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Creating international knowledge coalitions to benefit society: The case of Stellenbosch University's HOPE Project

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Abstract

In this paper the author looks at how universities' international knowledge networks and partnerships can be maximised. These have traditionally focussed on student mobility and benefiting the participating institutions. However, to have a broader impact, two aspects should be emphasised: Multi-structure linkages, as well as the context of the societal need for human development. The theoretical foundation for this analysis is twofold. Castells defines the university as an "engine of development" in society. It plays this role by generating, transferring and applying the knowledge required for human advancement. And Freire's "critical pedagogy" emphasises the idea that education should play a role in changing the world for the better. Along these lines, Stellenbosch University's HOPE Project allows the institution and its partners to direct their activities towards the achievement of developmental goals. This approach has found expression in several pan-African and international networks serving a dual purpose: They address pertinent societal challenges, and also strengthen the various participants.

Keywords

Critical pedagogy, development, HOPE Project, knowledge coalitions, networks, partnerships, science-for-society, Stellenbosch, universities

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1. Introduction

The modern university may be characterised by three distinct yet overlapping functions¹. In the first place the university is a centre of education or general formation through learning and teaching. The emphasis here is *pedagogical* – on shaping the graduate through an open and rational exchange of ideas.

In the second place the university aims at the generation of new knowledge via research. The emphasis is *cognitive* – on the skills and facilities and methods for producing measurable, reliable qualitative and quantitative knowledge outcomes.

Finally, the university serves as an important instrument for the furthering of goals external to itself, often determined by social needs. The emphasis here is *pragmatic* – where the application of knowledge is pursued to the benefit of society.

Universities have the profound task of satisfying all three characterisations, as all three are always pertinent to a greater or lesser degree in different contexts and times. Moreover, university management is about the art of keeping all three these paradigms alive, yet knowing which model fits when and where. For countries in developing contexts, it is about integrating them comprehensively so that the institution becomes what Castells² calls an “engine of development”.

Stellenbosch University’s current strategic plan is an example of an attempt to bring these differing characterisations into a cohesive and complementary whole. We call it the *HOPE Project*³ – a reflection on Freire’s⁴ notion of a “pedagogy of hope”. The pragmatic conception is key here, but it is achieved by educating individuals to lead change and serve development and by producing research that is not only excellent but also relevant.

Through a wide range of academic and cross-cutting initiatives the HOPE Project pursues sustainable solutions to some of South Africa’s and Africa’s most pressing challenges. The

¹ Adapted from a characterisation by Hennie Rossouw, *Universiteit, wetenskap en kultuur: opstelle oor die krisis, uitdagings en geleenthede van die moderne universiteit* (Cape Town: Tafelberg, 1993).

² See Manuel Castells, *The University System: Engine of development in the new world economy* (Washington DC: The World Bank, 1991).

³ See www.thehopeproject.co.za

⁴ Paulo Freire, *Pedagogy of the oppressed* (London: Penguin, 1996 [1970]); and Paulo Freire, *Pedagogy of hope: reliving Pedagogy of the oppressed* (London: Continuum, 2004 [1992]).

initiatives follow a science-for-society approach, and are grouped into five themes that are aligned with the international development agenda:

- Eradicating poverty and related condition;
- Contributing to human dignity and health;
- Consolidating democracy and human rights;
- Promoting peace and security; and
- Balancing a sustainable environment with a competitive industry.

These themes are pursued in each of the University's three core functions of learning and teaching, research and community interaction⁵. And the motivation for doing this can be found in how we see the role of the University – that it should be a centre of hope by addressing the needs of society and in that way help to change the world⁶.

Stellenbosch University – in a policy document adopted by its Senate and Council, *Hope as guiding concept for Stellenbosch University*⁷ – states that it “is committed to creating hope in and from Africa by means of excellent scholarly practice.” This idea is expanded upon as follows:

The University endeavours to create the conditions that will ignite the imagination of scientists to solve problems in creative ways through basic and applied research and through multi-, inter- and transdisciplinary academic activities. The three core academic functions of the University, namely scientific research, learning and teaching and expertise-based community interaction are integrated and used in the service of both the private and the public good.

Our thinking is informed by an analysis that a university is not just there for itself and its immediate community. A university is a national asset, *and* a regional asset, *and* a continental asset *and* a world asset. It is in this context that the need to integrate the core functions of a university – and the strategy of pursuing meaningful collaboration with others through building international knowledge coalitions – should be seen.

⁵ See H.R. Botman, “The case for the relevant university,” *South African Journal of Higher Education* 25 no. 1 (2011): 14–21

⁶ See <http://www.sun.ac.za/university/Management/rektor/docs/russel%20installation%20speech.pdf>

⁷ <http://www.sun.ac.za/NEWS/dokumente/algemeen/Hoopmotief.pdf>

2. The developmental context and universities

The context to which the HOPE Project is directed is diverse. It is characterised by South Africa's history of exclusion and discrimination on the one hand, and the promise – but also the challenges – of democracy, inclusion and sustainable development on the other. This context is not unique to South Africa, but representative of many other countries in Africa and other regions of the developing world.

However, Africa's higher education situation presents a number of unique challenges, and the HOPE Project aims to address these as well. A snapshot of sub-Saharan Africa's contribution to world science output as measured in share of accredited journal publications shows a decrease from 1% in the mid-1980s to 0,7% two decades later. It should be noted that in reality the total number of articles in sub-Saharan Africa had increased by 38% between 1990 and 2004 to a total of 46 000 articles during the period 2001-2004. This increase was, however, slower than the rest of the world over the same period.⁸

These problems are of course multifaceted and resists simple solutions. It has to do, amongst others, with: the “massification” of higher education in Africa (lecture rooms are overcrowded and academics spend most of their time teaching and yet access to higher education remains painfully low); lack of resources and the lure of better salaries and career opportunities in advanced nations (the “brain drain” out of Africa has reached unprecedented levels over the past decade); weak infrastructure that hampers scientific investigation, communication and access to information; and institutional bureaucracy and leadership styles that inhibit academic freedom.

Many of these challenges can be traced back to the debilitating effects of underdevelopment and the accelerated de-institutionalisation of science and scholarship in Africa over the last few decades.⁹

An additional aspect that appears as an African anomaly is the very limited contact that scientists in Africa have with their colleagues in other African countries. Perhaps as a

⁸ Robert J. W. Tijssen, “Africa's contribution to the worldwide research literature: New analytical perspectives, trends, and performance indicators,” *Scientometrics* 71, no. 2 (May 2007): 303-327, <http://www.springerlink.com/index/10.1007/s11192-007-1658-3>.

⁹ Johann Mouton et al., “The State of Public Science in the SADC Region,” in *Towards a Common Future: Higher Education in the SADC Region*, ed. Piyushi Kotecha (Johannesburg: SARUA, 2008), 197-302, <http://www.sarua.org/?q=content/chapter-4-state-public-science-sadc-region>.

consequence of colonisation, higher education institutions have maintained contact with their former colonial powers post independence, but were slow to build ties with neighbouring institutions. This has increased the marginality of science in Africa, which partly explains its low share of global research output. Marginalisation means “to be less well-integrated into the social network of scientists, to have fewer colleagues to whom to turn for feedback, or to have one’s potential contributions ignored.”¹⁰

Lack of collaboration becomes an even more pertinent problem when one considers the crucial role that collaboration has played in the history of knowledge. It is only by reading, sharing, criticising and presenting ideas that they develop into meaningful human products.

The opposite of this is to be tied into collaborative networks where one’s work is read and criticised, where one gains access to the most recent, unpublished work of other researchers in one’s field and where collaborators share access to resources and funding.¹¹ A recent report on worldwide scientific collaboration by the Royal Society emphasises that collaboration is becoming an important indicator of competitiveness since it enhances the quality of research, improves its efficiency and effectiveness, and is increasingly necessary as the scale of both budgets and research challenges grow.¹²

3. Collaboration in bilateral and multilateral mode

It is our contention that addressing these varying challenges of higher education in Africa requires innovative approaches to collaboration in and with Africa. The traditional mode of north-south collaboration needs to be expanded to south-south and south-south-north collaboration. This needs institutional support, such as university exchange agreements that support potential areas of collaboration, seed funding for joint research and teaching, and project managers who understand the complexities of academic networks. It also requires national support, like raising science spending to at least 1% of GDP and ensuring that part of the spending goes towards transnational higher education collaboration in Africa.

¹⁰ Warren Schmaus, “A New Way of Thinking about Social Location in Science,” *Science & Education* 17, no. 10 (December 2007): 1127-1137, <http://www.springerlink.com/index/10.1007/s11191-007-9129-z>.

¹¹ K. Brad Wray, “The Epistemic Significance of Collaborative Research,” *Philosophy of Science* 69, no. 1 (March 2002): 150-168, <http://www.journals.uchicago.edu/cgi-bin/resolve?id=doi:10.1086/338946>.

¹² The Royal Society, *Knowledge, networks and nations: Global scientific collaboration in the 21st century*, 2011, <http://royalsociety.org/knowledge-networks-nations/>.

Numerous examples of institutional and national strategies for increasing African collaboration already exist. At national level South Africa's Department of Science and Technology have concluded bilateral science agreements with many of their counterparts in other African countries and in some cases both parties have contributed funding towards research collaboration, e.g. with Kenya, Mozambique and Namibia.

At institutional level bilateral exchange agreements are a standard model of collaboration. These are important as they provide the frameworks within which collaborative research and teaching projects can be initiated. However, more recent phenomena in Africa and worldwide has been to establish multiple-partner networks, often organised around a jointly administered educational programme, sometimes encompassing also joint research on specific themes with societal and developmental relevance. Examples of such thematic networks in Africa include the African Economic Research Consortium (AERC), and the Regional University Forum for Capacity Building in Agriculture (RUFORUM).

Stellenbosch University currently engages in numerous such thematic networks, encompassing almost all faculties and engaging tens of university partners throughout the continent and beyond. Three of these networks will be elucidated here, as a demonstration of the multifaceted nature of what we like to refer to as "knowledge coalitions".

3.1. PANGeA

The Partnership for Africa's Next Generation of Academics (PANGeA)¹³ originated from a meeting with the deans of humanities and social science faculties throughout Africa in Stellenbosch in November 2006. PANGeA started as a collaborative network amongst the universities of Botswana, Dar es Salaam, Makerere, Malawi and Stellenbosch, later adding the Universities of Nairobi and Ghana to its core membership. The network's main initiative is to promote Africa's next generation of academics and professionals by building and sustaining world class doctoral programmes and scholarly communities through partnerships on the African continent.

Since 2010, 76 PhD scholarship holders from PANGeA partner institutions and elsewhere in Africa have enrolled through the Graduate School of Stellenbosch University's Faculty of Arts and Social Sciences in eight different research themes. The first year at Stellenbosch

¹³ See <http://www.pangeaonline.org>

University addresses research competence and research proposal development via specialist training programmes and guidance, followed by a research stay, typically under a co-supervisor at their home institution and a third year for finalisation of the dissertation at Stellenbosch. The opportunity for academic exchanges and training of supervisors are also made available to staff members from partner institutions.

Expertise from the various partner institutions will be tapped into and made available; this may lead to the expansion of existing research themes or the development of new emerging themes that may be incorporated into the PANGeA doctoral programme. The current research themes indicate the diversity of the network and incorporate a variety of content that is indicative of the priority areas in social sciences across the African continent.

3.2. TRECCAfrica

The TRECCAfrica¹⁴ consortium, which stands for “Transdisciplinary Training for Resource Efficiency and Climate Change Adaptation in Africa”, is a network of six African Universities – Dar es Salaam (Tanzania), Ghana, Mekelle (Ethiopia), Nairobi (Kenya), Nigeria-Nsukka and Stellenbosch. This mobility scheme is focused on assisting the continent’s sustainable development in addressing the twin challenges of climate change adaptation and natural resource depletion.

This scheme consist of mobility scholarships for 72 students and 8 staff members whose common goal is to surpass borders of discipline in order to produce scientifically acclaimed postgraduate research in this area. The Intra-ACP Academic Mobility Scheme of the European Commission granted TRECCAfrica a grant in 2011, which will be disbursed over a period of five years. The PhD and master’s degree scholars will study at all six partner universities whilst maintaining contact and aligning their research with the overall objective of transdisciplinary approaches to resource efficiency and climate change adaptation. Core staff members and PhD students are invited to an annual Summer School on transdisciplinary research methodologies and competencies. This training initiative will allow young staff members to gain and increase their knowledge on Africa’s future sustainability options whilst networking and liaising with colleagues from various disciplines across the continent.

¹⁴ See <http://www.treccafrica.com>

3.3. Periperi U

Partners Enhancing Resilience to People Exposed to Risks (Periperi U)¹⁵ – is a consortium of African Higher Education Institutions (HEIs) in Algeria, Ethiopia, Ghana, Kenya, Madagascar, Mozambique, Senegal, South Africa, Tanzania and Uganda. This consortium is revolutionary, as it is the only one of its kind focused on providing an African response to disaster risk management in Africa. Founded in 2006, its innovative collaboration seeks to challenge prevailing views around different levels of agency. Its core values lie in the abolishment of victimhood by investing in human capital through training and education.

Periperi U now actively engages 71 academic professionals in ten countries working together as colleagues in a socially responsive enterprise. This collective effort is practically reflected in the introduction of nine applied undergraduate and postgraduate programmes within Africa that are generating “new” applied disaster risk reduction professionals.

Through bilateral and multi-lateral exchange visits, staff members from within the Periperi U consortium are able to attend short courses, which not only contributes to capacity development, but in turn allows them to apply the knowledge they have learnt for their own community’s empowerment. They also have the opportunity to liaise and consult with colleagues from various disciplines on curriculum development and co-teaching in academic programmes. This form of knowledge transfer has undoubtedly contributed to the continent’s knowledge base on disaster risk management.

4. Conclusion

The overall theory about the three core functions of universities is not realised in practice at each and every institution. Some universities concentrate more on some aspects than others. However, the key to fulfilling the true potential of a university is the integration of the three core functions into a coherent whole, as we have done through our HOPE Project.

Stellenbosch University’s internationalisation strategy now includes an explicit focus on developing sustainable and long-term academic networks that will contribute relevant knowledge for Africa’s immense developmental potential in the decades to come. Africa has been growing steadily since the turn of the millennium. This growth was virtually undeterred by the so-called global financial crisis, and there is widespread agreement that Africa’s

¹⁵ See <http://www.riskreductionafrica.org>

economies will continue its high growth in the coming decade and more. According to *The Economist*, “Africa’s economies are consistently growing faster than those of almost any other region in the world.”¹⁶

The challenge for Africa is to translate economic growth into broad-based human development, and here civil society and higher education has a key role to play. As I argue elsewhere¹⁷, the research output of African universities should be increased – coordinated in such a way that it is focused on the developmental challenges of Africa. Universities must plug themselves into the development processes. One way to ensure that they do this is by gaining the support of universities in other developing and developed regions around the globe.

The impact of bilateral and multilateral collaboration can be increased by moving beyond a narrow conception of institutional advancement, embracing instead the much broader idea of critical knowledge partnerships for human development.

¹⁶ “The Sun shines bright: The continent’s impressive growth looks likely to continue,” *The Economist*, 3 December 2011.

¹⁷ H. Russel Botman, “Taking Africa beyond the MDGs: The role of higher education in development,” in *The Millennium Development Goals and Beyond: Global Development after 2015*, ed. Rorden Wilkinson and David Hulme (to be published July 2012), Routledge.