universities: Academics holding a PhD end up doing either consultancy and/or additional teaching, which are more rewarding than producing more doctorates. It was interesting to note that although Mauritius is ranked first in the sub-Saharan region in the Global Competitiveness Report 2015–2016 published by the World

Economic Forum, the University of Mauritius does not produce a large number of doctorates. It must be highlighted here that for any university to improve its knowledge production, a better understanding of the academic and non-academic job market for high level knowledge is important. The recent CHET publication, *Doctoral Education in South Africa*, emphasizes that in order to produce quality doctorates, adequate importance and emphasis must be given to the quality of supervision, and this must be supported by doctoral tracer studies analyses, to show whether there is a reasonable match between the demands of the labor market and the knowledge and skills presented by the doctoral graduates.

CHET research further reveals that apart from UCT, the knowledge production and research output of the six flagship universities are not strong enough to make a sustainable contribution to development, while it is widely agreed that African universities must produce more academics with doctorates to increase knowledge production. CHET criteria indicate that for a university to perform as a research tool for development, 50 percent of its core academics must have earned a PhD, enabling them to provide a high level of teaching and learning as well as generating more PhDs for the development of the knowledge economy. An additional concern was that, with the exception of the Higher Education Quality Council (HEQC) of South Africa, how policies are regulating the quality of postgraduate programs articulated in African countries is not clear. Few evaluation systems and quality control mechanisms are in place to ensure the quality of doctorates. Interestingly, CHET studies reveal that African labor markets and governments do not systematically evaluate the competencies of PhD holders, nor the relevance of what they can contribute to society.

As compared to what happens in Europe, predominantly in the United Kingdom for example, the Quality Assurance Agency (QAA) provides a code of practice for postgraduate research, including doctoral education. Universities in the United Kingdom, as a result, have well-established guidelines that clearly delineate the rights and responsibilities of supervisors, universities, and doctoral candidates. Internal and external assessments form part of the research framework and add to transparency and accountability. Results of the internal assessments form the basis for external assessments from third party institutions, such as the QAA, the Higher Education Funding Council (HEFCE), or other professional research bodies. In many instances where external funders have funding streams for doctoral education, these may also externally evaluate doctoral education. Therefore, it is believed that for a university to perform as a tool for development, appropriate frameworks must be in place at the national level to regulate and

assess the effectiveness of doctoral outcomes.

CHALLENGES FOR RESEARCH

Africa is viewed as a continent with huge potential for growth, and is called upon to harness its resources to emerge. Universities in Africa have tremendous capacities and resources to deploy in favor of training, development, and innovation. As the knowledge economy grows, careers needing doctoral education will emerge in Africa, and new methods of teaching and research will need to supersede the traditional ones. Academics holding a PhD must be motivated and guided to produce more doctorates that will strengthen and empower the labor force. Digitization and computerization will play a key role in the transformation process of all businesses, and of the financial, educational, and other key development sectors in Africa. Likewise, universities will need to provide increased access to electronic research databases and improved information technology

CHET research further reveals that apart from UCT, the knowledge production and research output of the six flagship universities are not strong enough to make a sustainable contribution to development.

facilities for conducting research. Universities will need to review their model of doctoral education for new and better models of postgraduate management, supervision and coordination, providing more peer interaction and international collaboration. Regulatory mechanisms and policies at national or regional level should guide the implementation of research strategies and plans. Regular assessments must be in place to ensure that the outcomes of doctoral education match skills requirement for the academic, industrial, public and private job markets. Tracer studies will certainly help to understand the degree of employability of the doctoral graduates on the job market, and will determine the extent of the research contribution and impact on the knowledge economy. Last but not least, increase in support must be provided for research performing institutions, with a more stable model for funding. ■

Kyrgyzstan: Quality Assurance—Do State Standards Matter?

MARTHA C. MERRILL

Martha C. Merrill is an associate professor of higher education administration at Kent State University, US. She wishes to thank IREX for a Short-Term Travel Grant that allowed her to do some of the research this article is based on. E-mail: mmerrill@kent.edu.

The Kyrgyz Republic has been without a formal system for evaluating its higher education institutions since June 3, 2014, when the Division of Licensing and Attestation in the Ministry of Education was abolished. Interestingly, neither students nor parents nor the media nor politicians seem to care very much. Roger King, in *Governing Universities Globally* (2009), has argued that higher education institutions are increasingly subject to both formal and informal regulation from a number of supranational sources, but that many variations are possible in the pathways from conception to implementation. Does the situation in Kyrgyzstan tell educators more about the influence of global governance or more about specific circumstances in Kyrgyzstan?

ALTERNATIVE ASSESSMENTS

Although Kyrgyzstan is not a member of the Bologna Process, it has been adopting Bologna reforms for several years, including switching from Soviet-era degrees to bachelor's and master's degrees. Another reform would be exchanging state attestation for independent accreditation, as required in the *European Standards and Guidelines*. When the Division of Licensing and Attestation was abolished, educators expected that independent accrediting agencies would be established quickly, but the Jogorku Kenesh (Parliament) has not yet approved the regulations needed to create them.

The fact that the Division of Licensing and Attestation was abolished does not mean that no ways of evaluating quality exist. Some higher education institutions, such as the Kyrgyz-Russian Slavonic University and the Kyrgyz-Turkish Manas University, were founded by intergovernmental agreements, and their diplomas are recognized in both countries. The American University in Central Asia has a dual-degree arrangement with Bard College, and students majoring in programs also offered by Bard can receive Bard diplomas.

Other universities are pursuing international accreditation for specific programs; the "German Informatik" program at the Kyrgyz State University of Construction,