# Trends in Higher Education: The Administrator's Dilemma

#### VINCENT ANUM ANKAMAH-LOMOTEY & BENEDICTA KWAKYE

#### Abstract

Effective higher education management and administration is key to the development of tertiary education. There are however, various challenges which have necessitated the call for the university administrator to think outside the box. The challenges confronting higher education management in general and in particular, Ghana, call for new ways of managing the system. University administrators tend to be more of managers, thus sticking to the status quo of practices, norms and statutory requirements. What we currently need are leaders who will bring change and robustness into the administrative machinery of higher education institutions. Current trends demand that proactive rather than reactive measures are taken by university administrators to keep the university system effective and fit-for-purpose. There is sufficient literature on higher education management as well as global trends and challenges confronting higher education. This paper thus looks at some of the key challenges and proposes ways and means to address such, drawing from some experiences at the Kwame Nkrumah University of Science and Technology.

The article thus, is intended to examine some shifts and challenges in higher education management and what strategies can be adopted by the university administrator to ensure an efficient and effective management system. The authors share many years' experience as university administrators at the Kwame Nkrumah University of Science and Technology (KNUST), Kumasi in Ghana. These experiences were based on the various schedules of duties, participation in workshops, conferences and interactions with colleagues. Being a case study, the paper draws from current research highlighted in the literature and proposes strategies that can be adapted to cope with some of the challenges in higher education management. This review and shared experiences of the authors are most likely to benefit higher education institution administrators in Ghana and beyond.

## Introduction

The global terrain of Higher Education (HE) management is becoming more and more challenging. Yes, new times call for new approaches, else one becomes irrelevant and systems dysfunctional. A number of global issues have come up lately that pose a challenge to HE management and in particular, university administration. These include higher education funding, government and market pressures, conduct of research and its utilisation, calls for community service, massification, institutional decisions relating to staff, student recruitment and programmes, competition between privately owned tertiary institutions and publicly owned ones (government funded) (Eisemon & Davis, 1991; Grit, 1997; Martin and Etzkowitz, 2000; Etzkowitz *et al.*, 2000; Etzkowitz, 2004; Castells, 2009; Salamzadeh, Salamzadeh & Daraei, 2011; Cloete *et al.*, 2011, Grobbelaar & Kirkland, 2013, Cloete *et al.*, 2015, UNESCO, 2018).

This ever-changing terrain demands that management and for that matter administrators adopt and adapt coping strategies in order to keep the HE machinery running. This article examines the major shifts in higher education management and what strategies can be adopted by the university administrator to ensure an efficient and effective management system. The authors share a lot of experience as university administrators at the Kwame Nkrumah University of Science and Technology, Kumasi in Ghana.

## Methodology

This paper is essentially a case study with an analysis of some global trends in higher education as discussed by various authors in the literature. The current authors share experiences of many years in higher education management. Most of these experiences and issues discussed in this paper are from interactions with colleagues, issues raised at workshops and conferences, both local and international, and, discussions from official meetings. Considering the fact that these are current and prevailing issues the authors propose possible solutions from international and local best practices. Practices at KNUST which have been found to be workable solutions to some of the challenges raised have also been discussed. The paper, therefore, initiates the process for further discussions at various levels of higher education management.

#### Discussion

## Key issues in higher education management

The sub-sections that follow highlight some of the key issues in higher education that call for proactive action by university administrators.

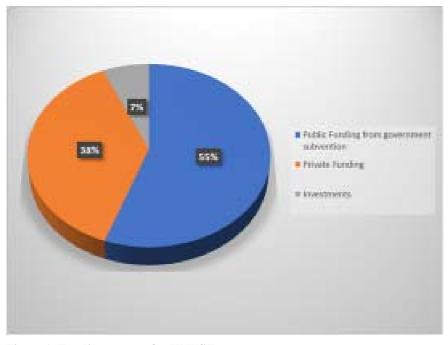
## Funding higher education

Funding is needed not only for teaching and research purposes but also to support the administrative set up of an institution. Funding for higher education has been the bane of many institutions in Africa. Government financial support for HE has been dwindling over the years. It is a fact that government funding alone is not sufficient for meaningful research. Universities therefore tend to enter into collaborations, partnerships and other sources that bring in some funding for research (Cloete et al., 2011). The KNUST is no exception to this and has therefore adopted some of these measures. The main financier of public research undertaken by universities and other research institutes is government through the various ministries (Cloete et al., 2011). The Council for Scientific and Industrial Research (CSIR), a research institute in Ghana, together with all its subsidiary research centres obtain government subvention through the Ministry of Environment, Science and Technology. The activities of the Centre for Scientific Research into Plant Medicine are supported through the Ministry of Health whereas the public universities, including KNUST, obtain funding through the Ghana Education Service (GES) and the Ghana Education Trust Fund (GETFund) facilitated by the National Council for Tertiary Education (NCTE).

Subventions from governments for the public universities are mainly for emoluments, administration and service, staff development and training with little left for research. KNUST, like other public universities in Ghana, therefore has to depend heavily on internally generated funds (IGFs) and strategic partnerships to obtain the needed funding for research and development. To augment funding by the state, KNUST has drawn from many collaborative efforts and research support from corporate organisations and foreign donors over the past decades. The university's internally generated funds (IGFs) comes from school fees, income from semi-commercialised units, such as the University Printing Press, university hospital, photocopy unit, guesthouses and shuttle services. These are captured under private funding in the figure below. The 2017 budget of the university (KNUST) gives the breakdown of the university's sources of income in terms percentages as follows:

• Public funding from government subvention = 55.56%

- Private funding = 37.85%
- Investments = 6.59% (KNUST budget, 2017)



**Figure 1: Funding sources for KNUST Source:** KNUST budget (2017)

The university administrator must rise to the task of strengthening the other areas of income generation. Production units such as photocopy units and printing presses have yielded some dividends to supplement the budgets of the university. Figure 1 above gives an indication of the potential for more funding through private funding and investments. The university administrator must thus evaluate these sources and assess the training needs necessary to build capacity for resource mobilisation.

## Research and its impact

Among the key essential activities of the University that calls for a strong administrative support and the prioritisation of needs is research and its relevance to society. The current thrust is towards knowledge transfer and applied research (Beer, 2008). Estabrooks and Derksen (2008) argue that society has become aware of the need to depend on

research findings and the way it can be used to improve the standard of living. One of the key sources of research findings can be found within the universities and other research institutes. Within the university system, the two main actors in the process of knowledge production are researchers or academics and post-graduate students.

It is the opinion of the authors that, as it is generally assumed, research must be aimed at advancing knowledge, influencing policy, practice and to a large extent aimed at solving socio-economic problems. The increasing demand for research findings is because of the expectation that knowledge production arising out of research is to address practical human challenges, guide decision makers in their decisions and practices (Estabrooks & Derksen, 2008). Also, this demand for the impact of research findings has resulted in many governments making direct demands on universities and research institutions to provide holistic solutions to societal problems. Presently, the most challenging problems include food security, housing, provision of portable drinking water and the provision of good sanitation. In view of this, policy regimes and measures are being put in place by governments to maximise the social impact of research. Some of these measures demand efficiencies in higher education (HE) systems (Wood, 2013). Wood argues further that, irrespective of the notion that universities are 'ivory towers', the boundaries around university campuses are gradually coming down as they engage more closely with local civil society to address practical issues of concern.

Currently, KNUST has several completed and ongoing collaborative research activities and projects which have impacted society positively. The setting up of an Office of Grants and Research (OGR) to drive research investments as well as promote its utilisation in the university may have contributed to the success story. The role of the administrator in the effective operation of the OGR is paramount. Information available at the OGR confirms the existence of many collaborative efforts, projects and their funding sources (KNUST Research Report, 2016).

The call by the public and tax payers for accountability and relevance means that measures are taken by universities to ensure that research is not only produced but utilised to meet the needs of society. This calls for the identification of the appropriate channels for the engagement of relevant stakeholders for the purpose of disseminating research findings and more importantly their applications to addressing societal needs. The place of the Administrator in this process of stakeholder engagement by different departments and faculties to link researchers and users of research is very crucial.

## Increased students' intake

One of the methods being adopted by universities to obtain needed funding for the running of the administrative and academic machinery is to increase the intake of students. This has implications for quality delivery of teaching and learning. Undertaking scientific activities becomes a problem where there are large numbers and inadequate appropriate resources. It is therefore necessary to adopt coping strategies such that with increased students' intake, there will be corresponding expansion in facilities. As far back as 1991, Eisemon and Davis argued that the rapid growth in enrolment which is unequally matched by available resources has led to institutions adopting innovative ways of reconciling the "pressures for mass higher education with selective development of high-quality scientific training and research". Apart from efforts by universities and governments to cope with student numbers and its attendant effects on research and innovation the private sector and philanthropic associations can be called upon to assist. According to Eisemon and Davis (1991), the lack of local government bodies and voluntary associations, local philanthropic foundations and private business with enough financial resources to support universities, have compelled governments to take up almost all the burden of financing higher education. The argument continues that economic conditions and competing and pressing demands from other sectors of the economy have forced successive governments to limit expenditure on higher education, and to shift a higher fraction of the direct costs on to the students. Thus, universities have had to resort to increases in students' intake to generate additional funds for their operations. This results in an imbalance and therefore teaching occupies more time than the other activities, including research. As asserted by Martin and Etzkowitz (2000), increased students intake creates a weakening of the relationship between research and teaching thus posing a threat to the very existence and relevance of the university.

Currently, available facilities at KNUST under normal circumstances would have been highly inadequate for teaching and

learning due to the high student numbers, but for some proactive mitigating measures taken by the university. What KNUST has done over the years is to split classes into smaller sizes and also establish satellite campuses through the distant learning approach. They have also employed the use of multimedia resources, for example, the use of electronic smart podiums which enable lecturers to teach large classes divided into different lecture rooms at the same time. Due to limited laboratory space, sessions are organised at different times for large classes divided into smaller groups.

## The entrepreneurial university and research commercialisation

It used to be the case that in the past, universities, at least using KNUST as an example, were not so much into the business of commercialisation but with current trends this is changing. A lot of innovative ways are coming up, including the setting up of production units to raise funds for the university. Grit (1997) asserts that in some places in the world "universities have lost the misgivings about commercial orientation; they have learnt that knowledge is a product or intellectual property which you can take advantage of in the market". This assertion may have informed the idea behind the entrepreneurial university. Salamzadeh, Salamzadeh and Daraei (2011) defined the entrepreneurial university as a system involving inputs, process and outputs with the aim of mobilising abilities, capabilities and resources to make economic gains. The inputs needed are resources, culture, rules and regulations, structure, mission, entrepreneurial capabilities, and expectations of society, industry, government and market. The processes for achieving this end are; commercialisation, innovation, logistical processes, managerial processes, multilateral interaction, innovation, networking, selection, research funding and financial processes, research and development activities. The expected outputs are; entrepreneurial human resources, entrepreneurial networks, entrepreneurial centres and effective researches in line with market needs, innovations and inventions.

As part of the traditional role of teaching and research, the economic and social development of higher education has since the second half of the 20<sup>th</sup> century been added as the third mission of the University (Etzkowitz, 2004). There is a process through which the entrepreneurial university has to go in order to fully pursue the third mission. Etzkowitz *et al.* (2000) explain that due to increased importance of knowledge, the entrepreneurial university has emerged as a response in enhancing national and regional innovation systems. Also, as a result of the entrepreneurial university, the university can be recognised as a creative and cost-effective inventor that serves as knowledge and technology transfer agents. "An entrepreneurial university proved to be an organization where risk taking is a normal phenomenon when new practices are initiated, and where entrepreneurship is often perceived as taking innovation practices to a commercial profit-exploiting stage" Gjerding *et al.* (2006).

In order to create an entrepreneurial culture, the university must embrace entrepreneurship as part of its working practices. An entrepreneurship culture is most likely to lead to research commercialisation. Efforts should be made by governments to focus on the university as a source that enhances the climate suitable for innovation as well as the creation of scientifically based economic development. To be enablers in economic development, universities must endeavour to achieve their missions by extending their research and teaching to the larger community.

In the light of the above the university administrator must be business-oriented, facilitating the creation of business incubators, liaison offices, technology transfer offices, in order for research results to be transferred through the various organisational structures to the stage of commercialisation. To a greater or lesser degree, the introduction of entrepreneurship training into the university system has affected the educational and research agenda of higher education institutions. (Etzkowitz *et al.*, 2000).

#### The university-industry-government relationship

Activities leading to the transfer of knowledge have brought a lot of transformation in the relationship between the university, industry and government. This relationship has become a strategic issue: as a form of partnership for university research and as a policy tool for economic development (Guena and Muscio, 2009). Knowledge transfer is enhanced through the university–industry-government relationships, otherwise known as the triple helix. It is reported among university scientists that interacting with industry brings about better basic research and gives opportunity for different perspectives which can sometimes be an inspiration for innovative research (Siegel *et al.*, 2003).

The core element in the university-industry-government relationships are transactions that occur through the mechanisms of sponsored research support (including participation and sponsorship of research centres), patents and publications, agreements to license university intellectual property, industry funded laboratories, formal and informal contacts such as meetings and conferences, the hiring of research students, and new startup firms (Bercovitz and Feldmann, 2006; Guena and Muscio, 2009). According to the triple-helix model, the relationship between universities, industry and government become increasingly intertwined, creating activities of collaboration where the different rationalities of university, industry and government are bridged and merged (Gjerding *et al.* 2004).

The capacity of university administrators to manage the intensified rise in the global knowledge economy needs a critical examination. Competencies in seeking strategic partnerships that go beyond the traditional roles of administrators are needed. World-class research universities, with proactive administrators, are at the forefront of pioneering partnerships that seek to enhance the university-industrygovernment relationship. The challenge of how to bridge the universityindustry-government divide can be addressed by highlighting what makes universities attractive as industry partners, what structures make for excellent partnerships and what approach produces seamless interactions. Over the years the University Relations Office and the Office of Grants and Research of KNUST have made some efforts at showcasing some research findings with the aim of bringing research into the public domain. By so doing industrial partners, government agencies and other stakeholders become aware of what the university is capable of doing.

## The challenge of university rankings

Education has long ceased to be defined by local and national issues. In fact, the frontiers of education are said to be endless. It has gone global, with rankings of universities across international boundaries becoming a regular annual feature. Clientele (students and their sponsors) now have more informed basis for selection of institutions of higher learning and this places an enormous responsibility on management to ensure that the institution is well-branded and internationally recognised. Staff training and capacity building in appropriate fields to boost the credentials of the university, increase its visibility and ranking depends to a large extent on smart management practices. The Administrator, working closely with other key academic staff, will need to study the ranking criteria and requirements in order to appropriately inform the university management in setting its own goals and mapping out a plan to accomplish same in this highly competitive process. As to whether or not the ranking is fair or not, it has received wide acceptance among stakeholders and therefore serves as a useful yardstick to measure the performance of universities. Both students and staff depend on these rankings to inform their choices. Perhaps it is about time African universities determine their own ranking system that takes cognizance of its own circumstances and aspirations.

#### Attracting the right caliber of staff

With the quest for a strong competitive edge at the global level comes the issue of attracting the right caliber of staff. In the UK, the higher education sector "generally experiences little difficulty in recruiting and retaining staff except in some professional areas of academic recruitment, where private sector salaries and external earnings potential are very high, and the labour market has historically been buoyant (e.g. the law, accountancy and some other specialist business fields)" (Beer, 2008). This achievement notwithstanding, it is also possible that they may be experiencing similar challenges in recent times.

Ghana, like many other African countries has experienced a continuous exodus of high calibre and experienced researchers to more developed countries for obvious reasons; financial gain and perhaps for prestigious reasons. Apart from attracting the right caliber of staff especially for teaching and research, universities are confronted with the challenge of retaining them. Professionals these days take on jobs as stepping stones for greener pastures. Some jobs are taken just to enrich one's curriculum vitae. Qualified staff are sought for to raise the profile of the institution. There are examples of university administrators and academics who within a period of five years have worked with three different higher education institutions. Again, institutions seeking affiliation and accreditation would provide a long list of experienced staff just to satisfy a criterion.

International migration policies are making it easier for experts to move from one country to another. It is therefore not surprising that

28

Ghana has for years been hit hard by the brain-drain phenomenon, with our most resourceful and productive workforce based in the Diaspora. The managers of the university need to devise some strategic approaches to retain their staff. Adopting an open-door policy, creating avenues to address staff grievances and other motivation packages can go a long way to encourage staff to keep their jobs for a little while.

## Attracting qualified applicants

University Administrators are confronted not only with the challenge of attracting students with the right background but also obtaining the critical mass of students for running some academic programmes. The middle class will opt for private and so-called elite institutions whilst majority of Ghanaians will opt for the traditional publicly funded universities that are usually viewed as prestigious. Whereas some programmes in some institutions are oversubscribed, others are looked down upon and taken as fourth choices. The university is therefore faced with the problem of handling large number of students for some programmes while others lack students. Also, high performing candidates will subscribe to the so-called high profile programmes while the less performing settle for less competitive programmes.

This challenge is worsened by the relatively more attractive programmes being offered by sister institutions and sometimes private universities.

Management should seek to roll out high demand academic programmes and find ways of expanding enrolment within the limited resources. There will be the need to aggressively campaign for programmes that are hitherto looked down upon but which have good potential for national development and the job market. It should be possible to repackage such programmes to make them more attractive to applicants.

The KNUST has a rich history of developing strategies to recruit international students to mainly pursue programmes of their choice. This is evidenced in the number of international students in the university. We must concede though, that the high numbers of international students seeking admission to KNUST has reduced. This calls for the introduction of more demand driven, labour market relevant courses/programmes attractive to both local and international students. The disharmony between academic training and job market/job placement must also be given a serious attention by the university management in order to attract more students.

#### Graduate unemployment

Graduate unemployment is a matter of great concern to every educator. So much public and private funds are spent on graduates who end up not getting jobs long after their National Service. This may be partly due to lack of job spaces to accommodate them but also due to lack of requisite skills required by the labour market. It is often suggested that curricula, teaching and learning should be more applied and practiceoriented in order to gain the confidence of employers and various industry actors. Whereas the first argument calls for knowledge which is immediately useful for work, the second describes a more complex relationship between learning and the field of work. The expectation is that higher education will ensure a systematic confrontation between ways of thinking and problem solving within academic theories on the one hand and the modes of professional thinking and problem solving on the other (Kluge, Neusel & Teichler, 1981). In addition to such a general approach in teaching and learning, internships and other practical phases in the course of study, as well as the involvement of practitioners in teaching and various other specific activities and measures are expected to serve to aid students to be more attractive to the job market and thus limit graduate unemployment. The role of the university administrator comes in handy in the preparation of graduates for the world of work.

#### Quality assurance

The issue of quality of education is of great concern to all university administrators. There is growing consensus that a need exists for improved standards and greater transparency in the process for determining the credit worthiness of learning attained in our institutions of higher learning. To ensure improved standards there must be standards and measurement instruments set within a policy framework. Assessment instruments backed by appropriate legislation to ensure compliance are therefore needed to ensure quality delivery of HE. There is however, the difficulty with the uniformity of assessment that spells out the yardstick for assessors. It is therefore, imperative to work towards an empirical, calibrated widely-accepted performance benchmark which will afford different assessors the use of the same yardstick. This is the duty of administrators and other managers of HE.

## Conclusion

The above discourse highlights some prevailing challenges in HE that need the attention of the university administrator. The call for relevance and accountability of the higher education system falls on the lap of those who directly manage the system. In order to remain relevant and to meet the expectation of the tax payer the university administrator would have to look for ways and means to upgrade his or her knowledge in the field of higher education management. There are other institutions of high learning within and outside this country that have practices which have helped to mitigate some of the outlined challenges. Learning from these experiences is worth considering. It is about time managers of higher education systems consider mounting tailor-made academic programmes that will bring managers of HE institutions up to speed with contemporary issues. The future of HE management highly depends on how versatile the managers will be and how effectively they can turn situations around for good. Whether we like it or not change is inevitable. Again, the university administrator owes it a duty to prove to funders of HE that they are capable of managing the system.

The clarion call is, prove to us that you can manage the higher education machinery in the face of daunting challenges and we will continue to fund it.

#### REFERENCES

Beer, J. HEFCE (2008). Oxford Brookes University. www.hefce.ac.uk

Bercovitz, J. and Feldmann, M. (2006). Entrepreneurial Universities and Technology Transfer: A Conceptual Framework for Understanding Knowledge-Based Development. *Journal of Technology Transfer*, 31: 175–188.

Business and Community Engagement. www.disc.ac.uk

- Castells, M. (2009). Lecture on higher education. *Centre for Higher Education Transformation*, Cape Town, August, 7.
- Clark, B. (2001). The Entrepreneurial University: New Foundations for Collegiality, Autonomy, and Achievement. OECD Journal of the Programme on Institutional Management in higher education management. *Education and Skills*, Volume 13, No. 2.

- Cloete, N., Bailey, T., Pillay, P., Bunting, I., & Maassen, P. (2011). Universities and economic development in Africa. *Wynberg, SA: Centre for Higher Education Transformation (CHET)*.
- Cloete, N., Maassen, P., & Bailey, T. (Eds.). (2015). Knowledge Production and Contradictory Functions in African Higher Education. Cape Town: African Minds.
- Eisemon, T. O., and Davis, C. H. (1991). Can the Quality of Scientific Training and Research in Africa be improved? Minerva, 29(1), 1–26.
- Estabrooks, C. A., Derksen, L., Winther, C., Lavis, J. N., Scott, S. D., Wallin, L., & Profetto-McGrath, J. (2008). The intellectual structure and substance of the knowledge utilization field: A longitudinal author co-citation analysis, 1945 to 2004. *Implementation Science*, 3(1), 49.
- Etzkowitz, H. (2004). "The Evolution of the Entrepreneurial University", *International Journal of Technology and Globalisation*, Vol. 1, No. 1, pp. 64–77.
- Etzkowitz, H., Webster, A., Gebhardt, C. and Terra, B. R. C. (2000). The future of the university and the university of the future: evolution of ivory tower to entrepreneurial paradigm, Research Policy 29, 313–330.
- Geuna, A. and Muscio, A. (2009). The Governance of University Knowledge Transfer: A Critical Review of the Literature. *Minerva* 47, 93–114.
- Gjerding, A. N., Wilderom, C. P. M., Cameron, S. P. B., Taylor, A. and Scheunert, K-J. (2006). "Twenty Practices of an Entrepreneurial Universities" *Higher Education Management and Policy*, Vol. 18/3. http://dx.doi.org/10.1787/ hemp-v18-art19-en
- Grobbelaar, S. & Kirkland, J. 2013. *Development research uptake in sub-Saharan Africa*. Retrieved from http://docs.lib.purdue.edu/cgi/viewcontent.cgi? article=1978&context=iatul [Accessed 17 August 2017].
- KNUST (Kwame Nkrumah University of Science and Technology). 2016. KNUST research report 2016. Published by University Printing Press (UPK), Kumasi
- Making University Partnerships Work. Lessons from Successful Collaborations, www.sciencebusiness.net
- Martin, B. R. and Etzkowitz, H. (2000). The Origin and Evolution of the University Species. Journal for Science and Technology Studies (Tidskrift för Vetenskapsoch Teknikstudier, VEST), 13 (3–4) 2000, 9–34.
- Siegel, D. S., Waldman, D. A., Atwater, L. E. and Link, A. N. (2003). Commercial knowledge transfer from universities to firms: improving the effectiveness of university-industry collaboration. *Journal of High Technology Management Research* 14(1), 111–133.

State Higher Education Finance Report (2014). (www.sheoo.org).

- Teichler, U. (1998). Thematic debate led by ILO: "The Requirements of the World of Work" (www.unesco.org/education/educprog/wche/principal/ worldofwork)
- UNESCO (United Nations Educational, Scientific and Cultural Organization) (2018). *Education and literacy*. Retrieved from http://uis.unesco.org/en/country/gh?theme=education-and-literacy [Accessed 13 May 2016].