Cardiovascular Topics

The value of community outreach for a University: a synthesis of trends in higher education The case of the University of Limpopo (ELS 45)

Hlengani Siweya

Abstract

Background: The South African National Development Plan (SANDP) vision for 2030 highlights key recommendations for reducing the prevalence of non-communicable diseases (NCDs) by 28% by 2030. These are mirrored by the World Heart Federation, although it focuses on reducing the NCD prevalence by 25% by 2025. The targeted diseases include, among others, cardiovascular diseases, diabetes, cancer and chronic respiratory diseases.

Objectives: The aim was to contribute to discussion on the social responsibility, public good and community development functions of a university in South Africa, as derived from the Higher Education Act 101 of 1997 (as amended).

Methods: The researcher's ontology links with this notion of the existence of multiple realities that exist among universities in South Africa, and provides the basis for a social construction epistemology. Different realities exist for the University of Limpopo.

Results: The Dikgale Health and Demographic Surveillance System and the Ellisras Longitudinal Study, which both started in 1996 within the University of Limpopo, provide ample bush university outreach models on social responsibility, public good and community development. Community participation was central to the dissemination of research results.

Conclusion: Social responsibility, public good and community development are core functions for a university, which should be treated as stand-alone roles, such as teaching, learning and research. The University of Limpopo has distinguished itself by being true to its vision of 'being a leading African university focused on the developmental needs of its communities and epitomising academic excellence and innovativeness'.

Keywords: community development, public good and social responsibility

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Faculty of Science and Agriculture, University of Limpopo, Sovenga, South Africa

Hlengani Siweya, PhD, hlengani.siweya@ul.ac.za

Social responsibility, public good and community development are three functions of a university that are less spoken about by any university outside the traditional roles of teaching, learning and knowledge generation through research. However, the understanding and interplay between these functions are often confused with community engagement, which many scholars are still grappling with as another university core function.

Teaching and learning are geared towards preparing and equipping learners with skills necessary for entry into the job market, and to a lesser extent, towards fulfilment of social roles in society. On its own, research could be classified into that which is meant to advance a discipline in the form of new findings on the one hand, and that which is meant to benefit the public on the other. The extent to which university research achieves its objective(s) manifests itself in policy formulation by the state or the advent of new products in the commercial industry. Yet non-communicable diseases (NCDs), which are rooted in lifestyle modification, are rooted in the community, despite the numerous research projects conducted by universities in Africa.

The fundamental importance of full community participation, as rooted in the South African National Development Plan,1 received little attention from universities in Africa in perusing research to improve the lives of people in society. This was evident from the highest increase in NCD-related mortality rates, with about 46% of all those expected mortalities attributed to NCDs by 2030 in Africa.^{2,3} Therefore the culture of valuing and respecting the needs of the community has faded in universities for their pursuit of community outreach programmes.

The main objective of this article is to contribute to discussions on the social responsibility, public good and community development functions of a university in South Africa, as derived from the Higher Education Act 101 of 1997 (as amended).

Strategic plans and quality-assurance directo-

In the past two decades, many universities in South Africa came up with strategic plans for establishing quality-assurance directorates to drive their academic activities: in essence, higher education management has become mission driven. However, the pursuit/desire of every higher education management to achieve its strategic objectives, as enunciated in its strategic goals, should not be at the expense of a university fulfilling public expectations on community development, social responsibility and public good. In addition, Saleem Badat4 lifted out some of the social purposes the new higher education terrain was expected to serve, which include:

- production, acquisition and application of new knowledge
- contributing to the creation, sharing and evaluation of knowl-
- addressing the developmental needs of society
- contributing to the social-cultural and intellectual life of a rapidly changing society
- socialisation of enlightened, responsible and constructively critical citizens
- helping to lay the foundations of a critical civil society with a culture of public debate and tolerance.

Furthermore, public good and social responsibility as functions of universities, are closely related and often difficult to differentiate. Here is an example of public good: under the inspirational leadership of Prof Jakes Gerwel, the University of (the) Western Cape (UWC) created a community legal centre [which was recently renamed the Dullar Omar Institute of Constitutional Law (DOI)], whose mandate was (to the public benefit of South Africa): 'the engine room of committed thought towards the new constitution'. Its contribution to the South African dispensation will be remembered for a long time. The Institute was instrumental in the inclusion and phrasing of some sections of the South African Constitution that deal with the National Council of Provinces, socio-economic rights, enforceable rights to housing, health, food and basic education.⁵ In fact, UWC had declared itself 'the intellectual home of the left'.6

Our Constitution (as amended) has enshrined in it a number of civil rights, among which the right to education and the right to academic freedom are of interest in higher education. The two are interrelated in the sense that 'if a person does not have access to (basic or higher) education, the person is also deprived of academic freedom'.7 Academic institutions are better placed to promote the understanding of this right to education and academic freedom.

The University of the Witwatersrand (commonly known as Wits University), during the erstwhile leadership of the respected and leading mathematician-cum-manager of our time, Loyiso Nongxa, was in the public spotlight through its Targeting Talent project. Through it, Wits would search for talented matriculants and help them find admission spaces at higher education institutions in the country.8 South Africa is known for its social inequalities; it is not uncommon that some of her brightest learners are based at rural villages, often without access to the internet, let alone information about academic offerings at South African universities. When such learners graduate from secondary education, having passed with distinction in critical subjects such as mathematics, physical science and accountancy, they would be unable to enter higher education. These are the learners Loyiso would target: this is public goodness.

In November 2017, Nongxa's successor, well-known political commentator, Adam Habib volunteered his university's expertise to assess the status of numerous bridges in Gauteng and advise the provincial government on whose responsibility it is to maintain these bridges. This is an example of social responsibility: providing the community with the expertise to find solutions to a social challenge.

The success of universities in the three areas that this article centres on depends on the role of their vice-chancellors; however, a university community is also at the centre of the visibility of the university in the public sphere. It is not surprising that at the University of Zululand, Charles Dlamini noted: 'When the transformation committee was established at the University of Zululand, I was excluded from it. I pointed out that the people constituting the committee might not have the necessary experience and expertise to lead the process ..., but was told to give these people a chance ... When the process failed, I got the blame'. While university leaders are undoubtedly the face and chief spokespersons of their institutions, their constituent communities are the foot soldiers.

Contextual framework

In this article, community development derives from a form of practice in the sense of it being inclusive. Some scholars refer to this as a community of practice where interest groups come together to share ideas on a specific activity; so, it is based on the principles of equality and social inclusion.¹⁰ Inclusion can also take the form of selected variables that the targeted population is expected to satisfy, as was the case with Kayama et al.,11 where the community was (hospital) patients who had dropped out of out-patient care for more than three months.

Analogously, a group of small-scale farmers in a village is a community, and their development could involve management of maize varieties or dinawa recipes (as is the case in examples that are discussed below). Being inclusive, community development is necessarily collaborative in that there ought to be a mutual understanding of community needs as well as availability of resident resources, which will inform the 'what' and 'how' of interaction between a university and the targeted community.

Our conception of the value and nature of a university is best summed up by Chris Brink when, in reference to the nature of a university, he says: 'The first, which is a matter of quality, is to ask what we are good at. The second, which is a matter of equality, or more broadly, our role in civil society, is to ask what we are good for'.6 It is the reference to civil society that this article leans on: to advance that which a university is good at for the benefit of society. After all, Aasen⁷ argues that a university should contribute towards a better life for all.

Creating and sharing knowledge with communities is the social responsibility of every higher education institution. For centuries, universities have also been at the centre of social change and development. The demise of apartheid in South Africa and the collapse of communism in Eastern Europe resulted from many African and East European countries in which universities played pivotal roles to dismantle the two philosophies. In South Africa, while the contribution of universities as centres of apartheid resistance was immense and well documented, perhaps the contribution of white universities, in particular the Universities of Cape Town (UCT) and the Witwatersrand need acknowledgement.

Even though Hendrik Verwoerd had wanted the black child not to be taught mathematics, and in consequence science, engineering and accounting, UCT started the Academic Support Programme (ASP) and Alternative Admissions Research Project (AARP) as a '...means of access for educationally disadvantaged students whose school results do not necessarily reveal their potential to succeed in higher education'. 6 This is the highest form (and example) of social responsibility: creating opportunities to and helping those who were not meant to enter higher education to succeed!

A university should be able to elevate its research to inform its teaching mission and reinforce its historical commitment to helping communities meet their needs.¹² In addition Bender also argues that the pedagogy of engagement can be used to advance social responsibility.

Experiences from the University of Limpopo

The commitment of the University of Limpopo to a societal reconstruction and development programme is evidenced through a number of initiatives that have come about post 1994. In the current classification, some of the social responsibilityorientated activities are (the) university crèche, Meal-a-Day initiative and Student Disability Unit (SDU); the CSIR White Spaces project falls on the public good side, while the dinawa project falls in the category of community development.

Universities are communities of a kind, and so is the University of Limpopo. The University has designated divisions whose responsibilities include provision of legal advice/services on a small scale, protection of life and property and ensuring that the University community behaves within certain minimum agreed standard and policies, access to health services, and provision of professional counselling to its community. All these are sufficient evidence that the University of Limpopo complies with the expectations on social justice and responsibility.

Dikgale Health and Demographic Surveillance System (DHDSS)

The project started in 1996 under the leadership of Prof Marriane Alberts, now emeritus professor in medical sciences, when the first census was conducted, and covered approximately 8 000 people. However, DHDSS was expanded in 2010 and it currently has in the region of 38 000 people under surveillance. The main aim of the project was to monitor NCDs and associated risk factors in a rural area that is undergoing rapid changes in lifestyle.

An annual census update has been conducted since 1996 to capture life events such as births, deaths and residence status, education status and migration; but since 2011, causes of deaths have been included. Fieldworkers are used to interview adults in each household on health surveys covering prevalence of and risk factors for chronic diseases, therefrom developing intervention strategies for better management of chronic diseases and reduction of attendant risk factors.

Of significance in this project is the added fact that regular meetings are held with the Dikgale tribal authority at which the main research findings are discussed, as well as informing the community about any future research that is being planned in the DHDSS. Beneficiaries are also University masters and doctoral students whose projects are based at Dikgale village.

Ellisras Longitudinal Study project

The desire of the South African government to improve the health of rural peoples requires that adequate baseline data be made available to combat the emerging chronic diseases of lifestyle, as they are becoming a major health burden in our communities today. In November 1996, the Ellisras Longitudinal Study (ELS) was initiated to monitor the growth, health and lifestyle of a group of children in the Ellisras rural area over time. Table 1 presents the data collected from then to date.

It is clear that the NCD profile is changing rapidly over time among the Ellisras rural community children as they grow older. For example, under-nutrition among Ellisras children was over 50% in the period 1996 to 2003, with most children in the ectomorph-mesomorph category.^{13,14} The prevalence of type 2 diabetes mellitus was non-existent in the same population during the same period. However, the level of physical fitness and physical activity was extremely low for girls compared to boys and other children of the same age studied in urban areas.¹⁵ The prevalence of tobacco smoking in the ELS increased from 4.9 to 17\%.16

Today, from the same ELS sample measured from November to December 2015, the prevalence of obesity is high, particularly among the females.¹⁷ Furthermore, it was clear from the previous analysis of this population that the prevalence of hypertension was emerging and low.^{13,18} Currently, the prevalence of diabetes and hypertension are escalating in this Ellisras population.¹⁹ The well-characterised ELS provides a unique opportunity for mapping some of these changes, particularly in vulnerable adolescents and young adults over time. The fact that ELS subjects migrate to urban areas and sporadically return to Ellisras rural areas provides a further unique opportunity for investing the influence of urbanisation on the changing magnitudes of NCD risk-factor profiles in the South African population.

The overall performance of the health system in South Africa since 1994 has been poor despite the development of good policy and relatively high spending in proportion to the GDP. Long-term health outcomes are shaped by factors largely outside the health system: lifestyle, nutrition, education, diet, sexual behaviour and exercise. Universities should play a central role in uplifting the standard of living.

Table 1. Research question data collected in the Ellisras Longitudinal Study sample from 1996 to 2008/9										
Survey	1996	1997	1998	1999	2000	2001	2002	2003	2005	2008/9
Anthropometrical measurement	*	**	**	**	**	**	*	**		
Blood pressure				**	**	**	*	*		
Diet				*		*				
Socio-economic status				*						
Glucose tolerance						*				
Learning environment						*	*			
Educational achievement (maths and English)						*	*	*		
Aptitudes tests (IQ test)								*		
Tanner scale							*	*		
Questionnaire on menarche								*		
Physical activity							*			
Fitness					*	*	*	*		
Smoking									*	*
Alcohol and drugs										*
*One survey, **two si	ırveys.									

Conclusion

Social responsibility, public good and community development are core functions for a university, which should be treated as stand-alone roles, such as teaching, learning and research. They are important functions for any university, not because they are implied in the Higher Education Act 101 of 1997 but because they can be used to advance social cohesion in communities and improve health awareness and lifestyles.

Certainly the University of Limpopo has distinguished itself by being true to its vision of 'being a leading African university focused on the developmental needs of its communities and epitomising academic excellence and innovativeness'. Not only has its researchers conducted research in neighbouring villages, but the University also continues to feed back into these communities. When the need arises, communities look up to the University for intervention and help, so, the communities see the University as a strategic partner. However, there are still many other areas of possible intervention and partnership that require substantial funding, which the current government funding model does not cover.

References

- South African Government (2012). A vision for 2030: South Africa's National Development Plan.
- WHO. Non-communicable diseases country profiles. Geneva: World Health Organization, 2014.
- Dalal S, Beunza JJ, Volmink J, Adebamowo C, Bajunirwe F, Njelekela M, et al. Non-communicable diseases in sub-Saharan Africa: what we know now Int J Epidemiol 2011: 40(4): 885-901
- Saleem B. The challenges of transformation in higher education and training institutions in South Africa. A study commissioned by the Development Bank of Southern Africa, 2010.
- The Constitution (Reflecting on 20 years). University of Limpopo Strategic Plan 2020. Financial Mail/Business Day 2017.
- Brink C. Two tales of quality and equality. In: Reflections of South African University Leaders (1981 to 2014), African Minds and CHE (2016). 2014: 93-118.
- Aasen HS. Academic freedom and education in a human rights perspective - experiences from Norway. In: Constituting Higher Education. Kagisano: 2017; 11: 51-80.

- Nongxa L. Leadership challenges for research-intensive universities. In: Reflections of South African University Leaders (1981 to 2014), African Minds and CHE, 2016: 143-158.
- 9. Dlamini C. Challenges of leading a historically disadvantaged institution in strategic planning. In: Leadership and Institutional Change in Higher Education. CHET and UNCF, 2000.
- 10. Hart CS. Professionalisation of Community Development in South Africa: Process, Issues and Achievements. Unisa Press: Africanus 2012; **42**(2): 55-66.
- 11. Kayama M, Kido Y, Setoya N, Tsunoda A, Matsunaga A, Kikkawa T, et al. Community outreach for patients who have difficulties in maintaining contact with mental health services: longitudinal retrospective study of the Japanese outreach model project, MBC Psychiatry 2014; 14(311): 1-10.
- Bender CJG. Engagement and social responsibility in the core curriculum: how engaged and responsible are our academics? https:// www.cetl.hku.hk/conference2010/pdf/Bender.pdf.
- 13. Monyeki KD, Kemper HCG. The risk factors for elevated blood pressure and how to address cardiovascular risk factors: A review in paediatric population. J Human Hypertens 2008; 22: 450-459.
- Monyeki KD, Toriola AL, Ridder JD, Kemper HCG, Steyn NP, Nthangeni ME, Lenthe FV. Stability of somatotypes in 4 to 10-year-old rural South African girls. Ann Hum Biol 2002); 29(1): 37-49.
- 15. Monyeki MA, Koppes LLJ, Monyeki KD, Kemper HCG, Twisk JWR. Longitudinal relationships between nutritional status, body composition, and physical fitness in rural children of South Africa: The Ellisras longitudinal study. Am J Hum Biol 2007; 19(4): 551-558.
- Mashita RJ, Themane MJ, Monyeki KD, Kemper HC. Current smoking behaviour among rural South African children: Ellisras Longitudinal Study. BMC Paediatric 2011; 11: 58.
- 17. Matshipi M, Monyeki KD, Kemper H. the Relationship between physical activity and plasma glucose level amongst Ellisras rural young adult males and females: Ellisras Longitudinal Study. Int J Environ Res Public Health 2017; 14(2): 198.
- Sekgala MD, Monyeki KD, Mogale MA, Ramoshaba NE. Performance of blood pressure to height ratio as a screening tool for elevated blood pressure in rural children: Ellisras Longitudinal Study. J Hum Hypertens 2017: 31: 591-595.
- 19. Monyeki MA, Koppes LL, Kemper HC, Monyeki KD, Toriola AL, Pienaar AE, Twisk JW. Body composition and physical fitness of undernourished South African rural primary school children. Eur J Clin Nutr 2005; 59(7): 877-883.