#### Newsletter

Michael Gardiner – "Ideas have powerful consequences"

Nic Spaull interviewed a number of academics in the field of education. Here is a summary of what they had to say on the various topics. I selected and summarize only three of the seven-eight questions posed to each participant. "The aim of the Q&A series is to get an inside look into some of South Africa's leading education academics, policy-makers and activists."

Let me share with you some of my comments an observations;

- 1. Nic interviewed "some of South Africa's leading education academics"
- 2. As probably an unintended consequence some of us will be left out(not all of us are considered academics or conversant in the discipline) of the narrative and discourse
- 3. Inclusivity across the length and breadth and cultural diversity is a prerequisite
- 4. Choices have to do with selection the need will always be more than the available resources
- 5. Politicians are elected officials "the will of the people" the rest of us have considered opinions
- 6. What is more important theory or practice? What is the relationship between social theory and practice?
- 7. Self-interest is a threat that needs to more clearly articulated at two levels (1) false need "the more important I am considered to be, the more powerful people and institutions I associate with, the more my views become dominant" (2) area of expertise and influence
- 8. Evidence-based action and policy
- 9. How research improves our understanding of our education system, its history and its future understanding, not ultimate truths!
- 10. Lack of institutional and personal capacity
- 11. The more we research the better our understanding and the more issues gets raised
- 12. Some of the central themes that comes through for me are;
  - Recognize and treat teachers better
  - Open the doors of the classroom
  - The majority teacher union is a problem
  - Make peace with SADTU
  - Teacher training
  - Accountability-Control and Support (my comment what about bringing school inspectors back)
  - Monitoring and Evaluation
  - Literacy & numeracy in primary school

Servaas van der Berg - May 2014



What do you think is the most under-researched area in South African education?

We know far too little of how much children learn in South Africa

- we have only limited systematic evidence of what happens in classrooms,
- we do not know enough about the difficulties of and consequences of language choices in our historically black schools,
- we know too little of what is necessary to overcome home learning deficits, and
- we do not know what are the best policy levers to improve performance at school level.

If you ended up sitting next to the Minister of Education on a plane and she asked you what you think are the three biggest challenges facing South African education today, what would you say?

- I would say to the Minister that a political resolution of the unproductive relationship between the teacher unions and government has to be found.
- Then I would argue that we need to create a situation where there are consequences for teachers who do not take their work seriously.
- I would advise the Minster to focus attention on the Foundation Phase,

If you were given a R5 million research grant, what would you use it for?

I would want to research learning from the Early Childhood Development (ECD) level and into
the early grades of school, because we know too little about it, and about the extent that
good ECD and Foundation Phase teaching can overcome home deficits.

Stephen Taylor February 2014



What do you think is the most under-researched area in South African education?

- We know incredibly little about what works to improve learning in the schools we have.
- What teacher support strategies actually work so that they change practice and consequently learning outcomes?

If you ended up sitting next to the Minister of Education on a plane and she asked you what you think are the three biggest challenges facing South African education today, what would you say?

- Diagnosis: The fundamental problem in the school system is that as children progress through the school system not enough learning is happening in each year.
- Put differently, learning trajectories are too flat. The problem is especially acute in the early
  grades where basic literacy and numeracy skills are not being acquired in time. This leads to
  massive learning deficits which is the main cause of dropping out of school in grades 10 and
  11.
- a well-researched intervention in the Foundation Phase, which addresses both teacher capability and motivation.
- we have many children in the Intermediate Phase and early secondary school who have accumulated learning deficits. We need to address these deficits through effective remedial interventions in order to help them cope with the grade-specific curriculum, which assumes earlier foundations are in place. Here one should design, evaluate and implement an intervention such as afternoon classes focussed on foundational skills like reading, holiday

learning camps or waiving the curriculum for a term to administer an intensive catch-up programme.

• I would also take the opportunity while sitting next to the Minister to express support for the three major interventions under her leadership – CAPS, Annual National Assessments and the DBE Workbooks – which were the kinds of recommendations many of us were making 4 years ago.

If you were given a R5million research grant what would you use it for?

• I am currently trying to raise roughly this amount for a research project about how to improve early grade reading acquisition.

Brahm Fleisch February 2014



What do you think is the most under-researched area in South African education?

• Overambitious curriculum, and the issues that Pritchett & Co have written about. There continues to be a tendency to blame teachers, a lack of resources and learners background for educational failure, but my sense is that there are a host of issues related to 'instruction' that need careful and original study.

If you ended up sitting next to the Minister of Education on a plane and she asked you what you think are the three biggest challenges facing South African education today, what would you say? Getting the instructional programme right (instructional infrastructure, pitched at the right level with the right alignment and coherence)

- Corruption (at school level, the buying of promotion posts, the requirement to pay cooldrink money to teachers, etc.)
- Finding ways to create elite education within the public sector.

If you were given a R5-million research grant what would you use it for?

• I'd try to set up a small-scale Randomised Control Trial or counter-factual studies that provide robust evidence of initiatives or approaches that work.

Mary Metcalf February 2014



What do you think is the most under-researched area in South African education?

 The social context of secondary schooling and how this impacts on learning and retention – dropout, self-esteem, and the consequences of this for families. If you ended up sitting next to the Minister of Education on a plane and she asked you what you think are the three biggest challenges facing South African education today, what would you say?

- To understand the constitutional framework for the roles and responsibilities of the national and provincial departments of education. Norms and Standards are a critical instrument and have not been adequately used as an instrument for accountability, planning, and to create
- I'd also highlight the internal efficiency of the system. We are running short of funding the personnel share is growing which has dire consequences for quality and there is too much wastage in the system. Poor quality results in repetition, failure and drop out. We need to move on the Grade 10 exam so that young people who leave before NSC have a credential, and to take the pressure off of the NSC which must assess so much.
- A sense of hope amongst teachers that they will be supported that they will be helped with the problems that they face.

Jonathan Clark May 2014



What do you think is the most under-researched area in South African education?

• For all what we think we know about teachers' actual classroom practices, I think we actually have very little understanding of what really goes on at the chalk/whiteboard face.

Particularly when it comes to working class urban and rural schooling, I think we tend to under-estimate the degree to which the pedagogic practices of teachers are forged in context and strongly influenced by their own lived experiences of schooling. I'm of the opinion that many teachers operate in what are essentially 'closed-loop' systems which are very, very resistant to change.

If you ended up sitting next to the Minister of Education on a plane and she asked you what you think are the three biggest challenges facing South African education today, what would you say?

- Firstly, we have to build the content, pedagogic and classroom organisational skills of teachers and capacitate school managers we have no choice but to invest heavily in teacher professional and school organisational development.
- Over a second drink, I might loosen up a bit and share with her my thoughts about the tensions between accountability and support which I believe permeate through all levels of the education system;
- can we hold teachers and school managers to account unless we have in place functional support systems at levels from circuit through district to provincial and national levels?
- I'd share some of my own experiences in the field, but seek to be humble I've never underestimated the immense complexity of (say) trying to run a large, under-resourced working class school in a community mired in poverty. It's almost ironic isn't it? The settings which require the most skilful practice, are inevitably the ones with the least 'curriculum and organisational capital' (as I like to think of it).
- Then there's the need to build the expertise of the technical core of the State so that it can play a more decisive supportive role.
- By the third drink I would probably be saying something totally inappropriate about the power of the majority union...

If you were given a R5 million research grant what would you use it for?

• A ten-year longitudinal study focusing on the unfolding narratives of practice of young teachers entering the profession and finding their ways in township schools.

## Linda Biersteker May 2014



If you ended up sitting next to the Minister of Education on a plane and she asked you what you think are the three biggest challenges facing South African education today, what would you say?

• Quality, (2) removal of all access barriers and lastly (3) engaging the energy, will and creativity of everyone working in the education system.

If you were given a R5million research grant what would you use it for?

- Pilot a continuous quality improvement system for ECD services of different kinds, including developing differentiated levels of quality – our current registration requirements are only the minimum.
- Within this explore self evaluation by educators/practitioners, verification and the role of external support and incentives.

## Shelley O'Carroll April 2015



What do you think is the most under-researched area in education in South Africa?

- It will come as no surprise that I think the field of early language and literacy learning is significantly under-researched. We need more evidence about what children begin school knowing, not only what happens at school.
- We need more evidence about what kinds of interventions work to improve children's early learning, and models of how to take good programmes to scale.
- We need to understand better how families can play a role in children's education at school and at home.

If you ended up sitting next to the Minister of Basic Education on a plane and she asked you what you think are the three biggest challenges facing the South African ECD sector, what would you say?

- Improving the quality of teaching and learning through high quality, relevant and practical teacher training (both preservice training and ongoing professional development)
- Improving the status and working conditions of ECD professionals so that teaching young children becomes a more attractive career path and teachers are recognised for the important role they are playing.

• Increasing the provision of and access to non-centre based support for young children through supporting parents and caregivers (e.g. home-visiting programmes, workshops for parents).

If you were given a R10 million research grant what would you use it for?

- To develop and/or validate tools that we could use to assess the impact of early intervention programmes for young children.
- To set up a team to research two related questions: a.) whether low cost interventions can lead to changes in parents' and teachers' knowledge about young children's learning, and b.) to what extent/under what conditions changes in knowledge lead to changes in everyday parenting and teaching practice.
- Although I'd have run out of money by now.... a longitudinal study that followed a cohort of children and evaluated the impact of early interventions to improve language/literacy on children's reading and writing development once they started school.

## Johan Muller February 2014



What do you think is the most under-researched area in South African education?

We have no idea what it will take to make knowledgeable teachers out of clueless ones, at least not while they are actually on-the-job. And I think the neurosciences will pretty soon say some surprising things to the educational enterprise, but I know of no-one in this country working there.

If you ended up sitting next to the Minister of Education on a plane and she asked you what you think are the three biggest challenges facing South African education today, what would you say?

Teachers, teachers and teachers. And, unlike most of my colleagues, I don't think it's what the teachers can't do that matters; it's what they don't know that makes the critical difference. (Of course those are connected).

If you were given a R5million research grant what would you use it for?

Doing neuro-social investigations of kids that succeed against the odds.

Ursula Hoadley February 2014



• I think one is our teachers. I have wanted for a long time to do a study along the lines of Lortie (see above) — which uncovers who our teachers are, why they are there, how long they stay, what they read... I don't think we clearly understand why teachers do the things they do in the classroom (and these are quite enduring things that have some uniformity across similar contexts). Part of understanding that is understanding why and how teachers come to be in the classroom in the first place.

If you ended up sitting next to the Minister of Education on a plane and she asked you what you think are the three biggest challenges facing South African education today, what would you say?

- Overshoot, overambitious plans. Why is a pre Grade R even being proposed at the point at which we can barely afford Grade R and have so little capacity in the system to deliver quality there? Why are we proposing a third compulsory language when we don't have sufficient skilled language teachers, nor enough good texts, to teach a first and second? We need to be more modest in our goals.
- The second is a lack of differentiation within the system. We can't have the same plan for every school and every university. This is hard, but trying to hit all nails with the same hammer is buggering up the coffin... or something like that...

If you were given a R5million research grant what would you use it for? A Lortie-style Sociology of teachers in South Africa study...

Elizabeth Henning March 2014



What do you think is the most under-researched area in South African education?

- Kids. Or 'learners' if you must.
- Not issues 'about' them like other people's ideologies. 'Them' as unit of analysis. Not their 'learning outcomes' or 'scores' for the 'national learner'. Them.
- This includes South African made and standardised and normed instruments to serve as measures for diagnosing South African kids' knowledge and find out where they are struggling, individually, so they can get help fast.
- And this includes the effects of using imported English tests (or their down-watered versions) to capture the competences, abilities, attitudes etc etc.

#### Research questions:

- When was the last standardised instrument with which to capture primary school children's competence in (insert here what you wish) developed and what was the theoretical bases of this tests?
- If you ended up sitting next to the Minister of Education on a plane and she asked you what you think are the three biggest challenges facing South African education today, what would you say?
- Foundation phase teacher development to understand kids not methods.
- Foundation phase classroom size: have you ever taught a kid the part-part whole concept of number, Ma'am. Now do it with 35 kids, Ma'am. While you are also crowd controlling them

- and code-switching 'cause, Ma'am, they aren't all really isiZulu speaking kids their parents just said so to get them into this school.
- Foundation phase teacher education please give more bursaries and more lecturers to educate the students and to inspire and love them and help them to make a stunning identity and pay these teachers more than others because, Ma'am, they build the foundation for your house of education. Thank you Ma'am Angie.

If you were given a R5million research grant what would you use it for?

- Check out the Grade R and Grade 1 kids with a good representative sample as they come in from home and before we inject them with our curriculum and our 'methods' of teaching.
- Oh yes, and go visit the educational philosopher(s) who write about the 'learnification' of education and probe them on what makes their minds tick this way.

Martin Gustafsson April 2014



What do you think is the most under-researched area in South African education?

• Difficult one, because virtually everything about education in South Africa is underresearched, by which I mean there's not enough good research. Probably the things that make South Africa special are worth emphasising strongly: the language mix, exactly how education currently contributes towards breaking apartheid patterns in employment and entrepreneurship, and what can be done to improve that contribution.

Being involved in the Department of Basic Education in South Africa I'm sure you have considerable first-hand experience of the real-world challenges that those in the civil service and in the Ministry face on a daily basis. Can you explain some of the under-appreciated challenges faced by the Director General and the Department?

- There are lots of challenges, but let's remember they're not uniquely South African. Stifling bureaucracy, wrong people in the wrong jobs, corruption, and above all a cynical abandonment of any dream of a better future, these are features of governments around the world. I think some media and NGO pressure on government is good, some of it is not good at all.
- Amongst the latter I include poorly informed and populist pressure to create a first world country overnight. One gets better in stages, and understanding the complexities of this is something researchers, activists, journalists, but also government officials, need to do better. Otherwise we get stuck in a logjam of impossible expectations and despair.

If you were given a R5-million research grant what would you use it for?

• I'd use it for bursaries for young South Africans with potential to study economics of education, or something related, in good overseas institutions that are sensitive to developing country contexts. Okay, that's not research, but it could lead to better and more research in future years.

### Eric Atmore March 2014



What do you think is the most under-researched area in South African education?

• In the ECD sector we have research, some very good and some really bad. What bothers me is that there is no link between research evidence, policy change and programme implementation. So we know how many children there are, what they need and how the country can provide it. But government does not use it, or avoids acting on the research which does exist. We do not need another study on the importance of ECD, this has been done. Probably the most needed research is on how do we turn what we know into action?

If you ended up sitting next to the Minister of Education on a plane and she asked you what you think are the three biggest challenges facing South African education today, what would you say?

- The biggest challenge is getting the political will of government to improve education. I believe that the political will to improve education is not there.
- The second challenge is to ensure that every school in the country has the basic infrastructure to function. This means classrooms, qualified teachers, textbooks, desks amongst others. This is linked to political will.
- The third challenge is to ensure that every child enters Grade 1 having had maximum opportunities to grow and thrive in a quality early learning environment.

If you were given a R5million research grant what would you use it for?

• I would assemble a dream team of education people (this is Dylan Wray's idea) and give them two weeks to complete a plan for how to get quality education to every children in South Africa now. The balance I would give to them to start to implement the plan.

Joy Olivier June 2014



What do you think is the most under-researched area in South African education?

It's crazy to me that we don't know the percentage of black kids going into university that
come from disadvantaged areas. Without knowing this and then seeking to improve on it,
we're essentially ensuring the perpetuation of inequality and the widening gap between rich
and poor.

If you ended up sitting next to the Minister of Education on a plane and she asked you what you think are the three biggest challenges facing South African education today, what would you say?

• Someone has to take on the unions. Teachers are not "workers"; it's a profession, and not showing up to work and striking when you're supposed to be teaching is not only unprofessional, it's diabolical.

- Rather than have curriculum delivered to them, learners need to learn how to learn. The
  focus should be on pedagogy and peer learning; there is WAY too much focus on curriculum
  and content.
- Literacy and Numeracy.

If you were given a R10million research grant what would you use it for? I'd like find answers to these questions:

- How many learners in township and rural schools would opt into being a part of IY if they had the opportunity?
- How much of our learners' results are due to their being a part of IY and how much is due to what they would have achieved anyway without us?
- Which aspects of what we do feed into the results, and which bits are just nice to have or could be tweaked to be more efficient (eg. learner:tutor ratio, winter school etc.)
- Piloting different models of online tutoring and seeing what works.

Hamsa Venkat May 2014



- I am increasingly interested in understanding what people think children should be able to do mathematically at various stages of schooling, and then thinking about what teachers need to do to develop these competences. I don't think we have sufficiently shared understandings even within mathematics education about what children should be able to do, and we seem reluctant to build the platforms and networks and engage in the hard conversations that might allow us to develop more shared perspectives across a terrain that is as riven with an inequitable history of access to education as South Africa is. Differences of opinion relate to both the type of mathematics children should be able to do, and the extent of the mathematics that schools should offer. For example, look at these two questions:
- 4/5 + 1/3 equals
- How many fractions lie between 1/4 and 1/2?
- Learner performance is usually higher on the first question than the second. I get mixed
  responses when I ask teachers and teacher educators whether they think that children should
  be able to answer both of these questions. Some say 'Yes, children should be able to answer
  both'. Most say they have taught children how to work out the answer to the first question,
  but have not dealt with the idea underlying the second question. Underlying these
  differences in what gets taught are different views about what school mathematics is actually
  about.
- I think it is critically important that children are able to answer both of the questions above, but I would go further. I think being able to do the first question without having any idea about how to answer the second is pretty useless. But we need to be able to understand what underlies these different positions, and then start building agreement over what we want children to be able to do and what we put in the school curriculum. If we don't, I can't see

how we will move towards closing the gaps in performance that are so widespread on the ground. So that is my under-researched priority (for now!).

If you ended up sitting next to the Minister of Education on a plane and she asked you what you think are the three biggest challenges facing South African education today, what would you say?

- Teacher content knowledge and openings for developing this in ways that are useful for teaching. This might mean more conversations around the kinds of understandings underlying the second question above, rather than more practice of the first question – which is what many of us did more of in school
- Lack of shared understandings of what mathematics we teach in school and why.
- Access to good quality primary level education

If you were given a R5million research grant what would you use it for?

Longitudinal studies that tracked through from developing teacher content knowledge from a
teaching perspective, into supporting teachers to make mathematics more coherently and
interestingly and purposively accessible to learn in classrooms. Research would aim to
understand the conditions, constraints and development trajectories within these processes.

Michael Myburgh May 2014



What do you think is the most under-researched area in South African education?

• Teacher training, both initial and continuing, need to be intensively researched. What knowledge base do teachers need to effectively practice as educators? Does initial teacher training prepare students for their roles as teachers? The debate of a professional degree versus a general degree and postgraduate diploma is not yet dead and should be part of the research. Implicit in these questions is the selection of students for teacher training. Is it possible to identify what qualities an applicant should exhibit. In Finland, for example, the selection criteria, including both academic and vocational interests, are stringent.

As the Chief Executive Officer of NAPTOSA Gauteng, can you explain some of the under-appreciated challenges faced by teacher unions in South Africa?

- The negative press that teaching attracts when a teacher is accused of some heinous behaviour frequently implies that the teaching corps is labelled as rotten, or when references are made to "teacher unions" when more often than not the author is referring to SADTU but for some reason or other would prefer to hide behind the generic. Having said that, teacher unions in general do have an image problem which they are not dealing with effectively.
- The dilemma of marrying the unionist functions with a desire to be a professional association is greater in some unions, such as NAPTOSA, than in some others but this remains an issue which teacher unions are having to face including their approach to the question of what is professionalism.
- The lack of funding for professional development activities, offered by most unions for their members and teachers in general, inhibits more ambitious programmes. While the Department of Basic Education had proposed a funding model for teacher unions to assist with professional development this occurred once only and then quietly died. The few

provincial education departments that do provide funds for the development of teachers (eg Gauteng and Western Cape) usually tie these up in expensive programmes which are department controlled. The Western Cape has shown some promise by outsourcing several of their programmes while Gauteng has brought all of their programmes back in-house (eg the literacy and mathematics primary school project).

If you were given a R10 million research grant what would you use it for?

• The question of what constitutes good professional development for teachers and how this might lead to a sustainable improvement in teaching and learning is not well understood especially in the complex South African situation. Researching the variety of different forms of ongoing teacher development and how each influences teaching and learning over a period of time is necessary. While it is true that a number of doctoral studies have and are being conducted, a comprehensive research programme might provide an insight into one of the big questions in our system: how do we improve the quality of teaching and learning?

Having considerable experience in basic education in South Africa, do you think there have been any major changes in the "mind-set" surrounding basic education in South Africa in the last 15 years? If so, what do you think those changes have been and what has caused them?

- The changes in the "mind-set" surrounding Basic Education has, amongst others, their roots in societal change, curriculum changes and the massification of education.
- Societal change and the culture of human rights have created an imbalance between rights and responsibilities. While teachers point to the restrictions that children's rights place on discipline in the classroom, they themselves are also part of the imbalance. The increasing lack of autonomy is leading teachers in a retreat from taking responsibility for their own teaching.
- Curriculum change has contributed to this phenomenon. From the heady days of OBE where
  teachers supposedly mediated the broad curriculum statement to the current situation where
  the curriculum statement (CAPS) instructs teachers what to teach and when to teach, what to
  assess, how to assess and how frequently. Teachers who are well educated, trained and
  experienced are able to resist the intrusion into their professional domain. There are not
  nearly as many as there should be.
- The massification of education has been a huge achievement but the inequalities in the system still exist, and combined with the increasing lack of a sense of responsibility, quality education is perceived to be the victim.

Percy Moleke June 2014



What do you think is the most under-researched area in South African education?

I think, most areas have been researched, but under-researched. Meaning it is the same narrative, almost similar analysis, hence same outcomes/messages from the research.

# But I will go with the following:

- First; is accountability in education. We all know that teachers are a critical component for improvement in education, we all point fingers at teachers (and Sadtu) for poor performance, we point to teachers' poor content knowledge, etc.
- I have not seen an analysis that looks at why teachers (a large proportion of them) in our system are doing so badly.
- What is the impact of poor education administration on school performance? Econometric analysis that I have seen says, not much, but I argue that if one was to use a different methodology to assess this, you may find that it has a huge impact. Hence we cannot only point fingers at teachers when there is poor performance, if they do not get support from the districts, provinces, national, they can't be blamed.
- Teachers in performing schools have mostly gone through the same training as those in under-performing schools, why does the issue of teachers' mastery of content an issue in under-performing schools and not in other schools?

Similarly, why is Sadtu so powerful? I think it point to failure of management/administration. Lines are blurred. It is almost as if we have not defined the line between a teacher and an administrator/management in the system. In my view, once a person becomes a principal/district /provincial/national official they take on a different role in the system, their labour relations interests cannot be represented by Sadtu. And I think that happens because of the way our 'education system' has evolved. There is no accountability built in the system.

The second; is centralisation versus decentralisation of education. It is related to the first, but takes a slightly different angle. Here as well I think the lines are blurred. Hence accountability is an issue. Who do we hold accountable for what in education, and who is responsible for what part of the system. Given the vast geographical differences in our country, should we decentralise more (and to what level, i.e. Province or District or School) or is centralisation the best model, what part of the system should be centralised/decentralised. What are the lessons from the past 20 years or so?

The third is related to foundation learning. Starting from ECD (not Grade R, but prior to that). Here one of the areas that I think need thorough research relates to the language of instruction and the

impact of learning or not learning in mother tongue at foundation phase for future performance. I don't think this issue is well understood and properly contextualised. It seems many people are saying teach in mother tongue at foundation phase? I wonder if, despite what international evidence say, we understand what this means in the South African context and how correct and feasible this is.

If you were given a R10 million research grant what would you use it for?

I interpret research broadly. I would use it to pilot different ways of improving quality teaching and learning in different contexts in SA. We all complain about poor quality of education, but I am not sure we know what we are complaining about and what to do about it. What works in what context and how to effect change. One of the fascinating areas to investigate is what is happening in the Quintile 2 schools that seem to be performing relatively well, what makes them work and why not in other schools. We need to move away from high level talk and analysis and understand what is happening at the school level, at the individual learner level. Our policies and intervention programmes must be informed by that.

Part of the problem I think is that we 'overuse' senior certificate results as a measure of how our system is doing. By the time learners are in Grade 12, it is a bit too late, because they are exiting the system. Meanwhile, every semester at least and yearly learners write exams in each Grade, we do not know how they are performing at the lower Grades, their progression, etc., and there is no mechanisms to use these results to understand performance at lower Grades and find ways to improve. We only wake up to the fact that about 40-50 per cent of a cohort that started Grade 1 is not writing senior secondary certificate, but are not sure at what point in the system do things begin to go bad and why, thus how can we intervene. We speculate that it at the end of the compulsory phase – Grade 9 or age 15, but the question is why a rational learner would drop out of the system when there are no positive prospects for them beyond that point.

R10 million is not a lot of money, but I would also invest a bit on education planning. I am referring to broad planning, understanding the implications of demographics, migration, social dynamics, town planning and developments, etc. on education provision and funding of education.



What do you think is the most under-researched area in South African education?

- We are way behind in Mind, Brain and Education research, and I feel this will give us strong insights into improving how learning works.
- We are clueless about Instructional Design, especially how it is currently playing out with new developments in technology and engineering.
- We are struggling with Big Data analysis. My basic take is that the social sciences have shifted sharply closer to the STEM subjects (Science, Tech, Engineering, Maths), and that education is not following suit.
- We need to strengthen our research by using insights and methods taken from Engineering, Economics, Computer programming, Biology, Geography and other 'complexity' sciences.

If you were given a R20million research grant what would you use it for?

- Certainly not whole school improvement. I would like to set up an education website similar
  to Khan Academy but in education and then track and trace student responses in a way that
  improves the curriculum, pedagogy and assessment of the website material.
- The website would give the basic building blocks that specialise a student into education and provide a dialogic space for interaction and engagement that can be used across South Africa, outwards and onwards.

Lilli Pretorius December 2014



- Approaches to early reading instruction are based mainly on reading in analytic languages.
   African languages are agglutinating languages with rich and complex morphosyntactic structures. The Nguni languages in particular have very long word units. At the micro level we actually know very little about what really works when learning to read in the African languages, from a decoding point of view, so that is an area that calls for further research.
- Another area that merits closer scrutiny is the development of academic language proficiency in bilingual education systems. There are quantitative and qualitative differences in the ways in which we communicate orally in everyday situations and the way we use language in more formal educational contexts. In written language whether in paper or electronic form, whether in the home language or a first additional language the locus of meaning shifts to the text itself, and the ability to construct meaning relies largely on the linguistic and textual cues in the written text and in the conventions associated with its use. In effect, since the advent of modern education, when we acquire our home language or learn another language, we learn oral and written 'dialects' or registers, and we switch between them, depending on

the context in which we use language. Although oral proficiency is what we rely on most throughout our lives on an everyday basis, it is proficiency in using literate or academic forms of language that determine success in the educational context. Many of our children who pass through the education system acquire only rudimentary reading abilities and are exposed to teaching practices where information is parroted in a superficial manner, so they are thus denied opportunities to develop new ways of using and understanding language. Although they are orally very proficient and may even be marvellously multilingual, if they don't acquire academic registers they will continue to struggle academically. Finding ways to develop and support academic language proficiency is important in our context.

If you ended up sitting next to the Minister of Education on a plane and she asked you what you think are the three biggest challenges facing South African education today, what would you say?

- First of all, I'd thank her for arranging this sudden upgrade from economy to first class for me, for how else would I sit next to her?
- I'd also thank her for candidly acknowledging the reading crisis in our schools. I think she has
  quite a strong finger on the education pulse in that regard. Then, depending on how long the
  plane trip was, I'd highlight three challenges facing SA today, all of which revolve around
  literacy:
- Attention to changes in classroom literacy practices. After 70 years of reading research we have a pretty good idea of what works in early reading development and why a balanced approach to reading instruction is important. However, telling teachers what to do about reading and giving them resources with which to do it do not necessarily bring about educational reforms. Teachers' perceptions, normative beliefs and knowledge influence their classroom practice. In order to get teachers to change ineffective classroom practices we need more research into theories of pedagogic change in schools and classrooms and how this can be done via in-service teacher training. We rely a lot on workshops to do this, but teachers often call these 'hit and run' affairs (facilitators come in, tell teachers what to do, then leave). How else can we support teachers in becoming more effective? All interventions should thus be informed by theories of change and be carefully monitored and evaluated so that factors that facilitate or hinder changes in teacher practice can be indentified and better understood.
- Attention to literacy in maths and science. In the past 20 twenty years millions of rands have been spent in this country on improving maths and science education, with very few dividends so far. The relationship between reading ability and maths and science learning needs to be given explicit attention. As long as we have low literacy levels in general, we will continue to have low maths and science performance. Students need to be explicitly taught how to read maths and science texts so that they can 'read to learn' more effectively from their textbooks.
- Attention to school libraries and post structures for school librarians. As mentioned above, very few schools in SA have functional school libraries, especially schools that serve poor communities, which is precisely where ready access to information and knowledge is most needed. Furthermore, school libraries need librarians, people who are specially trained to manage libraries and to help build a culture of reading and finding information. Teachers do not have the time or the expertise to run school libraries. This means that post structures for school librarians should also be created. Low quintile schools cannot afford to appoint school librarians because they would have to sacrifice a teaching post to do so. Although the DBE encourages schools to build up school libraries, in effect it does not provide the

- infrastructures to enable schools to do so. According to Equal Education's statistics, by 2010 the state had spent a total of R13.6 billion on building ten new sport stadiums in SA. Surely providing easy access to knowledge via school libraries is a worthwhile investment too? It also helps to professionalise schools.
- Just before we landed, I'd ask for more funding for raising teachers' literacy levels in my national reading campaign. In light of the cost of sport stadiums, R200 million for a reading campaign that has the potential to improve teacher literacy seems rather stingy.

If you were given a R15million research grant what would you use it for?

I'd really like to explore ways of boosting the development of academic language proficiency during the Intermediate Phase. If children don't learn to engage with texts and read at a deeper level, then they battle to 'read to learn' through the rest of their schooling and it's really difficult for them to become independent learners. So I would use the funding to explore ways to develop such proficiency, using randomised-control studies with different interventions that are carefully monitored and evaluated. For example, something along the lines of a genre approach to expository/information texts similar to what Dave Rose has been doing in Australia and an intervention that focuses on explicit instruction in reading strategies. Pauline Gibbons has also done interesting work in this area. However, interventions are also only as good as the people who implement them, so the first year would be spent training teachers (language and content subject teachers) in these different approaches, building up their own literacy skills, developing their academic vocabulary and content-specific terminology, as well as their content knowledge and pedagogic knowledge and their understanding of the logic behind the specific interventions. Many teachers attend workshops where they are shown specific methods to use in the classroom, but they have very little understanding of why, what the bigger picture is, and their own pedagogic or literacy skills are not necessarily enhanced by implementing the method.

Paula Ensor January 2015



- This is a tricky question as one could answer this question in so many ways, depending on the subfield of education one works in – ECD, primary and secondary schooling, further and higher education.
- I want to get a better grip on how education as a system articulates.
- Is there any research out there that provides guidance on this? I have been involved (either through research, or teaching) in different levels of the formal education system, from Foundation Phase through to higher education, but it is not clear to me how, and to what extent (if at all), government policy grasps education as a system rather than as a number of quite distinct silos.

- OBE had a disastrous impact on schooling; the NQF arguably has had a similarly disastrous
  effect on post-school (vocational and adult) education and Stephanie Allais's recent book on
  the NQF and its effects is a must-read in this context.
- The parlous state of post-school education impacts negatively on schooling, and on higher education. So an interesting question for me (I wouldn't claim it as the "most" underresearched area) is how (if at all) government policy understands and promotes the interconnection of the system as a whole.
- At the level of more personal interest, I want to understand better the regularity of pedagogic practice over time and place, and the difficulties of changing this, a question which for the moment I am placing under the working title of "ritual in pedagogy".

If you were given a R20million research grant what would you use it for?

- R20 million is a great deal of money and we would want to make sure that such a funded research project would have maximum impact on policy and practice. Having read through some of your earlier interviews I am struck by how much more precise we have become in our diagnosis of educational problems and in identifying areas that require further research, and at the same time how broadly these questions cut across the whole system.
- So the first thing I would do is bring together a group of the most productive and interesting thinkers and researchers in education in South Africa and map out a project which we collectively believed would make the most impact.

Carol Macdonald January 2015



- The effects of rapid curriculum change on the confidence and practice of teachers. They are not treated with the respect they deserve. Educational change is stressful, and so too much change is even more stressful. I do understand that this kind of rapid change is a world-wide phenomenon, but we haven't looked at the effects in our context.
- I think we need to make a detailed study of the use of LTSM. In developed educational systems teachers only give a cursory look at textbooks, and tend to develop their own materials or use several sources. We need to know what happens when the challenges are much greater in context like our own.
- We also need to have a long hard look at lack of prestige when young people go into
  education. Education is the easiest faculty to get into the lowest number of matric points.
  There are so few really bright undergraduates in education, yet we entrust the future of the
  country to these young people. We need to look at countries like Finland where teaching is a
  highly respected profession.
- If you had to pick 2 or 3 'reasons' why most African language learners battle to transition to English in grade 4 which ones would you pick and why?
- The absence of deep literacy at home.
- The poor management of resources like libraries, and classroom libraries.

 The failure of the teachers to realise what it takes to inculcate the practices of literacy, particularly in the Foundation Phases. This is because they never experienced this for themselves as learners and students.

If you ended up sitting next to the Minister of Education on a plane and she asked you what you think are the three biggest challenges facing South African education today, what would you say?

- I would first commiserate with her for having such a daunting job. Then I would share with her about what I said in 10) above.
- Finally I would talk to her above the professional burden on teachers in the context of excessive and continuous curriculum revisions.
- Finally I would talk to her about the range of learners we have locally, and why their needs would not be met by all having the same textbook that is really a very silly suggestion.

If you were given a R15million research grant what would you use it for?

- I would first ask if it was for basic or applied research (although it is very likely to be the latter). That would determine the range of questions I would address. I would like to have a project to run for five years. The most interesting questions tend to pop up in the third year.
- Probably the most important aspect would be to pull in promising young research and mentor them. At the ripe age of 61, that is the key contribution I can make.

Jill Adler January 2015



- I think our whole field of educational research in South Africa is relatively young. There is so much we need to know more about, and from the empirical base of our schools, classrooms and learners.
- I think the transition years from primary into secondary mathematics what teachers need to know and do to teach across subjects at that level are very poorly understood. This is critical in mathematics where the move to greater abstraction and working with symbolic forms emerges. It is also a critical point where we need to know more about what it means to learn and teach mathematics in a dominant minority but extremely powerful language (English).
- There is widespread agreement in the mathematics education literature in South Africa that a
  large proportion of mathematics teachers do not have the content knowledge and
  pedagogical skill to teach mathematics effectively. What do you think are the most promising
  models or interventions that deserve further investigation or evaluation?
- Given our history, and the way in which apartheid education ravaged both sense of self, and of knowledge and learning, I think the models that require support NOW, are those that provide practicing teachers sufficient TIME to (re)learn mathematics, more specifically what the field calls 'mathematics for teaching'. The model we have developed in the Wits Maths Connect Project is promising it is grounded in a conception of mathematics for teaching, and takes place over 16 20 days, spread over an academic year. We have shown that when teachers have opportunity AND TIME to strengthen their relationship with mathematics (and by this I mean relearn mathematics they teach in greater depth, and learn new mathematics,

while becoming more mathematical in how they think when doing mathematics) this impacts on the learning gains of their students. The model includes a version of lesson study – and so work on teaching and thus pedagogical skill. But even in our lesson study model, the focus is on what we call the object of learning – what learners are to know and be able to do mathematically, and how this is or is not brought into focus with learners in a lesson.

If you ended up sitting next to the Minister of Education on a plane and she asked you what you think are the three biggest challenges facing South African education today, what would you say?

- Hmm, an interesting question. Building respect for the profession, and the work of teaching is
  a huge challenge, and it requires engaging the organisation of the profession where at a
  public level, employment conditions and mainly salary is the issue.
- Changing that conversation to be one that is equally concerned about learners and learning is first and foremost.
- Second, I would focus on the challenges of time and knowledge in our education. We have systemic problems, underpinned by weak orientations to knowledge (whatever the discipline. Becoming knowledgeable and that is what is needed for teaching takes time, no matter what your discipline is; and it requires deep respect for the learning/teaching process.

If you were given a R5million research grant what would you use it for?

This could sound like a lot of money – depending on what it has to pay for, it could also do
very little. The short of it is that I am doing the research I want to do, and think is important –
studying the inter-relation between mathematics teaching in secondary school, mathematics
teacher education and professional development, and student learning.

Andrew Einhorn (Numeric) January 2015



What do you think is the most under-researched area in South African education?

• I'm also not an expert here, but it does surprise me that there isn't a bigger lobby to up the ante in the teacher-training space.

If you ended up sitting next to the Minister of Education on a plane and she asked you what you think are the three biggest challenges facing South African education today, what would you say?

- Teacher training
- Teacher training
- Teacher training

What would you most like to see change in the South African education system?

• I'd like to see sensible legislation passed that makes space for charter schools. These are schools which receive public funding but operate independently of the established public school system. There are many people chomping at the bit to open and run good public schools with the government's assistance. I think providing space for them to do so would bring a lot of talent into South African education and I suspect the government would ultimately get kudos for the improved educational outcomes.

- I would also like to see sensible legislation passed that allows for independent teacher-training institutions to be opened. At present, the universities carry the entire burden of teacher training. I think there are lots of talented people outside of universities who would relish the opportunity to open and run small, high-impact teacher training institutes. The effect of such institutes, in my view, would be substantial.
- Finally, I'd like to see a PR campaign that brings more talented matriculants into bachelor of education (or teacher training) programmes. As the famous American engineer Lee Iacocca once said: "In any rational society, the best of us would be teachers and the rest would make do with something else." I have sat in too many interviews with prospective pre-service teachers where they explain to me that the bachelor of education was their second choice or their fall-back option. This mentality needs to change. There are few professions that compare in importance with that of teaching and it's time we communicate this to young South Africans and bring our best into the teaching profession.

Carole Bloch March 2015



What do you think is the most under-researched area in South African education?

• Understanding the way babies and young children learn to speak, read and write in multilingual settings.

You have been heavily involved in research on early literacy in African settings, can you give us an overview of what we know about early literacy in African settings and also what we don't know?

- I can only talk about my views as to what I think we know and don't know or somehow don't acknowledge or value ...
- In a nutshell, we know that most children, irrespective of class, socio-cultural and linguistic background are capable of becoming competent, avid and creative readers and writers but that huge numbers of mainly African language speaking children don't and that the conditions that need to be in place for successful learning to take place are mainly in place for children of the elite only. We know that a combination of factors is involved and that these cut across home, community and school. But we don't seem to widely appreciate the incredible importance of the 'invisible' literacy learning that takes place in the daily, informal community and home language 'goings on' of literate homes, and what it means when such learning, for whatever reasons, cannot take place.
- We know that teachers 'bring with them' like children do, their literacy theories and practices into the classroom, and that a real stumbling block in the early years is how we still tend to train teachers to view their task as teaching skills as a priority over demonstrating and making possible the use of written language for personally meaningful reasons (This contributes to the learn to read/read to learn myth). We should know that this blocks many children off from highly effective learning strategies that could reveal them as exuberant emergent readers and writers that we expect from most young English speaking children. We don't widely acknowledge, and maybe we don't know, that the consequence is a cyclical one of

- adults tending to underestimate poor children's capabilities in formal education situations, believing the children are struggling with 'the basics', when actually the struggle is that the basics of written language are being denied them!
- We know that the push down from higher education is exacerbating this through the justification of curricula that package skills and knowledge in ways that override considerations about how to motivate young children 's enormous learning capacity. Global forces push down too a current example is an assessment packages like EGRA, which grew from the USA 's DIBELS, that has caused so much heartache and stress for so many families (see The Truth About Dibels, Goodman 2006).
- We know that low status and use of African languages for print functions (including the dearth of fiction and non fiction) means fewer adults are leisure readers. But we don't widely value or address the fact that it seems extremely difficult to teach others to read when you don't have your own repository of knowledge and stories arising from the texts you've read over time, to draw from with the overwhelming effect of poor reading habits being that you tend not to have what it takes to reap the benefits from and pass on a passion for knowledge and story to others.
- Given what we do know, we don't know why government (with support from business) seems unable to invest with unflinching determination in the translation of desirable world texts, including ones from Africa, to support African publishers to produce a steady flow of the books we need and order these to stock community and school libraries .... to inspire reading and creative writing among adults and children in African languages and English and also to use in the training and mentoring of adults to grow to know and manage these collections. We also don't know why there is an insistence on making teaching so very hard for teachers and learning difficult for the majority of children living in South Africa after grade 3 by forcing teaching in a language often not known well enough to use with dignity and depth.

If you ended up sitting next to the Minister of Education on a plane and she asked you what you think are the three biggest challenges facing South African education today, what would you say?

- The first is the fact that it is a tragedy that we haven't implemented our Language in Education Policy of 1997, but that it is not too late and that this needs leadership from government and lots of information in fact a campaign to allow parents the opportunity to appreciate the issues involved in educating their children from a language perspective how they would come to realise that they do not need to choose between English or African languages but that both are possible, and desirable.
- The second is related and I've raised already that government needs to act on the fact that until publishing in African languages is supported in a serious way, so that these languages are used in print for high status functions, including literature and more of our adult population starts reading regularly for personal satisfaction and for pleasure, many children won't become readers and writers in the fullest sense.
- The third, if she was still listening, would be to discuss how to use literature to find practical ways to create a different ethos among us one that promotes and encourages empathy and respect for each adult and child living in South Africa irrespective of background. We'd gather people together to generate a curriculum of shared stories for children of all ages, from South Africa, Africa and the rest of the world, which reflect the highs and lows of humanity to support the growth of a new generation of people who reject stereotyping and prejudice, and value what we share in common, as well as our differences.

If you were given a R15million research grant (and complete discretion on how to spend it) what would you use it for?

• I'd facilitate a major qualitative research process on various aspects of Nal'ibali: I'd like to track groups of children living in different settings from home to reading club to school over a period; document the indicators of the effects of reading for enjoyment on motivation, engagement and achievement, literacy and school learning, family dynamics etc. I know that our only glimmer of hope to persuade policy makers, linguists and many involved in education that what we are doing is essential is 'scientific' evidence!