

Hope in Africa

Human development through higher education community interaction

Prof H Russel Botman, Rector and Vice-Chancellor of Stellenbosch University, South Africa and Vice-President of the Association of African Universities

Talloires Network Bellagio Conference, Italy 23-27 March 2010









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www.aau.org



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A presentation to the Talloires Network Bellagio Conference, Italy, 23-27 March 2010, by Prof H Russel Botman, Rector and Vice-Chancellor of Stellenbosch University and Vice-President of the Association of African Universities If you plan for a year, sow a seed.

If you plan for a decade, plant a tree.

If you plan for a century, educate the people.

- Zhuangzi (Master Chuang), Chinese philosopher, 4th century BC

Introduction

A growing number of African universities (see Appendix I) are joining the Talloires Network, "an international association of institutions committed to strengthening the civic roles and social responsibilities of higher education" (www.tufts.edu/talloiresnetwork). Africa is a continent in great need of empowerment, growth and development, and the network has emerged as an important initiative in the global drive to promote human development.

Stellenbosch University signed up last year. Along with other members, we share the view that "higher education institutions do not exist in isolation from society". Talloires participants have committed themselves to "education for social responsibility" and the "application of university resources to the needs of local and global communities".

Participants in the Bellagio Conference, 23-27 March 2010, will be discussing measures to strengthen regional networks of higher education community interaction. It would be necessary to get a sense of initiatives in our respective regions, and to identify the most important challenges and opportunities for expanding our civic interconnectivity.

This particular input is focused on Africa. It is not a comprehensive overview of higher education community interaction on the continent. Instead, some contextual factors are briefly outlined and the example of Stellenbosch University discussed in more detail.

Higher education community interaction in Africa

The Association of African Universities (AAU) is the overarching network of tertiary institutions on the continent, with nearly 200 members in 45 countries. It plays a role in all five sub-regions of Africa.

The AAU's mission is "to raise the quality of higher education in Africa and strengthen its contribution to African development" (www.aau.org). Note how development is linked to higher education. The AAU also lists community engagement as a core function of universities, alongside teaching, learning and research.

In a submission to the I2th General Conference of the AAU in Abuja, Nigeria in May last year (Botman et al, 2009), it was argued that "knowledge and education is the bedrock of human development" and that "higher education is the capstone of education in society" and "a critical pillar of sustainable human development". Higher education "imparts knowledge and produces professionals" in a variety of fields, equipping them with the necessary skills to fulfil leadership roles in society and drive the economic growth required for improving people's lives.

It was pointed out that "in the past, very little empirical evidence showing the link between investment in higher education and economic growth and poverty-reduction existed", but "more recently ... evidence has emerged showing a more complex relationship between higher education and income; tertiary study is both a determinant and result of the latter."

Higher education results not only in private good (e.g. better employment opportunities, higher salaries), but public benefits too (greater tax revenue and investment, stronger entrepreneurship, reduced population growth, improved technology). This has led the World Bank, UNESCO and donors to acknowledge that "higher education is no longer a luxury; it is essential to future national, social and economic development" (Task Force on Higher Education and Society, 2000).

Higher education participation in Africa is very low. According to the United Nations (UN), tertiary enrolment has risen faster in Africa than elsewhere – by some 66% since 1999 – but in 2005, the number of students entering higher education still

stood at just 5% of the eligible age group (World Conference on Higher Education, 2009). Comparable figures were 72% in the US, 60-64% in Eastern European countries such as Slovenia and Russia, and 10% in India (Teferra and Altbach, 2003).

In order to address this problem, both the UN and the African Union (AU) have prioritised higher education in Africa. Development of the tertiary sector forms part of the UN Decade of Education for Sustainable Development, which runs from 2005 to 2014. And it is a key focus of the AU's Second Decade of Education for Africa, which runs from 2006 to 2015.

Community engagement is highlighted in both campaigns. It benefits both the university and the community, and promotes a shared goal – that of sustainable human development.

Community Interaction

Internationally, the term "community engagement" is commonly used to describe the mechanism through which teaching and research is integrated into a university's engagement with and in society. Stellenbosch University prefers the term "community interaction", which offers essentially the same meaning, but emphasises reciprocity between the university and the community.

At Stellenbosch University, community interaction as a core function of the university exists to nurture and manage partnerships with communities. This facilitates cooperation between communities and the university. And it provides the means whereby both parties can actively discover knowledge, teach and learn from each other.

Community interaction contributes to an environment where student learning is enriched and research relevance is enhanced. It supports Stellenbosch University's institutional commitments to reciprocity, redress, development and transformation.

Stellenbosch University is considered a leader in the field of civic engagement because of the extent to which community interaction has been institutionalised. It forms an integral part of governance structures, budget lines, academic work and student activities at the university.

South African Higher Education Community Engagement Forum

Civic engagement is making strides in the South African tertiary education sector. All 23 public universities plus one private institution belong to a new national structure, the South African Higher Education Community Engagement Forum (SAHECEF). It is now duly constituted after a launch conference in Durban (I-2 November 2009) and an inaugural board meeting in Johannesburg (30 November to I December 2009).

SAHECEF is representative of university staff responsible for a broad typology of community engagement expressions in South African higher education. It is in the process of obtaining official recognition as a sectoral committee of Higher Education South Africa (HESA), the country's highest level representative association of universities.

Stellenbosch University played a leading role in the establishment of SAHECEF, and also holds the forum's chair for 2010-2011.

Universities and the Millennium Development Goals

The Association of Commonwealth Universities (ACU), "one of the largest interuniversity networks in the world", will be focussing on the contribution of universities to the UN's Millennium Development Goals (MDGs) at its Conference of Executive Heads in South Africa in April 2010 (see Appendix 2 for a full list of the MDGs).

In its preparatory material for this meeting, the ACU states: "Universities are not mentioned in any of the goals, although it is recognised that the goals cannot be achieved without the research, policy analysis and the teaching and outreach that universities provide". According to the ACU, its MDG conference "provides an opportunity to demonstrate this essential contribution and will allow universities to re-affirm their commitment to helping to create a sustainable and more equitable world for future generations.

On 26 April 2010, the ACU's Conference of Executive Heads will be meeting in Stellenbosch. The day's programme is devoted to a discussion of the institutional commitment of universities to the MDGs. This ties in with the fact that Stellenbosch University has taken the bold step to draw out from the MDGs five themes on which to focus its mission and vision, and so marry higher education with development and economic growth in a more comprehensive way. Stellenbosch University has positioned itself to use its expertise to assist in:

- Eradicating endemic poverty and related conditions
- Contributing to human dignity and health
- Consolidating democracy and human rights

- Promoting peace and security
- Balancing a sustainable environment with a competitive industry

We have decided to draw everything that we do into these developmental themes research, learning and teaching, as well as community interaction (Botman et al, 2009). Over the past three years faculties have developed research proposals that would direct their expertise into achieving these goals, in a process called the Overarching Strategic Plan (OSP). The result has been the formulation of 23 visionary projects covering topics such as the socio-economic rights of the needy under our constitutional dispensation, the use of Geographic Information Technologies for Africa's development, renewable and sustainable energy supply for developing regions, food security in Southern Africa, rural health and development, human dignity, as well as invasion biology and environmental sustainability, to mention just a few.

Stellenbosch University's higher education vision

(Botman et al, 2009.)

Stellenbosch University seeks to embody pedagogy of hope through knowledge pioneering scholarship, research and teaching, generating hope and optimism from and within Africa.

The "pedagogy of hope" concept has been adopted as a guiding principle in teaching, research and learning. This philosophy posits that the main idea driving our university should be rooted in the idea of "hope".

Hope should be embedded in the skill of teaching and educating. It is a foundation from which the message of possibility over limitations, of opportunity over cynicism, of creation over destruction, indeed, of hope over pessimism is carried through to everyone in our community.

Learning is something more than just imparting knowledge through teaching; it is a special process where we absorb and adapt and question. Knowledge, in all its shapes and forms, is the vehicle through which future opportunities and future success is achieved – the better the vehicle, the more suited it is to individual needs, the better the journey and destination.

Generating hope from Africa is thus a future-oriented vision for education on the continent. The global development agenda is similar in its focus; the identification of social, health and political goals which we as a global community should strive to achieve.

An example of one of Stellenbosch University's strategic projects with a strong element of community interaction is the TsamaHUB project (an acronym derived from its full name - the Centre for Transdisciplinarity, Sustainability, Assessment, Modelling and Analysis). The TsamaHUB is conducted in partnership with the Sustainability Institute and its Eco-Village concept. It also forms part of an agreement between Stellenbosch University and the Stellenbosch Municipality called "Reinventing Stellenbosch: A Sustainable University Town". These connections express the need for science to move beyond the confines of classrooms to the communities and societies where development is most needed.

We have turned the town of Stellenbosch and the surrounding areas into a living laboratory to pioneer new knowledge and to create tangible hope for the less fortunate. Our academics and students are the knowledge partners of the municipality on issues such as land reform, spatial development and planning, water purification, refuse management and a scientific approach to the landfill problem, as well as issues pertaining to infrastructural planning for the future and ensuring a sustainable environment and responsible resource usage in the country's leading wine and deciduous fruit region. And the golden thread running through all these projects of social reconstruction is tangible hope for all our people.

In the following graphic (Figure 1), the 23 strategic projects are positioned respectively to the five developmental themes. Each of the projects feed into one or more of the themes. Importantly, the OSP projects have an overtly inter-faculty, interdisciplinary and transdisciplinary orientation. They also engage partners from various spheres of society: industry, government, nongovernmental organisations and faith based organisations, urban and rural communities, science councils, and partner universities elsewhere in Africa and beyond.

Stellenbosch University's Pedagogy of Hope

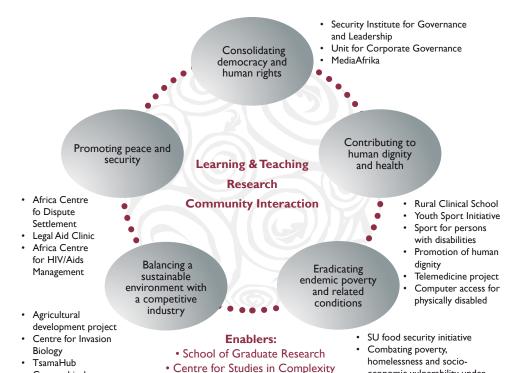
Figure 1: Themes and Projects

· Geographical

· Energy and the

environment

Information Technology



e-learning library

Virtual postgraduate learning

support project

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Challenges for higher education community engagement

- Conceptualisation: It remains a challenge in higher education to arrive at a common definition of what civic engagement is. It is also a challenge to rid ourselves of the old paradigm of "community service" that keep us captive and to arrive at a more reciprocal concept that emphasises partnership and mutual benefit.
- Institutionalisation: Civic engagement is not yet universally accorded the status of a fully-fledged academic core function of universities. The challenge is to develop and institute appropriate mechanisms for community interaction at an institutional level.
- Quality assurance: The challenge is to develop quality assurance mechanisms and management indicators for civic engagement that are similar to those developed for research and for teaching & learning.
- Funding: In South Africa and elsewhere on the continent - government subsidies are earned for research and teaching & learning, but not for all types of civic engagement work.

Opportunities for future development (Slamat, 2009)

- The hope of finding sustainable solutions to the most pressing problems of society through research is perhaps the greatest opportunity for higher education community interaction.
- Through their involvement in community interaction, the social responsiveness of students can potentially be enhanced. This is supported by anecdotal evidence gained from student feedback at

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- Stellenbosch University. It is hoped that socially responsive students will ideally become socially responsive citizens and professionals.
- Through their involvement in community interaction, academics can potentially become capable and committed to address and improve the human condition. This also is supported by anecdotal evidence gained from lecturer feedback at Stellenbosch University.
- Civic engagement has the potential to advance a certain kind of community, namely communities with a voice, committed to partnership and a spirit of reciprocity.
- Community interaction has the potential to facilitate a participatory pedagogy, where the barriers between those who teach and those who learn, and between those inside the university and those outside the university become blurred.
- Related to this is the recognition of the existence of different types of knowledge sources, both inside and outside the university and the possibility of a more modest epistemology, that recognizes the complex nature of our world, and that values the centrality of interpretation.
- Community interaction makes it possible to view the university not in terms of a well-oiled machine, but as an engaged institution that fosters hope - because of the honest efforts of many committed and inspired individuals and group inside it.

economic vulnerability under

the constitution

Conclusion

Our vision for Africa is a future free from poverty, where the human dignity of all people is protected, where our social and ecological systems are healthy, and where peace, security and democracy are safeguarded (Botman, et al, 2009).

Higher education community interaction is central to the realisation of this vision because it, too, is essentially aimed at achieving sustainable human development.

The implication for universities is that community interaction is far more that a peripheral activity, but in fact a key driver in the academic project. As such, higher education civic engagement in Africa should be strengthened and expanded.

Appendix I

African universities that belong to the Talloires Network

- I. Ahfad University for Women (Sudan) *
- 2. Bayero University (Nigeria)
- Cape Peninsula University of Technology (South Africa) *
- 4. Cuttington University (Liberia)
- 5. Kenyatta University (Kenya)
- Kwame Nkrumah University of Science and Technology (Ghana)
- 7. Michael Okpara University of Agriculture, Umudike (Nigeria)
- 8. Midlands State University (Zimbabwe)
- 9. Mzumbe University (Tanzania)
- National University of Lesotho (Lesotho)
- II. National University of Rwanda (Rwanda)
- 12. Rhodes University (South Africa)
- 13. Stellenbosch University (South Africa)
- 14. Strathmore University (Kenya)
- Tshwane University of Technology (South Africa)
- 16. University for Development Studies (Ghana) *
- 17. University of Cape Town (South Africa)
- 18. University Cheikh Anta Diop (Senegal)
- 19. University of Dar es Salaam (Tanzania) *
- 20. University of Fort Hare (South Africa)
- 21. University of Ghana (Ghana)
- 22. University of Mines and Technology (Ghana)
- 23. University of Pretoria (South Africa)
- 24. University of the Free State (South Africa)
- 25. University of the Western Cape (South Africa)
- 26. Walter Sisulu University (South Africa)

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Appendix 2

Millennium Development Goals

- 1. Eradicate extreme poverty and hunger
- 2. Achieve universal primary education
- Promote gender equality and empower women
- 4. Reduce child mortality
- 5. Improve maternal health
- Combat HIV/AIDS, malaria, and other diseases
- 7. Ensure environmental sustainability
- 8. Develop a global partnership for development

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^{*} Founder members

Stellenbosch University Institutional profile

Nestled among picturesque mountains in the heart of the Cape Winelands, Stellenbosch University (SU) offers a stimulating academic environment, a vibrant student life and a preferred sporting and cultural destination.

With origins dating back to 1866, the institution acquired university status in 1918 and now is recognised as one of the top research-intensive universities on the African continent. The University has the highest research output per academic staff member in the country, as well as one of the highest percentages of postgraduate students. In addition, it has South Africa's second highest number of researchers rated by the National Research Foundation (NRF), with the highest number for the human sciences.

Academic and research excellence

Stellenbosch University has 270 NRF-rated researchers, three Centres of Excellence and 12 Research Chairs. SU designed and manufactured Africa's first micro satellite, SUNSAT, which was launched in 1999. South Africa's second micro satellite, SumbandileSat, was launched in September 2009 under the management of the University, while the satellite was built by SunSpace, a spin-out company of SU.

Eight of the University's ten faculties — AgriSciences, Arts and Social Sciences, Education, Engineering, Law, Science, Theology, and Economic and Management Sciences — are situated on the University's main campus at Stellenbosch. The Tygerberg Campus is home to the Faculty of Health Sciences, while the Faculty of Military Science is located at the Saldanha Campus on the Province's West Coast. The Business School and the School for Public Management and Planning are situated at the Bellville Park Campus.

Life on campus

The University campus culture is one of a vibrant blend of differences and similarities. Various student organisations on the four campuses cater for a wide range of interests, including politics, religion, culture and relaxation. Well-known and established student activities that range from festivals to more focused discussions and debate add to the unique experience of being a Matie (as a Stellenbosch student is affectionately known). Ultimately, students are being prepared for the complex societies within which they must live and work.

The heart of campus life, and the true experience of being a Matie, lies in the wide variety of activities on offer. Maties share a feeling of solidarity, forge lifelong friendships, and in consequent years often reflect fondly on all the experiences they have shared.

Stellenbosch University can be described as a residential, town's university. The "res" is one of the focal points of the Stellenbosch

University experience. This is where friendships are formed and strengthened, where cultural differences are discovered and enjoyed. The residence system enables students to live and learn in an environment that helps them thrive. Experience has shown that students living within a structured support network with access to mentors, teachers, tutors, counsellors, peers and friends achieve greater success than those who do not have similar support.

Internationalisation

Through its Post Graduate and International Office, Stellenbosch University has forged strong international relationships. The office creates a focused support service platform to promote postgraduate studies and the success of postgraduate students, and promotes the incoming and outgoing international academic mobility of staff and students. The university offers a range of opportunities for international students enrolled elsewhere to follow courses here at both undergraduate and postgraduate level, depending on the student's academic background and the availability of places on courses. The Postgraduate and International Office is a member of the Association of African Universities (AAU); Association of Commonwealth Universities; European Association for International Education: Association of International Educators (NAFSA) and the International Education Association of South Africa (IEASA).

Stellenbosch University has earned international recognition over many years for its excellence in all three pillars of its core function: teaching, research and community interaction. In addition, knowledge-based initiatives that are aligned with international development objectives provide proof that Stellenbosch University

is transforming its vision of being a builder of hope in the South African and African context into tangible science for society.

Faculties

AgriSciences; Arts and Social Sciences; Economic and Management Sciences; Education; Engineering; Health Sciences; Law; Military Science; Science and Theology.

Statistics 2009	
Founded:	1918
Undergraduate students:	15 390
Masters students:	4 719
PhD students:	993
International students:	2 137
Academic staff:	867

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Fast facts

- According to the South African Department of Education, SU's formal weighted research output per academic staff member for the year 2008 was 2.13, the highest research output per capita of any university in the country. In addition, the University's research teams produce about 12% of the research output in South Africa.
- SU has 270 researchers with ratings from the NRF, 14 of whom have A ratings (researchers regarded as world leaders by their peers) and three of whom have P ratings (researchers regarded as potential world leaders by their peers).
- For several years, SU has been a major recipient of research funding from the Technology and Human Resources for Industry Programme (THRIP) of the Department of Trade and Industry, in terms of which the Department matches industry funding rand for rand.
- SU has retained the top position among universities in South Africa in terms of funding obtained through various bilateral partnerships managed by the NRF, with a total income of approximately R10 million.
- With innovative interdisciplinary programmes, the Stellenbosch Institute for Advanced Studies offers national and international researchers the opportunity to embark on thematically oriented projects.
- The South African Department of Science and Technology (DST) has established three out of only seven Centres of Excellence at Stellenbosch University in Invasion Biology, Epidemiological Modelling and Analysis and (in collaboration with the University of the Witwatersrand) and Biomedical TB Research.
- The DST also adjudicated Stellenbosch as the Most Technologically Innovative

- Campus in the country largely due to its e-campus initiative, which encourages the use of technology for improving teaching and research.
- Spearheading innovation on the campus is InnovUS, the University's technology transfer company. InnovUS, one of the oldest technology transfer companies in the country, facilitates technology transfer from the academic to the commercial environment, taking the benefits of scientific inventions to communities.
- Through their involvement in the European Union's prestigious Framework Programme 7 (FP7) Stellenbosch University researchers are recognised as leaders in their fields of expertise. Framework Programme 7 is the largest public funder of research in the world.
- SU makes science work for Africa through seven centres with a special focus on Africa:
- The African Business for Sustainable Natural African Plant Products brings research proficiency to individuals in order to ensure sustained agribusinesses.
- The African Institute for Mathematical Sciences is an internationally acclaimed initiative in Muizenberg supported jointly by the Universities of Cambridge, Oxford, Paris-Sud, Cape Town, Western Cape and Stellenbosch, that develops talented young mathematicians from Africa.
- The National Institute for Theoretical Physics gives local physicists international exposure and trains future African theoretical physicists. It provides theoretical underpinning for national programmes and has regional centres at the Universities of KwaZulu-Natal and Witwatersrand.

- The Africa Centre for HIV/Aids
 Management equips students with
 the knowledge and skills to manage the
 impact of HIV/Aids in the workplace.
- The Ukwanda Centre for Rural Health coordinates and supports training and research initiatives in rural and underserved communities.
- The Desmond Tutu TB Centre combines basic and cutting-edge research with the training of students in the Health Sciences.
- Networking of African
 Congregational Theology develops
 Christian leadership in Africa.
- Striving to be relevant and taking its social responsibility seriously, SU has established itself as a national leader in community interaction. Solid institutional arrangements, incentives and flagship projects are in place to advance community interaction as a core function of the University. SU actively pursues the integration of community interaction with its other core functions of teaching, learning and research.
- Stellenbosch University hosts
 nine research chairs as part of the
 SA Research Chairs Initiative
 (SARChI) in the fields of: Functional
 Nanostructured Materials; Experimental
 Petrology; Advanced Macromolecular
 Architectures; Genetic Tailoring of
 Biopolymers; Post-harvest Technology;
 Photonics, Ultrafast and Ultra-intense
 Laser Science; Post-traumatic Stress
 Syndrome; Economics of Social Policy;
 and Property Law.
- Through an SA National Energy Research Institute (SANERI) Research Chair, the University acts as the hub for a

- postgraduate programme in Renewable and Sustainable Energy Studies.
- Stellenbosch University is home to two other research chairs: the HF Oppenheimer Chair in Human Rights Law and a South African National Roads Agency Limited (SANRAL) Chair in Pavement Engineering.
- The University of Stellenbosch
 Business School (USB) is one of the
 few management schools outside of
 Europe that is accredited by the European
 Quality Improvement System of the
 European Foundation for Management
 Development. The School's MBA
 programme has also been accredited
 by the Association of MBAs of the
 United Kingdom.
- Unique to Stellenbosch University is the First-year Academy (FYA), an initiative that focuses specifically on success in the first year of study. In the Faculty of Health Sciences alone, this initiative has led to an improvement in the pass rate from 92% to 96% over the past three years, in spite of a greater intake of students from disadvantaged schools.

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