

## SA Numeracy Chair Project - 13 November 2015: Dr Kenneth Mlungisi Ngcoza

To the honourable director of the SA Numeracy Chair Project, Prof Graven and her staff, honourable teachers, sisters and colleagues – allow me to greet you all! I'm indeed humbled and honoured for being invited to be part of this historical event, which is a celebration of 5 years of partnership and working together uninterrupted. This honour bestowed upon me is appreciated even more so as 38 years ago in this month I was turning and tossing being detained in goal not knowing what to expect. I would like to commend and congratulate all of you for your resilience and such an unconditional commitment to the project, a project which aims to, according to Martin Luther King, dig "a tunnel of hope through the mountain despair ...and turn dark yesterdays into bright tomorrows". We thank you and you deserve a big round of applause!

I'm tempted to dedicate my talk to my beloved late mother *maRhadebe*, who passed away in 2004 while I was in the middle of my PhD and at that time I thought it was the end of the world. I remember as a child I used to run every morning to her work to fetch the bread she was supposed to it so that we could have something to eat before we went to school – Oh! What a sacrifice and how many parents out there are sacrificing for their children but only to find that they come to a *culdesac* in life (I like this in Afrikaans even though Afrikaans was forced down our throats by the Apartheid regime: *die straat loop dood*). And we would eat again when she came back with the leftovers from her work – which have produced a doctor. It is precisely this humble background which makes me to want to see other people flourish and prosper in life!

On reflection, also, she exposed me to practical mathematics and science when we used to fetch fire wood from where Graeme College is today – that used to be a forest. I remember she would make two bundles of wood for her and me, and when I questioned why mine was smaller compared to hers, she would ask me to go lift up her bundle of wood and that gave me experience the difference between **mass and weight** as well as **ratio and proportion, fractions** and so on. She would then put her bundle of wood against a tree, put a piece of cloth on my head and then place my bundle of wood on top of it to prevent **friction**. Thereafter, she would then struggle to put hers on top of her head with a piece of cloth in-between too. As I walked behind her, trying to keep up with her pace, I used to realise that actually her bundle of wood was not placed in such a way that it was in the middle – the **laws of levers**! The trouble started of course when she had to make fire at our 'partial home' – I say partial home because 43 years ago I came back from school and our family belongings were thrown in the street and we had no place to stay. She would start the fire by using my wood and I used to complain about that. And she would tell me that you can't start fire with logs but you have to start it with twigs (*ukukwazi ukuqala ukubasa umlilo ngenguni ezinkulu, uwaqala ngentsasa*) – **surface area**!

Now, what could be the problem behind the problem in our education system in South Africa? **Could it be that we are metaphorically starting the fire with logs instead of twigs?** I'm reminded of what Charles Dickens wrote in his book, *Tale of Two Cities* that:

It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us, we were all going direct to Heaven, we were all going direct the other way. . . .

Undoubtedly, Grahamstown resembles a Tale of Two Cities in many ways, **politically, economically, socially, educationally**, and so forth, with one side of town where rich people stay and functional schools are in abundance. In contrast, on the other side of town it's where the poorest of the poor are leaving and schools are dysfunctional. Of course our municipality is trying very hard to redress the imbalances of the past by equalising the unequal as we have potholes everywhere you go now!

Back to my point, it could be argued that Grahamstown is epitomized by LIGHT on one side town and DARKNESS on the other side. Sadly, if you want the best of view of Rhodes University, you have to go to the township, yet Rhodes is a Promised Land for most of those learners studying in those schools. This is sadly exacerbated in part by the fact that in South Africa we are currently having Apartheid in reverse. For instance, in the past the focus was on **race** and now it is on **class**. Regarding the quality of education in particular, the disparities in the schooling system in South Africa, I think can best be described by the following poem in my view:

#### **You taught me**

You taught me the names of the cities in the world

#### **But**

I don't know how to survive the streets in my own city.

You taught me the minerals that are in earth

#### **But**

I do not know how to prevent my world's destruction.

You taught me how to speak and write in three languages

#### **But**

I do not know how to say what I feel in my heart.

You taught me all about reproduction in rats

#### **But**

I don't know how to avoid pregnancy.

You taught me to solve maths problems

#### **But**

I still can't solve my own problems.

Yes, you taught me many facts, and thank you,

I am quite clever

**But**

Why I feel I know nothing?

**Why do I feel I have to leave school to go and learn about coping in life?**

Listening to this child, Dr Verwoerd must be smiling in his grave as some schools are even dropping maths and science. So, given the reality reflected in this poem (whose author is unknown), **WHERE and HOW** should transformation and qualitative change be implemented then?

Firstly, I believe that the community (by community I mean all of us) can take ownership of the issues that face Grahamstown and its townships, so that the poorer-resourced township schools can improve through greater collaboration with the better schools. While I sit between two cultures, experiencing border crossings from one to the other daily, it lies at the heart of my own hybrid identity and interest in indigenous knowledge systems that, 'learning about other people's cultures can strengthen a sense of oneness in our country...it can make learners aware that there are other ways of thinking.' Likewise, while I applaud Rhodes for the knowledge produced through research, but we should be asking ourselves some hard questions such as: How is such knowledge disseminated and used in our communities to bring about qualitative change?

To this end, the first democratic president of South Africa, Nelson Mandela once stated that: "...What differentiates one person from another is not what you have but is what you do with what you have....". So, in light of this, I personally see community engagement projects, such as SA Numeracy Chair Project and so forth, as vehicles to improve access and epistemological access in the university. As we all know that, the rationale for CE is to enhance social responsibility and mutual relationships with the community with the view to promote **agency, development**, and for some projects greater **access** to university education and greater **epistemological access** when in the university. Pertaining to what is and can be done to assist learners from historically disadvantaged schools to get into (I hate the term 'historically' as these schools are still under-resourced and disadvantaged) or have greater access to the university and then to be successful at university through greater epistemological access, efforts can be directed at learners on both counts; 1) before these learners are accepted at university, and 2) when these learners are already in the university.

For instance, through the leadership of Dr Ashley Westaway, GADRA has become a beacon of hope in Grahamstown. With its advocacy programme GADRA has managed to take back agency to the community members through mobilizing **parents, school principals, school learners and Rhodes students** to work together to improve the quality of education in schools. I'm sure you must have been wondering why I dedicated my talk to my mother whose highest standard was standard 3. Parents have a big role to play in the education of their children no matter how educated they are.

For example;

- The GADRA Matric School (GMS) contributes more than half of the Bachelor passes produced by working class black youth in Grahamstown. That is, the school produces more Bachelor passes than all the six township schools combined together.
- Furthermore, GMS is now the largest feeder school to Rhodes University. In 2015, 37 of the 2014 alumni were accepted at Rhodes; this is a higher figure than any other school – private or public.
- GADRA provides bursaries to about 80 local disadvantaged Rhodes students. Its bursary programme has been in existence for almost fifty years. And I'm proud to say the I was also one of the GADRA bursars in the 70s and I'm now its chairperson.

**Where is the trick?** If you were to ask this question to Dr Ashley Westaway he would tell you that there is no trick but it's all about respect and valuing of people you work with. This is witnessed in SANC whereby Prof Graven, her team and community partners emphasize the importance of bringing back of UBUNTU. This is critical as our children are the future of our country and we have to invest in them. To this end, Madiba once said:

“Our children are the rock on which our future will be built, our greatest asset as a nation. They will be the leaders of our country, the creators of our national wealth, those who care for and protect our people.”

But is what we are doing enough? What can we do TOGETHER to improve the situation in our under-resourced schools? Herein lies the importance of UBUNTU. For instance, when people support one another when ploughing the fields that is called *ILIMA* and when they bring different expertise and skills to build houses that is called *IBHOXO*. So, we need to re-imagine teaching and learning; research and community engagement. As Albert Einstein cautioned: “We cannot solve our problems the way we created them”. Furthermore, as Prof Graven once reiterated at our SAARMSTE Colloquium, we should endeavour to marry **Research and Development**. Congratulations to all those who are doing their masters and doctoral studies and I hope you'll take heed of Prof Graven's words of wisdom.

We are also blessed that our VC at Rhodes, Dr Mabizela, would like to see qualitative change and development in our community and in his own words he said, “Rhodes as an institution of higher education has a particular responsibility to engage with unequal and inadequate basic educator sector in Grahamstown”. Hence, Rhodes has committed itself to an initiative which will increase the number of disadvantaged local Grade 12 who secure access at Rhodes (based on merit of course). To this end, a Governing Board has been set-up to drive this process as Archer rightly emphasizes the importance of **STRUCTURE, CULTURE** and **AGENCY**. And GADRA Education, under the ably leadership of Dr Ashley Westaway, has been appointed to deliver managerial, leadership and professional services to the intervention.

In my individual capacity and as a member of the university I am also involved with the following CE projects: Khula project (which means to grow); SciExpo Stars project and GADRA. In the Khula project grade 10-12 learners are taught extra Mathematics and Physical Sciences lessons in the afternoons so that they can develop understanding in these

subjects and hence obtain good marks in order to be accepted at university. One of the success stories of the Khula project is a learner from a poor socio-economic background who obtained MSc in Chemistry (with distinction from Rhodes) and thereafter obtained a PhD in Chemistry from UCT. He commented that:

*I will always be grateful to all those who were and are still involved with the Khula Project. I am where I am today largely due to the experiences and lessons I learnt from them. I am sure each and every former learner of the Khula project during my time share the same sentiments as me. Very few in this lifetime get a chance to experience and witness the selflessness of others such as the likes of the Khula organisers and educators who sacrificed their time, energy and resources in making sure that others succeed in life as well. I am eternally grateful and words alone cannot even begin to express my gratitude, I so wish that more and more learners could experience what I and others have experienced during our Khula days. Thank you!!!*

In the SciExpo Stars project learners from disadvantaged schools are encouraged to do science projects so that they are equipped with scientific enquiry skills and other skills which are much needed at university. Also, through doing such projects these learners are afforded an opportunity to get bursaries to study at Rhodes. For example, as we speak, Ntsikelelo Charles from Ntsika secondary school was the second top student in the province, regardless of his background, and he obtained the Rhodes and SKA bursaries and is now doing BSc here at Rhodes. Certainly, we need to do more as the university! Similarly, we should be mindful of the fact not all learners can and should go to university. So, as community we need to work together as our first democratic President, Nelson Mandela cautioned:

“Freedom should not be understood to mean leadership positions or even appointments to top positions. It must be understood as the transformation of the lives ordinary people in the hostels and the ghettos; in the squatter camps; on the farms and in the mine compounds. It means constant consultation between leaders and members of their organisations; it demands of us to be in constant touch with the people, to understand their needs, hopes and fears; and to work together with them to improve their conditions.”

I would like to conclude my humble talk with my favourite African Proverb which states that:

**If you want to walk fast, walk alone but if you want to walk far walk together**

I wish you all a Merry Christmas and a Prosperous New Year!!!!!!!

**Ndisatshaya! I thank you all!**