BERTHA CENTRE FOR SOCIAL INNOVATION & ENTREPRENEURSHIP

GRADUATE SCHOOL OF BUSINESS
UNIVERSITY OF CAPE TOWN

BERTHA FOUNDATION

CENTER FOR EDUCATION INNOVATIONS
An initiative of Results for Development Institute

COVER PHOTO SHINE LITERACY

SOUTH AFRICAN
EDUCATION INNOVATOR'S REVIEW
2015

GRADUATE SCHOOL OF BUSINESS
UNIVERSITY OF CAPE TOWN

BERTHA CENTRE

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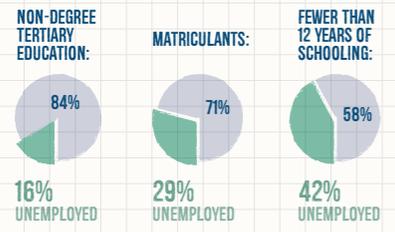
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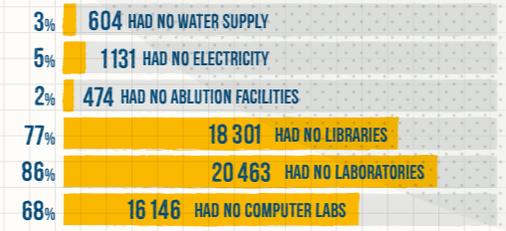
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UNCOVERING OUR EDUCATION INNOVATORS

THIS REVIEW IS A SHOWCASE OF THE OUTSTANDING INNOVATIONS THE BERTHA EDUCATION INNOVATION INITIATIVE HAS UNCOVERED IN THE SOUTH AFRICAN EDUCATION SPACE.

LOUISE ALBERTYN, CAMILLA SWART AND DR FRANÇOIS BONNICI.

The Bertha Centre for Social Innovation and Entrepreneurship is a specialised unit at the UCT Graduate School of Business. Established in partnership with the Bertha Foundation in 2011, it has become a leading academic centre dedicated to advancing social innovation and entrepreneurship. One of the priority areas of the centre's work is education innovation.

In 2013, The Bertha Centre Education Innovation Initiative partnered with Results for Development to drive forward Center for Education Innovations' mission to increase access to quality education for low-income communities by identifying, analysing, and connecting innovations in the education sector. Over the past three years, the team has compiled case studies of over 125 organisations which have demonstrated innovative programme design, successful scaling, robust monitoring and evaluation, cost efficiency and systemic collaboration for proven impact on learners, from 'cradle to career'.

We have also focused on engaging and building collaboration with innovative and impactful education models and sustainable solutions, to address the challenge of access to quality education. Over 30 gatherings have been facilitated in response to the changing needs of the education community – whether it be knowledge sharing or getting diverse stakeholders around the same table to look at a challenge together. With our network of academics, members of provincial and national government, funders, implementers, educators and business stakeholders, we believe we are well-placed to provide an overview of the education landscape.

Many organisations have drawn on our experiences through one-on-one strategy discussions, reflecting on their impact and potential innovation within existing programmes. Our exploratory visits to Zambia, Botswana and Uganda have enabled us to share some of the learnings from our colleagues in the rest of Africa with our network back home. Our opinions on the critical success factors of education innovations have also been consolidated. Firstly, these interventions ensure that the child is supported in every stage along his or her learning journey through education interventions that look at change systemically and collaboratively; secondly, they should be coupled with teacher development programmes to facilitate the adoption, sustainability and success of these interventions.

In 2015, upon reflection of our work over the last three years, we were inspired to compile this South African Education Innovator's Review. Through this Review we want to celebrate a selection of the outstanding innovations we have uncovered.

These innovations have proven impact, and have scaled to increase the reach of this impact. We spent time with the implementers to move beyond a clinical analysis, to extract and understand their practical learnings gathered through implementation, and to identify what works and why. These discussions were characterised by vulnerability and generosity on the part of the programme implementers, and a tenacious commitment to keep addressing the challenges in the system with thoughtful interventions that value the input of the entire education ecosystem to improve the learners' access to dignified and quality education.

This ecosystem is reflected in the chapters of this Review, with the learner at the centre, surrounded by the vital stakeholders needed for successful systems change: teachers, parents and caregivers, school leadership, Government and the private sector. Along with the in-depth look at specific programmes, each chapter features a local expert's opinion, outlining the current state of – and challenges in – the particular field, and highlighting the need for innovation and the likely components of a viable solution. We have also highlighted some innovations to watch, which are meeting a need in this ecosystem through sustainable and thoughtful implementation.

We trust that this Review will shine a spotlight on the sometimes under-recognised role that frontline actors can play in systemic change in education, and the hope that lies in the all-too-often untold narrative of their positive work. We hope that you are inspired to embark on your own journey to support education in our country.

OUR EDUCATION ECOSYSTEMS

THE FUTURE SUCCESS OF THE SOUTH AFRICAN CLASSROOM LIES IN UNDERSTANDING THE ISSUES OF INTERDEPENDENCY AND SUSTAINABILITY – AND IN HAVING THE COURAGE TO MAKE INNOVATIONS POSSIBLE.

To understand why South Africa is lagging behind in the area of education innovation, consider the following scenario: we're in a school which was built by a community development programme employing local contractors. Outside, a small group of parents from the local community are working in the school's vegetable garden. In one classroom, trained volunteers begin a one-on-one reading lesson with Grade Two learners. In the classroom next door, we find a trained, motivated teacher: one who regards himself as a life-long learner. Following a discussion he had with a group of colleagues at a recent Community of Practice meeting, our teacher deliberately positions himself at the back of the room, and allows a recent graduate, drawn from the school's own community, to teach the class of Grade Six learners. The graduate neatly arranges her teaching tools for the day, then looks up, smiles, and says to the class: "Please take out your LEGO blocks!"

Does this scenario seem far-fetched? It shouldn't… yet it is. It shouldn't, because each element of the story is a real-life example, drawn from schools and classrooms across South Africa, of a bottom-up approach of teachers and communities oriented towards a new way of thinking about and doing innovation.

Yet it is, because the elements of our story remain the exception, rather than the rule, in our contemporary education landscape.

And there's the problem: with every year that passes, South Africa will fall further behind in the global competitiveness stakes unless we invest in quality education for all our children, built around innovative cultures of open-minded, inventive, and courageous thinking. Innovative cultures do not emerge from teaching and learning environments that are risk-averse, test-driven, teacher-centered, authority-based, and that value rote learning over experimental thinking.

Without this paradigm shift, the South African pool of innovators rising to the top will remain shallow. This is only possible with a network of support backing up this teacher, from principals and parents to community leaders and funders.

That is why I was excited to learn about the many organisations in this country that work in the innovation space. The case studies of innovation compiled by the Bertha Centre for Social Innovation and Entrepreneurship cover the spectrum of education work, from early childhood education to teacher development to Science education and the thread of education technology running through many of these interventions. I love the metaphor of the ecosystem that frames these innovations, for it speaks to issues of interdependency and sustainability; in other words, that multiple stakeholders are required, from funders to NGOs and from government and teachers, to make such innovations possible, visible and durable within the education change landscape.

The case studies in this Review are truly exceptional. They offer hope to many who find that the humdrum of mainstream education has bypassed the dynamism offered through innovation, and who alter the ways in which we teach and learn, and live and work, together. My sincere congratulations to the case study teams, and to the Bertha Centre for making public these powerful examples of innovation in education.

PROFESSOR JONATHAN JANSEN

Professor Jonathan Jansen is Rector and Vice-Chancellor of the University of the Free State.

"INNOVATIVE CULTURES DO NOT EMERGE FROM TEACHING AND LEARNING ENVIRONMENTS THAT ARE RISK-AVERSE, TEST-DRIVEN, TEACHER-CENTERED, AUTHORITY-BASED, AND THAT VALUE ROTE LEARNING OVER EXPERIMENTAL THINKING."
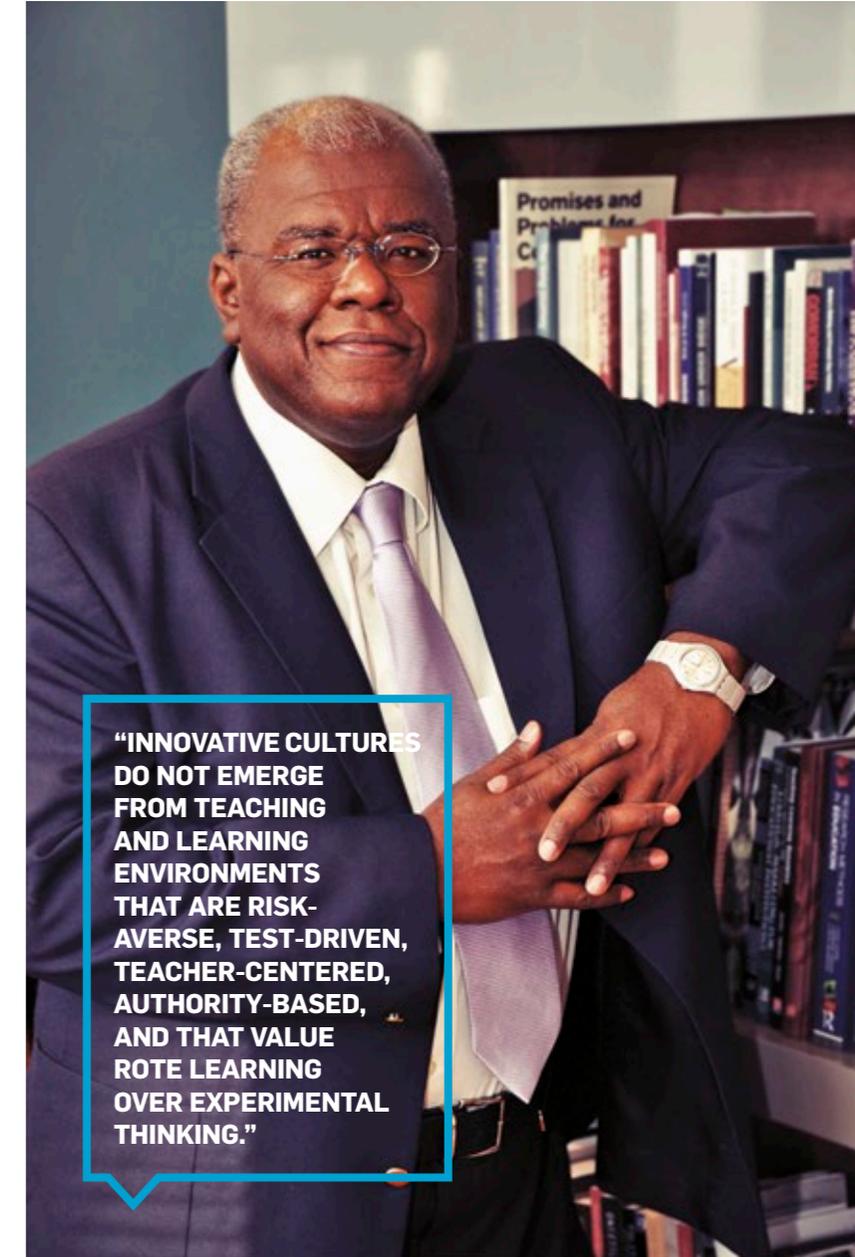
SOUTH AFRICAN EDUCATION OVERVIEW

DR JONATHAN CLARK

Dr Jonathan Clark is the director of both the Schools Development Unit and the Schools Improvement Initiative at UCT.

WHILE SEEKING TO PUT RIGHT THE INEQUALITIES OF THE PAST, SOUTH AFRICA'S EDUCATION SYSTEM IS WORKING TOWARDS A BRIGHTER FUTURE. BUT FIRST, THE CHALLENGES OF THE PRESENT MUST BE OVERCOME.

After the first democratic elections in 1994, one of Government's priorities was educational reform, which was seen as a key vehicle for overcoming the injustices of Apartheid. Since then, progress has been made in education legislation, policy development and curriculum reform, with the allocation of educational resources clearly directed by considerations of equity.

South African education today is characterised by co-operative governance, with power sharing between the national and provincial governments. At the national level, the Department of Basic Education (DBE) provides the framework for school policy, with administrative responsibility held by provincial education departments. School governance has been further decentralised, with greater autonomy devolved onto school governing bodies.

Since 1994 educational provision has expanded considerably: virtually all primary-age children are in school, with equal numbers of girls and boys. On both counts the UN Millennium Development Goals of 2000 have been met. Grade R enrolments in public schools increased from 544,000 in 2009 to about 800,000 in 2014.

Equality of access has unfortunately not translated into equality of opportunity. Measured literacy and numeracy performance of South African children is well below countries of similar economic status, leading some researchers to conclude that many schools serving low-income communities have not significantly improved in terms of educational outcomes since 1994.

South Africa's education system generally sees children making the switch to either English or Afrikaans (the only languages of instruction at schools) in Grade 4, by which time they are expected to have understood basic concepts in their mother tongue. However, research undertaken by the South African Human Sciences Research Council (HSRC) has revealed that too many students are competent in neither their native nor a second language. This issue is further complicated by the fact that many of their teachers are also are not fluent in English.

What has become apparent is the extent to which poor quality teaching and learning has been perpetuated by what is largely an under-skilled, poorly incentivised, yet highly unionised teaching corps, many of whom were themselves products of inferior education. Unfortunately, attempts to improve teaching through qualifications have not resulted in an improvement in learner performance.

The recruitment, retention and deployment of teachers are part of a wider problem faced in the system as a whole. Whereas

the best performing education systems tend to have highly selective teacher recruitment programmes, South Africa faces the same challenges as other middle-income countries in that teaching tends to attract the lowest 40% of graduates. Coupled with the current remuneration structure, the system offers little reward to teachers who perform well. The flat age-wage profile in turn offers few incentives to remain in the teaching profession after the initial few years.

This is not to suggest that Government is failing to act. Given that education is a priority in terms of both its goals and its budgetary allocation, the persistent low performance in the academic achievement of learners has prompted Government to undertake a number of initiatives to improve the quality of schooling. Initiatives include a curriculum review, which has resulted in Curriculum and Assessment Policy Statements (CAPS) developed for all subjects for Grades R to 12. From 2014, CAPS is being implemented across all grades of schooling. The classroom level delivery of the new, more tightly structured curriculum is reinforced in two subject areas, Mathematics and Languages, through a series of prescribed workbooks provided free of charge to all Grade R to 9 learners in public schools.

Following a Teacher Development Summit held in July 2009, a new, strengthened, integrated plan for teacher development has been developed. The implementation of a nationally coordinated system of Continuing Professional Teacher Development (CPTD) commenced in 2013, with roll-out anticipated to take place over a three-year period (2013-2015).

Meanwhile, the independent schooling sector accounts for a relatively small percentage of the overall system. In 2011, there were just under 480,000 learners in 1207 registered private schools, accounting for 3.8% of total enrolments. The sector caters for a broad spectrum of socio-economic and cultural communities. There is a robust independent school movement with a number of associations, the largest of which (ISASA) has over 700 member schools with 160,000 learners.

"EQUALITY OF ACCESS HAS UNFORTUNATELY NOT TRANSLATED INTO EQUALITY OF OPPORTUNITY."

While a significant number of schools operate as non-profit organisations, a number of for-profit public companies are active in the South African market. Independent schools are eligible for government subsidies on a sliding scale dependent on the fees each school charges and, by corollary, the community it serves.

In recent years, there has been a growth in schools catering for the lower income market. The emergence of low-fee private schools signals what may be a significant shift in this area. Linked to this, there is growing interest in 'contract schools': a model where there is partnership between Government (which finances the school) and a private sector provider (which manages it).

Corporate social investment (CSI) in all levels of education amounted to around R2 billion per annum in 2009. Companies direct funds either to service providers or, particularly in the case of school building and refurbishment projects, to the National or Provincial Departments of Basic Education who identify schools in most need of support. In recent years, there has been a trend away from making available funds (other than relatively small grants) directly to schools or to school foundations.

There is an extensive range of NGOs in South Africa with around 85,000 presently registered with the Department of Social Development. The majority are classified as voluntary associations, but there are a significant number (319) of non-profit organisations (NPOs) and 311 Trusts. A number of these trusts channel the CSI spend of large South African corporations. The challenges outlined above need sustained attention. Otherwise, the South African schooling system will continue to punch well below its weight in terms of educational outcomes.

WORKING TOGETHER TO IMPROVE EDUCATION

AS THE FOCUS SHIFTS FROM SIMPLY GETTING LEARNERS INTO CLASSROOMS, AND TOWARDS IMPROVING THE QUALITY OF EDUCATION, WE HAVE BUILT A NETWORK OF LIKE-MINDED CHANGE-MAKERS WHO ARE EAGER TO TRANSFORM SOUTH AFRICA'S EDUCATION LANDSCAPE.

THE CENTER FOR EDUCATION INNOVATIONS: RESULTS FOR DEVELOPMENT INSTITUTE

THERE ARE THOUSANDS OF INNOVATIVE EDUCATION PROGRAMS STRIVING TO INCREASE NOT ONLY ACCESS, BUT ALSO THE QUALITY OF EDUCATION FOR CHILDREN IN LOW-INCOME COMMUNITIES.

Access to education in developing countries has improved significantly over the last several decades, but quality and learning outcomes have not kept pace. As a result, development priorities are shifting away from simply getting children in the door, and are increasingly focused on improving the quality of education. There are thousands of innovative education programmes striving to increase not only access, but also the quality of education for children in low-income communities. However, there are significant gaps in our understanding of the benefits these programmes provide.

This gap is due, in part, to the lack of systematic and easy-to-access information about programmes around the world – both big and small. Practical lessons about successful and unsuccessful experiences are even harder to find, and as a result we are left with a world full of innovative models, but without an understanding of how they are distributed, whether they work, or how those that do can be improved, replicated and scaled up to serve more of the world's poor.

Seeking to address this challenge, Result for Development's Center for Education Innovations (CEI) has sought to identify, analyse and connect innovative education programmes in low- and middle-income countries, in order to better understand, learn and build on their work. CEI developed two mutually-reinforcing mechanisms to pursue this goal: a public web platform, serving as an online knowledge hub for those working to improve education in developing countries; and a network of in-country partners, whose on-the-ground presence and expertise allow for learning and collaboration to take place offline.

The value of this two-pronged approach can be seen especially through our presence in South Africa. Since 2013, we have worked with the Bertha Centre for Social Innovation and Entrepreneurship, a specialist unit at the UCT Graduate School of Business, to develop and integrate our network into the nation's education sector. The Bertha Centre's commitment to evidence-based development, their multi-sector expertise and their passion for innovative ideas make them an ideal collaborator.

The first step of our valuable partnership was to cultivate relationships among practitioners working every day to improve the future for South Africa's children. What we found was an astounding variety of models striving for better quality education, with approaches that ranged from the provision of support to primary school learners in rural communities of KwaZulu-Natal to tutoring secondary school students across the country so they not only excel academically, but reach their full potential as community members as well.

With Bertha's leadership, we together have now identified over 125 South African innovations, and built a network of like-minded change-makers who are eager to transform their country's education landscape. We brought these programmes together, both digitally and in person, featuring their work on the CEI online platform as well as at conferences and events in South Africa. The Bertha Centre has connected them to knowledge and resources, partnering with the Jameel Poverty Action Lab (JPAL) Africa regional office at UCT to ensure their work is influenced by the newest evidence. We have also connected several programmes to assessment reviews, through the Bertha Centre's existing partnership with UCT's Institute for Monitoring & Evaluation, that have helped them learn from their own practices and improve.

Most of all, we have learned from our network of innovators, whose innovative ideas push the boundaries regarding what is possible for the South Africa education system. As the Bertha Centre releases this Review, highlighting the challenges and successes of many of these South African innovators, we hope that their work will inspire and guide the work of others like them seeking to improve education outcomes worldwide.

These programmes have already made great progress for education in South Africa, and if their experiences are properly harnessed for the benefit of others, their collective impact has the potential to improve the education and livelihoods of millions around the world.
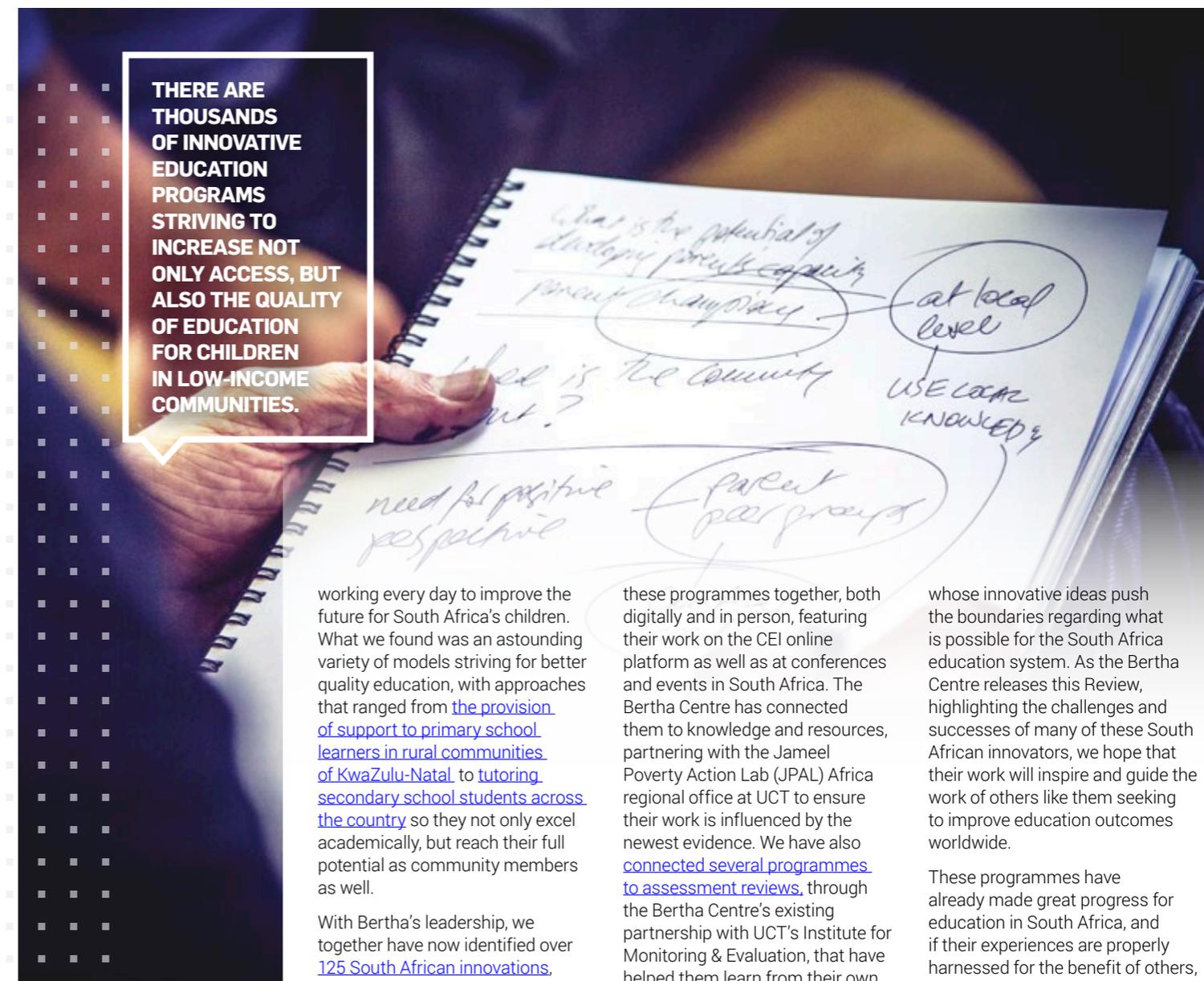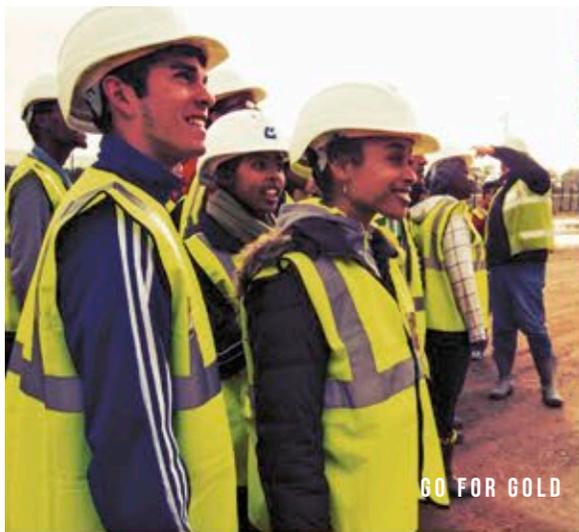
GO FOR GOLD

BRIDGE

SHINE LITERACY

GIRLS & BOYS TOWN

ILIFA LABANTWANA

LEAP
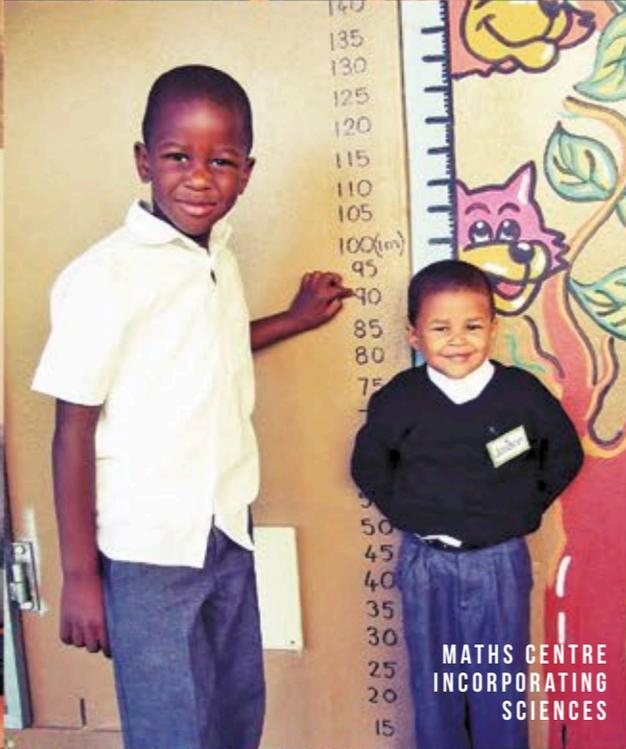
MATHS CENTRE INCORPORATING SCIENCES

REDCAP FOUNDATION

PROJECT BUILD

THANDULWAZI TEACHER DEVELOPMENT PROGRAMME

DEVELOPING TALENTS THROUGH CREATIVE PLAY

JUJURHA EDUCATION CENTRE

TSIBA

BEYERS NAUDÉ SCHOOL DEVELOPMENT PROGRAMME

WORDS CAN CHANGE WORLDS

01 EARLY CHILDHOOD DEVELOPMENT

A PROMISING START

WITH INCREASING POLITICAL AND DONOR VISIBILITY BOTH GLOBALLY AND IN SOUTH AFRICA, IT'S TIME TO ASK THE QUESTION: ARE WE ENTERING A NEW ERA FOR EARLY CHILD DEVELOPMENT?

Neuroscientific, biological, genetic and social science research over the past two decades is unequivocal: the first 1000 days (the antenatal period and the first two years) and the period to the end of the third year of a child's life are foundational in terms of brain development.

Brain development and the neural connections formed in this early period are central to later social, emotional and cognitive development. We are also becoming acutely aware of the negative impact of early nutritional deficits on cognitive development, and of the impact of toxic stress (as a result of poverty, abuse and trauma) on how children develop the capacity to regulate their behaviour and emotions, as well as on the development of attention. All of these are essential skills if children are to succeed at school.

Delivering interventions in the early years has proven to be cost effective[1] and to reduce health inequities[2], and an increasing evidence base exists for how early childhood investments can substantially improve adult health[3]. But while the scientific data has been accumulating, until quite recently there has been a striking worldwide indifference – from a donor and policy point of view – towards early child development (ECD).

Despite the relative neglect of ECD, there a wide variety of non-governmental agencies (NGOs) and community-based organisations (CBOs) in South Africa and elsewhere which have for decades been delivering innovative ECD services to children throughout the region.

In the light of these interventions, and in the context of the compelling need for ECD services, how should we understand the global disregard of ECD? Why are some health initiatives more successful in generating funding and political priority than others, and what might some of the system blockages be? The answer to these questions is complex.

At the most crude level, young children are not a constituency who can speak for themselves or mobilise resources. In the context of scarce financial resources and where prioritisation of resources is essential, it is often the case that "she who shouts loudest" gets heard. Allocation of resources is often only partially related to disease burden or to what may yield the greatest societal benefits in the future.

Democratic governments that have a five-year cycle before re-election may be inclined to focus on health concerns with a more immediate outcome (neonatal survival), rather than delivering ECD services where the greatest impact is likely to be only seen decades in the future.

The ECD landscape has also been characterised by a number of internal divisions. These issues include debates around terminology (early child development, or early child education, or early childhood care and development); the age period (antenatal to age two, or birth to three years, or birth to nine years); which sector is responsible for ECD services (health, or nutrition, or education, or social development); and where ECD services should be delivered (home, or clinic, or community). This makes it difficult to promote a common construct.

Other obstacles to ECD policy and implementation progress include the lack of population-based metrics that can be readily collected, as well as an inadequate and inaccessible evidence base. Without such evidence, policymakers have found it difficult to become champions for ECD.

Finally, inter-sectoral co-ordination is essential, as many of the roles and functions currently linked to the everyday life of children are artificially split across government departments. The result may be a "silo" approach to service provision, resulting in costly task replication and missed opportunities to deliver essential services. In a financially constrained system, improving inter-sectoral coordination is vital.

Despite the many obstacles, the increasing political and donor visibility of ECD provides an opportune moment for existing stakeholders to advocate for the particular niche within which they are working. Delivering services to children is complex for many reasons, not least of which is the diversity of settings.

Delivering services needs to be holistic and cannot be a 'one size fits all' approach. The needs of children living in urban settings may differ in important ways from children in rural settings.

The programmes showcased in this *Education Innovator's Review* have, in one way or another, all been specifically adapted to their particular contexts (rural or urban); all use a multi-faceted holistic approach to intervention; and all have a strong prevention focus. The extent to which these and similar programmes can take advantage of a shifting ECD landscape will determine the extent to which we will be able to look back in 10 years' time and say this was when things began to change.

MARK TOMLINSON

Mark Tomlinson is a Professor in the Department of Psychology at Stellenbosch University, and a Visiting Professor in the Department of Mental Health at the University of Cape Town.

STAT

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INNOVATIONS TO WATCH

INTERVENE EARLY

Chaeli Campaign believes in inclusive education. To promote this their Occupational Therapist and Community Workers support ECD centre practitioners and parents to identify and address barriers to learning in the early years of a child's life.

TAKE A HOLISTIC APPROACH

Tree provides holistic support to children in rural areas, through a programme designed to build the capacity of practitioners while offering resources and spaces that encourage learning through play.

BE COMMUNITY-CENTRED

Pebbles Project designed their intervention to support the child from ECD and throughout their schooling. They draw farming communities together, empowering parents and helping local farmers make meaningful contributions to the education needs of their community.

TARGET THE NEEDS

Early Inspiration improves the quality of ECD by equipping practitioners with training, by including parents and targeting support through home visits to the most at-risk families.

REFERENCES: 1/ HECKMAN JJ (2006) SKILL FORMATION AND THE ECONOMICS OF INVESTING IN DISADVANTAGED CHILDREN. SCIENCE 312: 1900-1902; 2/ MARMOT M, FRIEL S, BELL R, HOUWELING TA, TAYLOR S, ET AL. (2008) CLOSING THE GAP IN A GENERATION: HEALTH EQUITY THROUGH ACTION ON THE SOCIAL DETERMINANTS OF HEALTH. LANCET 372: 1661-1669; 3/ CAMPBELL F, CONTI G, HECKMAN JJ, MOON SH, PINTO R, ET AL. (2014) EARLY CHILDHOOD INVESTMENTS SUBSTANTIALLY BOOST ADULT HEALTH. SCIENCE 343: 1478-1485.

ILIFA LABANTWANA

THIS NATIONAL EARLY CHILDHOOD DEVELOPMENT PROGRAMME USES A SYSTEMS APPROACH TO AFFECT CHANGE AND IMPROVE EFFICIENCIES.

Ilifa Labantwana is a national programme, initiated in 2010 and supported by a donor partnership involving the DG Murray Trust, the FNB Fund, the ELMA Foundation and the UBS Optimus Foundation. It aims to provide implementation evidence, build national capacity and galvanise informed political support for the provision of quality early childhood development (ECD) services at scale. The programme focuses on the poorest 40% of children under six years of age and on the period of development during pregnancy.

It is innovative in its commitment to systems change in enhancing access and quality of ECD services in South Africa. Ilifa Labantwana looks at ways to make systems more effective and more efficient, building on existing resources within Government.

Any system involves multiple parts that are interrelated. Adopting a systems approach means considering all elements of the system, and taking into account the interrelationship and interdependencies between its parts. A system is also similar to

a chain, in that it is only as strong as its weakest link. Systems change, then, is based on identifying and strengthening that weakest link.

Using this systems approach, Ilifa Labantwana identifies and explores mechanisms for scaling ECD services ,working closely with government to facilitate the enhancement of existing systems and the development of new systems where necessary.

A clear example of this systems approach at work can be found in Ilifa Labantwana's partnership with the Department of Social Development (DSD) in KwaZulu-Natal. Ilifa adapted simple wall-mounted workflow boards, which are commonly used to improve systems efficiency in the manufacturing industry, to help DSD service offices (which operate at the level of local municipalities) to identify key constraints within their ECD registration system. The process creates a simple visual map of the complicated registration system, allowing social workers to see at a glance where the main

bottleneck is within the system and to quantify this bottleneck. In this way, time and resources can be efficiently directed at the key constraint and users of the workflow boards are able to see immediately whether this bottleneck is being effectively addressed. Ilifa has tested this intervention at two services offices and has been able to improve systems efficiency to the extent that turnaround time for each step in the process has reduced dramatically and the number of ECD sites registered increased from an average of 5 sites per year at each office to a potential 10 per month.

Adoption of a systems approach to enhancing access to ECD services is not without its challenges. One of the biggest of these challenges is the fact that government systems are nested and it is impossible to address the constraint within one system without addressing blockages in the system within which this is nested. This added level of complexity demands a collaborative approach with

Ilifa working across all levels of government simultaneously.

Ilifa Labantwana's approach is informed by The Theory of Constraint, which argues that resources should be directed at the area where there is the greatest constraint, thereby alleviating that constraint to aid flow within the system. "High-

leverage changes in human systems are often nonobvious until we understand the forces at play in those systems. There are no simple rules for finding these high-leverage changes, but learning to see underlying structures rather than events is a starting point".[1]

The benefits of a systems

approach to change are clear. But it does require support from funders who buy into the long-term nature of this approach and who accept that while changing a system can leverage significant long term benefits to children, change is not always within your control and the benefits may only be evident later.

1: Peter M. Senge (1990) *The Fifth Discipline: The Art & Practice of The Learning Organization*

ILIFA LABANTWANA LOOKS AT WAYS TO MAKE SYSTEMS MORE EFFECTIVE AND MORE EFFICIENT, BUILDING ON EXISTING RESOURCES WITHIN GOVERNMENT.

KEY LEARNING

A systems approach to change is needed. This can be a hard sell to funders, but the benefits are far more sustainable.

LEARN MORE

For more about Ilifa Labantwana, go to **ilifalabantwana.co.za** or **educationinnovations.org/program/ilifa-labantwana-sobambisana-initiative.**

Follow the programme: 🐦 **@IlifaLabantwana** 📘 **ilifa.sa**

JUJURHA EDUCATION CENTRE

LOCATED IN A REMOTE RURAL AREA OF THE EASTERN CAPE, THIS ECD CENTRE EXTENDS ITS INFLUENCE FAR BEYOND THE CLASSROOM, EMPOWERING AND INFLUENCING OTHER SCHOOLS AND COMMUNITIES IN THE AREA.

The Bulungula Incubator was established in 2007 to address the challenges of rural poverty, while promoting and preserving the positive effects of the traditional South African rural lifestyle and culture. At the time, there were no institutions that offered Early Child Development (ECD) education in the four villages that make up the Xhora Mouth Administrative Area of the Eastern Cape. That changed in 2009, when the Jujurha Education Centre (JEC) opened to all three- to six-year-olds living in Nqileni Village. Its daily programme is offered by local ECD practitioners, and continues up to the Grade R level.

The JEC was followed by three more community-based preschools: Khanyisa Preschool in Mgojweni Village opened in 2012; and Masiphathisane Preschool in Folokwe and Phaphamani Preschool in Tshezi in 2013.

The JEC offers library facilities for the whole community, and support for schools in the area through After School Enrichment and Rural Schools Outreach programmes. Afternoon sessions include opportunities for supervised play with educational toys, as well as structured numeracy and literacy lessons, creative art activities, basic English, story time in the Jujurha library and the opportunity to borrow library books.

During the establishment of the JEC, the Bulungula Incubator actively sought to build local skills, sourcing and training employees directly from the community. It also created permaculture gardens to supplement a planned nutrition programme, and developed appropriate infrastructure in an area which had no access to running water, electricity, sanitation or road access. It developed a practical curriculum of how to deliver excellent early childhood education and managed to access government funding to support the set-up and daily running costs of ECD centres. The JEC trains ECD practitioners from the immediate area, requiring only potential and enthusiasm from the candidates. These teachers start with no prior experience or relevant formal qualifications.

Parent Participation workshops are offered on a range of topics. The importance of educational stimulation from birth is emphasized, and parents are given the opportunity to make learning equipment from locally available materials. The JEC is intentional about preserving the elements of rural life that contribute to a nurturing, wholesome and safe space in which children can learn; with an emphasis on emergent literacy and developing imaginative play.

The community is supported in managing the centre. Parents are included in its sustainability model, committing to cooking meals for the learners two days a month in lieu of school fees. Parents are also equipped with the skills to serve on management committees. The grant from the Department of Social Development (DSD) is managed by local teachers, and they serve as the liaison between parents, the community and the DSD.

The impact of the JEC will be felt for generations. The community of the Xhora Mouth Administrative Area is not a transient population, so the level of competence can continue to be leveraged to the benefit of both the learners and the rest of the community.

KEY LEARNING

Build the capacity of the community, so that it can take ownership of the innovation.

THE JEC IS INTENTIONAL ABOUT PRESERVING THE ELEMENTS OF RURAL LIFE THAT CONTRIBUTE TO A NURTURING, WHOLESOME AND SAFE SPACE IN WHICH CHILDREN CAN LEARN.

LEARN MORE For more about the Jujurha Education Centre, go to **bulungulaincubator.wordpress.com** or **educationinnovations.org/program/jujurha-education-centre-jec.**

02 LITERACY AND NUMERACY

IT ALL ADDS UP

SOUTH AFRICA IS FACING A MATHEMATICS CRISIS. TO SOLVE IT, INTERVENTION – AND INNOVATION – MUST COME EARLY.

ANDREW EINHORN

Andrew Einhorn is the founder of Numeric. Learn more at numeric.org.

When I was a child my grandfather told me there were only two subjects he cared about: Maths and English. In retrospect, this stands to reason. Maths forms the foundation of all quantitative subjects (Physics, Accounting, etc) and English provides the foundation for the humanities (History, Literature, etc). I don't doubt my grandfather cared about my other subjects too, but I'm guessing his remark was intended to place emphasis on the foundational subjects.

Mathematics is unique in that everything we learn builds on something we have learned previously. You cannot learn to add before you have learned to count. You cannot learn to subtract before you have learned to add. And so on. Learning Mathematics is like building a tower with many layers. The stability of each layer depends on the stability of the layers that came before.

Most South African primary school children have gaps in their Mathematics foundations. When these learners reach high school, teachers are required to introduce high school curriculum. But, as any physics student will tell you, when you add load to weak foundations, it's only a matter of time before the tower collapses. This is reflected in the results of the Annual National Assessments in Mathematics (ANAs) for Grades 3, 6 and 9. Last year the average score on the Grade 3 ANA was 56%. By Grade 6, this average had fallen to 42%. By Grade 9, the average score was just 10.8%. The tower had collapsed. It has become clear that South African Maths education is broken well before Grade 9, let alone matric.

Or, let's put it this way: For every 100 learners who enter the South African schooling system, only 48 will make it all the way to matric. Of the 48 who make it to matric, only 22 will write Maths. Of the 22 who write Maths, only 10 will pass. And of the 10 who pass, only four will score higher than 50%. So for every 100 learners who enter the system, only four will leave it with an adequate understanding of this important subject.

When implementing interventions in Mathematics, it's best to start earlier rather than later. By strengthening the foundations, we can dramatically reduce the burden of Maths education in high schools as children are better able to help themselves.

As Plutarch once said, education is not the filling of a pail but the lighting of a fire. When running an intervention, remember that without appropriate motivation, learners will struggle to stay the course. Continually show learners why Mathematics is important, and how it can be fun.

They, in turn, will show you what brilliant mathematicians young South Africans can be.

SHELLEY O'CARROLL

Shelley O'Carroll is the Director of Wordworks.

REWRITE THE FUTURE

OVERCOMING SOUTH AFRICA'S LITERACY CHALLENGES WILL REQUIRE STRENGTHENING THE TEACHING OF LITERACY, PARTICULARLY IN THE EARLY YEARS WHEN FOUNDATIONS ARE LAID FOR LATER LEARNING.

STAT

80%

OF OUR GRADE 9 PUPILS ARE ACHIEVING AT A

GRADE 5 LEVEL

IN MATHEMATICS AND THE BACKLOG STARTS IN

GRADES 1-3

AT THE END OF

GRADE 4

MORE THAN HALF OF OUR STUDENTS CANNOT READ FOR MEANING AND INTERPRETATION

Children begin by learning language, and then use language to learn. Before school and at school, the teaching of reading and writing must include a greater focus on building language-rich environments that support interaction and language learning.

Children's literacy is everyone's responsibility. Parents have a vital role to play, but many believe that preschool and school are the proper places for learning. Some might feel that their own educational background or home language does not qualify them to support their child.

The development of literacy in two languages is a reciprocal process, and research supports a model of bilingualism that provides ongoing support for the mother tongue as children become competent in a second language. Rather than being in competition, first and second languages are interdependent.

Reading to children helps to inspire enjoyment of books and stories, and fosters a love of reading. Where books are not available, telling stories helps to bridge the gap between everyday language and the more complex language of books. Community-based spaces that encourage a love of stories and books need to be supported and resourced.

Schools in historically disadvantaged communities frequently struggle with large class sizes and limited access to specialised remedial services. There is a need for early intervention and compensatory initiatives that draw on community members to work with children who struggle with reading and writing. In-school and after-school volunteer programmes have enormous potential for mobilising communities to partner with teachers.

Yet national and provincial assessments show that a high percentage of South African children are not acquiring basic literacy in their first three years at school. Many from disadvantaged communities are starting school already behind, having missed out on those vital early learning opportunities. The result is that the achievement gap becomes entrenched from the earliest years, and teachers struggle to make up for lost time. The focus needs to shift from tackling low literacy levels once children have failed to learn to read, to innovation in the ECD space to ensure that every child learns to read and write successfully.

INNOVATIONS TO WATCH

PROVIDE ACCESS

Good Work Foundation have established ICT learning centres in rural areas, giving learners access to technology which they may not have in their schools. The tablets have Literacy and Numeracy apps, and facilitators help make the mastery of these skills accessible and fun.

CREATE A SOCIAL MOVEMENT

Nal'ibali have responded to the literacy crisis by launching a national campaign to encourage reading for enjoyment. They have established a network of school and community-run reading clubs and a digital platform for parents to access stories for their children, in 11 official languages.

TAKE A SYSTEMIC APPROACH

Wordworks tackle the literacy problem systemically by empowering teachers, parents and community volunteers, and by designing quality content and resources. Their methodology is based on extensive research, and they aim to intervene as early as possible.

ADDRESS PRACTICAL ISSUES

Basic Concepts is a teacher professional development program to build pedagogical skills for foundations in language development, numeracy and literacy. The coaching approach centres around scaffolding learning, which is interactive, exploratory and hands-on.

DEVELOPING TALENTS THROUGH CREATIVE PLAY

HANDS ON TECH BELIEVES THE BEST WAY TO LEARN IS THROUGH CONSTRUCTION RATHER THAN INSTRUCTION, AND HAS PARTNERED WITH THE LEGO FOUNDATION TO OFFER AN INVOLVED, CREATIVE CLASSROOM EXPERIENCE.

There is strong evidence to suggest that learning through play opens possibilities for holistic child development. This includes the development of both cognitive and emotional skills, and is the entry point for influencing performance in Mathematics, Languages and Life Skills. With this in mind, Hands on Tech have partnered with the LEGO Foundation to develop a creative approach to learning for Grade R through Grade 7, called Developing Talents Through Creative Play.

The project, which uses LEGO Education products and teacher training, was launched in Atteridgeville, west of Pretoria, in 2009. With the help of the Department of Education, five primary schools a year, for five years, were identified for a year-long trial, and were provided with LEGO kits including building blocks and CAPS-aligned workbooks.

The programme aims to teach learners to work cooperatively and creatively when attempting to solve challenging problems. It also emphasises the importance of recognising playfulness and creativity as prerequisites to help societies prepare for and accommodate the rapid changes associated with technology and globalisation.

In the Foundation Phase (Grades R to 3) Mathematics, Languages and Life Skills learning foundations are established through manipulating the age- and stage-appropriate LEGO blocks. In the Intermediate Phase (Grades 4 to 6) LEGO blocks are used to enhance learners' understanding of Mathematics, Science and Technology; and in the Senior Phase (Grade 7), LEGO-based robotics are introduced to encourage an interest in future technology and engineering.

Teachers presenting the programme must also understand that learners cannot simply be given knowledge; they must actively build their own theories and marry new information to their existing views. Teachers receive initial training, follow-on classroom visits, and coaching support, and are further motivated by exploring new teaching methods, knowledge and classroom management approaches.

Over the past five years of implementation, the programme designers have learned that often when both a problem and its solution are complex, the implementation is too complex. The initial programme assumed a higher level of competency than was actually present in the schools, so it had to be adapted to include further skillset development. The implementation of the programme also needed to be simplified, as there is more likelihood of success and buy-in if it is easy to explain and use.

Securing that teacher buy-in is vital to the sustained impact of the programme. Hands On Tech has found that a strong relationship needs to be established between the teacher and the trainer, for the teacher to fully appreciate and believe in this method of teaching. The trainer needs to be present, and must take into account the context and needs of each teacher. Experience has shown that the success of the teachers is directly proportional to the number of visits by the trainer and an increased sense of support.

With trained and motivated teachers driving the simple implementation of this sometimes complex teaching methodology, the learners in the classroom have – quite literally – the building blocks they need for their cognitive and emotional development.

LEARNERS CANNOT SIMPLY BE GIVEN KNOWLEDGE; THEY MUST ACTIVELY BUILD THEIR OWN THEORIES AND MARRY NEW INFORMATION TO THEIR EXISTING VIEWS.

KEY LEARNING

When a problem is complex and its solution is complex, the implementation of that solution has to be as simple as possible.

LEARN MORE

For more about learning through creative play, go to **handsontech.co.za** or **educationinnovations.org/ program/developing-talents-through-creative-play.**

Follow the programme: **HandsOnTechnologies**

SHINE LITERACY

THIS LITERACY PROGRAMME TAKES THE LESSONS IT HAS LEARNED IN WORKING WITH YOUNG LEARNERS, AND IMPLEMENTS THEM IN THE WAY IT COLLABORATES WITH OUTSIDE PARTNERS.

The Shine Literacy Programme provides Foundation Phase learners (Grades R through to Three) with reading support through a variety of activities aimed at improving literacy and language acquisition, and encouraging a love of reading. The programme is implemented in Shine's school-based literacy centres by trained volunteers, and using evidence-based methodology.

At the core of the programme's model are twice-weekly, hour-long sessions for learners in Grades Two and Three. These sessions consist of story reading, paired reading with trained volunteers, writing and word play. Most of these learners are learning in English, which is not their home language, so the individual attention they receive during these sessions is particularly important to building their skills and confidence. The learners are also provided with suitable reading material to take home.

Since its launch in 2000, Shine has found that the key to effectively implementing its programme lies in meaningful collaboration, and in creating a safe space for the learner. The hour that the Shine volunteer spends with the learner is characterised by the phrase "ease creates, urgency destroys", so patience, kindness and a calming environment, with minimal interruptions and undivided attention from the volunteer, are key. Developing literacy is a sensitive process, so praise and an absence of fear are vital to creating a space in which the learner can develop confidence.

This ethos is carried through in the way Shine collaborates with schools and other service providers. An example of this is the relationship with Wordworks, an organisation whose services include training and resources for teachers to strengthen literacy teaching in Grade R. Shine's volunteers are encouraged to supplement their resources and techniques with those of Wordworks wherever appropriate. The directors of these two organisations are also thought partners, who reflect on their learnings. Shine director Maurita Weissenberg sees no need to compete, and Shine and Wordworks have shared the resources developed for their organisations, like communication strategies and policy documents.

The Shine Centre's success in improving literacy levels is recognised and endorsed by the Western Cape Education Department (WCED). This endorsement is attributed to the programme's evidence-based methodology, its rigorous approach to measuring impact, its systemic testing of pilot schools, and its offer of complementary support to the teacher.

However, Shine's collaboration with schools – and funders – can require a degree of nurturing at times. These relationships need room for trust and reconciliation. Shine appreciates the context of the schools, and does not take its ability to work in the schools during the school day for granted. The learner's progress is monitored, and every six months results are fed back to the class teacher, Head of Department, Head of School, and parents. Again, the process is based on communication and cooperation. In their classroom interactions with young learners, Shine learned the value of patience and meaningful collaboration. Its key learning lies in the way it has taken that approach, and implemented it in its work outside the classroom.

KEY LEARNING

The ethos "ease creates, urgency destroys" echoes through everything Shine does: from how they creating the learning space to how they partner with government and collaborate with service providers.

THE HOUR THAT THE SHINE VOLUNTEER SPENDS WITH THE LEARNER IS CHARACTERISED BY THE PHRASE "EASE CREATES, URGENCY DESTROYS".

LEARN MORE

For more about Shine Literacy, go to **theshinecentre.org.za** or **educationinnovations.org/program/shine-literacy-programme**.

Follow the programme: 🐦 **@ShineCentre** 📘 **shinecentre.**

03 MATHS & SCIENCE

> **SOUTH AFRICA HAS A SHORTAGE OF ADEQUATELY QUALIFIED MATHS AND SCIENCE TEACHERS, LEAVING MOST PUBLIC SCHOOLS UNABLE TO PRODUCE GOOD RESULTS IN THESE SUBJECTS.**

REINVENTING THE FORMULA

SOUTH AFRICA'S LEARNERS ARE SLIPPING BEHIND THEIR INTERNATIONAL PEERS. BUT BEFORE WE CAN IMPROVE THE EDUCATION OF OUR LEARNERS, WE HAVE TO INCREASE THE SUPPORT FOR THEIR TEACHERS.

South Africa participates in a number of local and international tests of educational achievement. Consistently, the results tell the same story: we have the worst education system of all participating middle-income countries – and, what's more, we perform worse than many low-income African countries.

The good news is that there have been some recent improvements. The 2011 Trends in International Mathematics and Science Study (TIMSS), for example, showed a noticeable improvement in Mathematics and Science performance among South Africa's Grade Nine learners between 2002 and 2011. That's encouraging, but difficult to celebrate.

The government has recognised the long-term implication of poor educational performance. But while various interventions have been introduced, government-led interventions tend not to be about testing new ideas and innovations, so government is collaborating with NGOs and donor organisations. These collaborative efforts have focused on addressing the complexities in the education system, particularly around Mathematics and Science.

One of the factors identified as likely to improve learner performance sees selected schools being supported to become centres of excellence in Mathematics and Science, thereby improving the proficiency of learners and teachers in the language of instruction.

Contextual factors, such as low literacy levels among caregivers or parents, play a significant role in poor learner performance for children from low-income communities. But this is only part of the picture, and it does not explain the poor performance of South African learners compared to those in other countries.

The education system as a whole still faces a major challenge when it comes to increasing the outputs of learners who obtain the passes in Mathematics and Science that they require in order to gain access to university.

In 2010 the Centre for Development Enterprise demonstrated the potential for more Mathematics passes, arguing that a number of

GAIL CAMPBELL

Gail Campbell is Chief Executive Officer of The Zenex Foundation.

STAT

76%
OF GRADE 9
PUPILS IN 2011
HAD NOT ACQUIRED
A BASIC UNDERSTANDING OF
WHOLE NUMBERS, DECIMALS, OPERATIONS OR BASIC GRAPHS
AND COULD NOT RECOGNISE BASIC FACTS FROM
LIFE AND PHYSICAL SCIENCES

candidates who had the potential to pass Mathematics did not take the subject. Cohorts of learners are lost in the system, when they might have otherwise bolstered the number of learners who obtain the passes necessary to bolster the national economy.

South Africa has a shortage of adequately qualified Mathematics and Science teachers, leaving most public schools unable to produce good results in these subjects. As a consequence, too few learners obtain the necessary passes at school level to pursue degrees in the Mathematics and Science fields. This, in turn, has economic implications as the country has a skills scarcity in professions – across industries, from ICT to engineering – which require literacy in these subjects.

Teacher-related issues are not only limited to supply; they extend to content knowledge. In 2005, a study by the Human Sciences Research Council (HSRC) linked poor outcomes to a lack of subject knowledge and inadequate pedagogical skills, especially in Mathematics and Science. Then in 2007, the Southern and Eastern African Consortium for Monitoring Educational Quality (SACMEQ) tested Grade Six teachers, and found that many South African mathematics teachers have below-basic levels of content knowledge. The SACMEQ study found that high proportions of teachers were unable to answer questions aimed at their own learners. Among the most disturbing findings was that the top five percent of Grade Six learners scored higher marks on the same Mathematics test than the bottom 20 percent of Grade Six teachers.

Recognising the challenges serves as an important milestone in the journey to improving the quality of education – and the quality of life – in South Africa. That journey is guided by the goal of improving learner performance. Support, then, should be given to donor agencies who promote innovation in the teaching and learning of Mathematics and Science by providing grants for materials, equipment and supplies related to the implementation of high quality programmes and activities in South Africa's classrooms.

The lessons learned from innovative approaches, informed by collaborative interventions, will focus attention on what needs to be done for these interventions to have a positive impact on learner performance. Being innovative requires us looking beyond what we are currently doing. It also requires that we are able to learn from others, and that we are able to adapt and enhance existing ideas.

INNOVATIONS TO WATCH

TAKE AN INTEGRATED APPROACH
Zisukhanyo Schools Project promotes Maths teaching and learning at primary schools. They take a whole-school approach to integrating ICT, including management, parents, teachers and learners, and fostering a close collaboration with the district education department.

OPEN IT UP
Siyavula produce open-source, curriculum-aligned Maths and Science resources under the Creative Commons copyright, allowing learners and teachers to freely access the content both in print and online.

PROVIDE DYNAMIC SOLUTIONS
AIMSSEC (The African Institute for Mathematical Sciences Schools Enrichment Programme) builds on the professional development of Maths and Science teachers. The teachers are coached through guided discovery, with an emphasis on understanding, mathematical thinking, discussion, collaborative learning and challenges, rather than just mechanical practice.

BE SCALEABLE
Mindset Learn offers e-learning video content supported by PDF notes and computer-based interactive lessons. These are provided directly to schools and individuals via DVD, Video-on-Demand and a free-to-air broadcast, with the Mindset Learn TV channel available to 3.5 million homes across Africa.

MATHS CENTRE INCORPORATING SCIENCES

BY CHANGING THE RELATIONSHIP BETWEEN LEARNER AND SUBJECT, THIS ORGANISATION OFFERS AN INNOVATIVE APPROACH TO TEACHING – AND LEARNING – MATHEMATICS, PHYSICAL SCIENCE, TECHNOLOGY AND ACCOUNTING

In the 2011 Trends in International Mathematics and Science Study, South Africa ranked 146 out of 148 countries in terms of education quality, with a mark of 2.1 out of 7. In terms of Mathematics and Science education, the country performed even worse, finishing bottom of the class (148 out of 148) with a rating of just 1.9 out of 7. You don't need a gift for numbers to know that serious intervention is needed.

Maths Centre Incorporating Sciences (MCIS) aims to improve those learner outcomes through a holistic combination of eight advocacy support campaigns (see box), transforming the school community by connecting local Departments of Education with learners, caregivers, small and large businesses and service providers. These advocacy support campaigns are built

around providing the numerous audiences that supporting a learner's journey, with the tools and enablers they need.

MCIS works in 500 schools throughout the country, covering Grade R to Grade 12, as well as out-of-school youth. Its core subject areas are Mathematics, Physical Science, Technology, Early Childhood Development, and MST Systems Technology for Engineering. Cumulative gaps in the learners' content knowledge are identified systematically, and corrected in a loving and disciplined way.

With this in mind, MCIS offers teacher training to primary and secondary school teachers, providing support for curriculum content-related issues and helping teachers meet the rising demands of the new assessment requirements. Learners are also

assisted with career guidance and study skills, with these interventions taking the form of Saturday classes, afternoon clinics, individual tutoring and camps (when funding is available). MCIS trainers are given continuous on-the-job training to intensify their professional expertise.

Love is an important word in Maths instruction. It removes the fear that so often accompanies learners' mathematical learning experience. MCIS believes that mathematical and scientific language has its own vocabulary and meaning. It requires deep thinking, retention, immediate recall and reproduction on demand, together with complex problem-solving situations. But ultimately, the enhancement of the subject can only happen if its teaching and learning is connected to local realities.

KEY LEARNING

The relationship between learner and subject is key. When it comes to Maths and Science, learners and teachers must understand – and grow to love – the unique language of the subject.

> **LOVE IS AN IMPORTANT WORD IN MATHS INSTRUCTION. IT REMOVES THE FEAR THAT SO OFTEN ACCOMPANIES LEARNERS' MATHEMATICAL LEARNING EXPERIENCE.**

MCIS'S ADVOCACY SUPPORT CAMPAIGNS

Maths Centre Incorporating Sciences aims to improve learner outcomes through the following campaigns:

▸ **The School Effect** develops school leaders, including principals, heads of department (HoDs), school governing bodies (SGBs), parents and district officers.

▸ **Maths, Science, Technology for**

Engineeering brings all engineering careers to the centre of learning.

▸ **Parents Matter Parents Count** works with parents and SGBs, casting parents as equal partners.

▸ **Maths, Science, Technology, ICT Hubs** partners the local business community with the school community

▸ **Share and Shine** provides continous professional development for teachers

and SGBs as they meet to share their best practices, address shortcomings and learn how to better support their learners. From 2016, the South African Council of Educators will endorse these courses and teachers will earn points for professional development.

▸ **Language Connections** helps teachers and learners to understand language of Maths, Science and Technology.

▸ **Maps & Mirrors** involves local businesses, with visitors and speakers mapping a journey for the learners, who in turn gain work experience within mining, manufacturing and IT companies.

▸ **Think Maths, Do Science** facilitates understanding of the links between Science and Mathematics for learners and teachers at primary school level.

LEARN MORE

For more about MCIS, go to **mcis.org.za** or **educationinnovations.org/program/maths-centre-incorporating-sciences-mcis**.

Follow the programme: **MathsCentreIncorporatingSciences**

LEAP SCIENCE AND MATHS SCHOOLS

WITH A SUSTAINABLE MODEL OF EMPOWERING PEOPLE, THIS CHAIN OF INDEPENDENT HIGH SCHOOLS FOCUSES ON FOSTERING THE LEARNER'S CULTURAL AND COMMUNAL IDENTITY.

LEAP Science and Maths Schools are a chain of no-fee, independent high schools. They offer quality education to young, underprivileged South Africans living in low-income communities, providing them with the academic and life skills they need to become future leaders. The school day is extended (to nine hours), with mandatory Saturday classes and formal holiday programmes

While the LEAP curriculum emphasises Science, Mathematics and English, there is also a clear focus on fostering self-confidence, as well as cultural and communal identity. These characteristics are cultivated through engaging the learners in community work, and setting high expectations for their academic performance.

LEAP's holistic approach includes engaging with the broader community and

developing partnerships and collaboration that add shared value. To this end, the LEAP Future Leaders Programme was created in 2007. The aim here is for 10 percent of LEAP's graduating Matric learners to enrol to study Education at tertiary level. Future Leaders are supported to enable their teaching studies at South African tertiary institutions, and are invited to participate in the LEAP Leaders in Education internship programme.

LEAP has arrived at the enviable position where it is no longer asking people to fund an idea; but rather to fund a sustainable model of empowering people to take up positions as advocates for transformation, equipped with an ability to reflect on their own decision-making.

The schools continue to serve their communities of young professionals after they have

matriculated: those in higher learning are supported by LEAP hubs, with additional assistance provided to first-year students. Those who are not in formal employment are invited to identify and access job opportunities by using LEAP's campus resources (like Internet access).

While recognising that content knowledge is vital, LEAP is guided by a pedagogy of developing reflective, mindful and engaged students, and by a firm belief in emotional development as a driver of cognitive development. The mastery of the core subjects of Science and Maths, which are perceived to be extremely difficult, is another lever for developing self-confidence.

The schools encourage learners to couple action with reflection, promoting this through weekly community meetings run by the

learners. This creates a platform for developing a national and global perspective, without the learner being expected to lose their own identity. The honest engagement relies on vulnerability and reflection.

During the course of their high school career, LEAP learners are encouraged to start their own

initiatives. There is clear evidence of this aptitude being sustained, in an emerging narrative of LEAP learners entering the job market driven by achieving social impact and enterprise development.

This is an exciting space, as the schools are cultivating autonomy, independence and fearlessness (with a temperate

voice) in their graduates.

One LEAP graduate reiterates this claim, saying that this outcome is "a result of the combination of social development projects we were involved in during school; a prioritising of life orientation and being provided with a circle of safety in which to develop our voices."

LEAP IS GUIDED BY A FIRM BELIEF IN EMOTIONAL DEVELOPMENT AS A DRIVER OF COGNITIVE DEVELOPMENT.

KEY LEARNING

While content knowledge is vital, emotional development is a proven driver of cognitive development.

LEARN MORE
For more about LEAP Science and Maths Schools, go to leapschool.org.za or educationinnovations.org/program/leap-science-and-maths-schools.

Follow the programme: 🐦 @leapschools 📘 leapschool.

04 PATHWAYS TO EMPLOYMENT

FINISHING THE JOB

THERE IS A GROWING DISCONNECT BETWEEN WHAT EMPLOYERS ARE LOOKING FOR, AND WHAT EDUCATED MATRICULANTS AND GRADUATES HAVE TO OFFER. IT'S TIME TO CLOSE THAT GAP.

Education plays an integral role in the socio-economic development of countries, and in the personal development of individuals.

Consider the numbers. In South Africa, graduate unemployment is estimated at about 5%. Among those who hold diplomas and certificates, it's about 12%. Among those who have Matric, it's about 30%. Now let's look at labour participation. Among those who only have secondary education, the rate is 59%. Among people with tertiary education, it increases to 85%. And in the case of graduates, it's about 90%.

What's more, if you've graduated from a tertiary institution, you are 20% to 25% more likely to find employment than a job seeker who has Matric as their highest qualification.

There is a clear link between education and employment; however, there is also a disturbing disjuncture between the two, where Matriculants and graduates do not always meet the expectations of potential employers. Some organisations have developed interventions to close this gap, exposing learners to the real work environment while they are still studying. This gives them experience, while also enhancing their chances of acquiring the attributes employers are looking for, such as problem-solving, teamwork, oral communication, and so on.

The 2013 South African Graduates Recruiters Association Survey indicates the attributes that employers look for in graduates. These attributes include a willingness to learn, problem solving, teamwork, proactivity, numeracy and oral communication. However, the same SAGRA survey shows a low level of employer satisfaction with regards to those attributes in the available pool of graduates.

For example, employers rate the importance of problem-solving at 83%, but their satisfaction at graduates' level of problem-solving is only 12%.

Young people do not necessarily have enough information to position themselves for careers that have high demand for skills. Some institutions do offer career guidance, but a lack of

KHATHUTSHELO RAMUKUMBA

Khathutshelo Ramukumba is Chief Executive Officer for the National Youth Development Agency.

STAT

UNEMPLOYMENT INCREASES PROGRESSIVELY

NON-DEGREE TERTIARY EDUCATION:

84%

16% UNEMPLOYED

MATRICULANTS:

71%

29% UNEMPLOYED

FEWER THAN 12 YEARS OF SCHOOLING:

58%

42% UNEMPLOYED

information and social capital makes it impossible for young people from disadvantaged backgrounds to access jobs that are not available through public platforms. Studies suggest that about 28% of employment opportunities are accessed through friends and relatives.

High drop-out rates are a cause for concern, as these contribute to the swelling ranks of young people who are classed as Not in Employment, Education or Training (NEET). South Africa has about 8 million of these, and the longer they stay in this category, the less likely they are to become employable. One of the recommendations made to the Department of Basic Education is that a tracking system of all learners be developed to identify secondary school learners who are likely to drop out. Those learners who have already dropped out should be provided with second chances to complete their schooling. There are organisations, including the National Youth Development Agency (NYDA), which provide these opportunities.

Drop-out rates are also a concern at higher education levels. Although the Department of Higher Education and Training is attempting to align secondary and tertiary education, more needs to be done to prepare school leavers for higher education.

A shortage of technical skills also contributes to young people being unable to access employment. One way of intervening is to make Technical Vocational Education and Training (TVET) colleges more attractive to learners. At the moment these colleges are seen as last resort, rather than as first-choice institutions. In addition, many young people attending these colleges are not able to graduate as they do not get opportunities to complete the practical component of their qualification. Apprenticeships and internships enhance technical skills while also providing employers with an opportunity to contribute to skills development.

At university level, employers play a limited role in what is being taught. Universities and other higher education institutions should be encouraged engage with employers around curriculum development.

There are many reasons for the gap between education and employment. Until that gap is closed, employers will continue to have unmet expectations in terms of the skills of young candidates; and Matriculants and graduates will continue to go from being hopeful, educated young people to joining a frustrated and despondent unemployed group.

INNOVATIONS TO WATCH

USE YOUTH TO TEACH YOUTH

Gold Peer puts a positive spin on "peer pressure", developing secondary school learners how to make informed decisions around health and wellbeing, and developing leadership skills. These learners then return to their classrooms and, through peer-to-peer learning, teach and influence their classmates. Gold Peer also provides connections to post school opportunities for their learners.

BE COST EFFECTIVE

IkamvaYouth is significantly shifting learner outcomes, especially at a Matric level. The programme supports secondary school learners with supplementary tutoring and mentoring, and uses volunteer tutors, many of whom were beneficiaries of the programme, who contribute to a cost-effective 'pay-it-forward' model that is adaptable to most communities.

MAKE IT PERSONAL

School of Hope offers a haven to learners who have left school too early. Close nurturing, tailored learning and attention to specific psychosocial needs helps these vulnerable youth reach their full potential and access job or tertiary education opportunities.

PROVIDE WRAP-AROUND SUPPORT

REAP offers bursaries to talented learners from very low-income rural areas. Full financial backing and a strong partnership with the universities are complemented by mentorship and life skills training. This wrap-around support increases retention, and helps these students thrive.
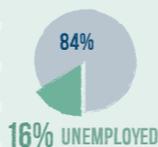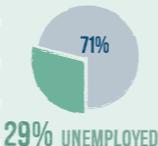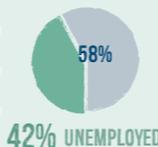
GO FOR GOLD

THIS COLLABORATION BETWEEN THE CONSTRUCTION AND EDUCATION SECTORS SETS DISADVANTAGED YOUTH ON A SECURE CAREER PATH, WHILE OFFERING CORPORATE PARTNERS A SKILLED AND MOTIVATED LABOUR POOL.

FOR THE PROGRAMME TO WORK, COMPLETE BUY-IN FROM THE WHOLE SECTOR IS NEEDED.

Go For Gold is a partnership between the public and private sectors which provides disadvantaged youth with learning and career opportunities in construction. Founded in 1999 through collaboration between companies in the Built Environment, the Western Cape Department of Education and Civil Society, it consists of a four-phase programme which includes tutoring, internships, sponsorship and employment.

The programme starts in Grade 11, offering two years of weekly after-school tutoring sessions. Students are tutored in Mathematics and Physical Science, with lessons complementing the school curriculum. They also receive training in life skills and basic computer skills.

The second phase takes the form of a structured gap year, where Go For Gold partners with corporate companies in the construction sector to employ Grade 12 graduates for one year after they have successfully completed their schooling. Participants spend this time on site, gaining hands-on experience in the industry. Their performance is monitored and they are assisted in making informed decisions about their careers. This phase also serves a "bridging" purpose, as students attend classes to help close the gap between high school and tertiary studies. The life skills training component continues on a monthly basis.

If participants meet the academic, performance and motivation requirements during their gap year, they have the opportunity of moving into Phase Three: tertiary education. Those who choose to participate in "learnerships" are supported financially by participating companies, where they return to complete the practical component of their programme. Tutoring and support is offered during the first year of this phase.

After that, the final phase is employment. Once Go For Gold participants have completed their tertiary education and received their qualifications, they are employed by the partner companies.

Go For Gold has learned many lessons over the 16 years it has been running. While it is well established in the construction sector, it now faces the challenge of selling its concept to other sectors. For the programme to work, complete buy-in from the whole sector is needed.

Being affiliated exclusively to just one company within the industry reduces the likelihood of other partnerships, so the Go For Gold team has positioned itself as an independent NPO and is housed in the Department of Education building. The success of the programme, though, depends on buy-in from the Human Resources departments of the corporate partners. To help secure their co-operation, Go For Gold has set up an advisory forum made up of the HR departments of the various partners.

The Go for Gold programme succeeds because it works for both the student and the corporate partner: the student is given a golden career opportunity, to which they may not have had access on their own; while the corporate partner has access to a skilled labour pool. The corporate partner can observe promising young people in action before committing to employment, and the relationship with Go for Gold means that they can expect a certain standard of commitment and work ethic from the students.
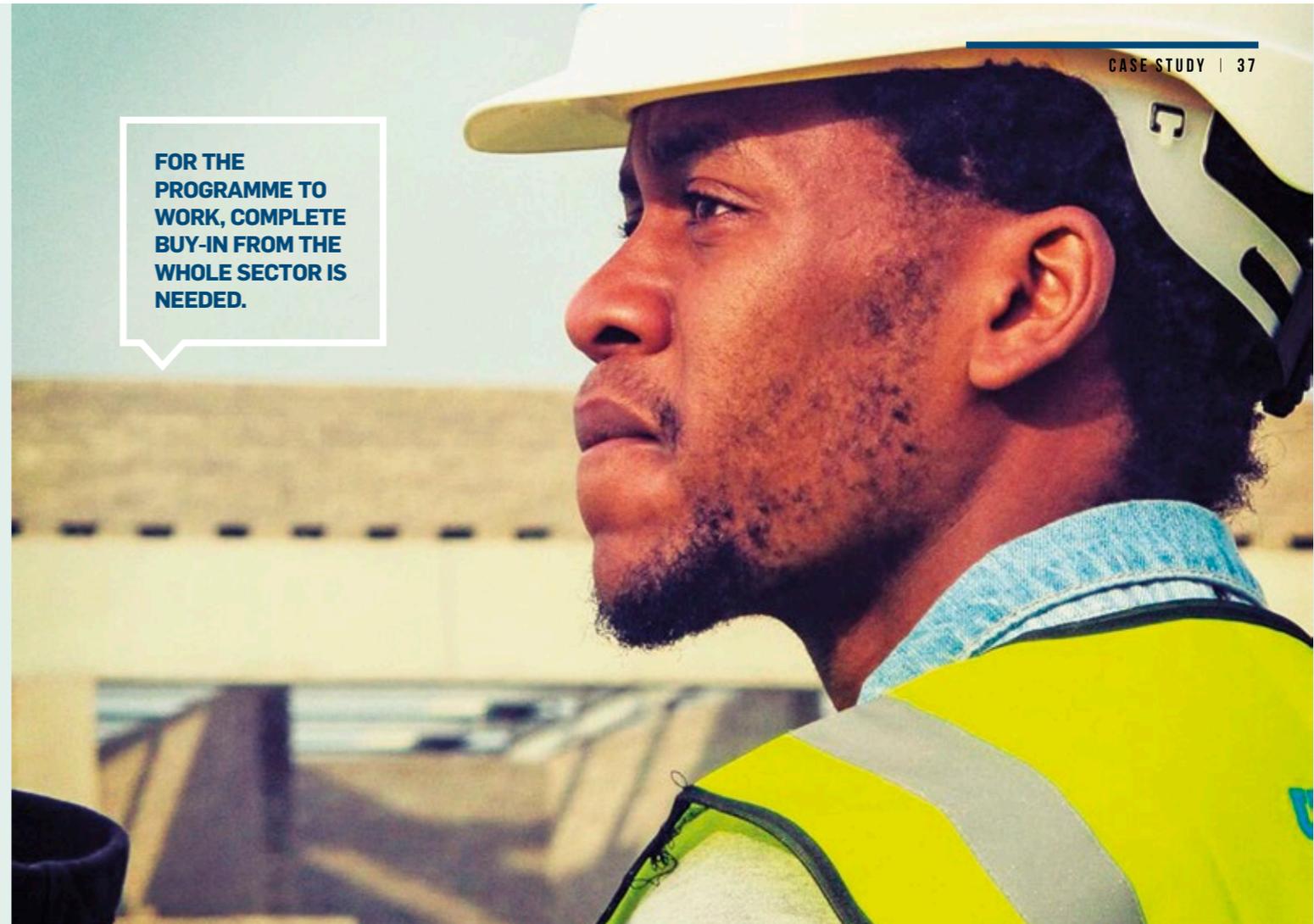
KEY LEARNING

Set up a pathway to employment that is mutually beneficial for both the student and the corporate partner.

LEARN MORE

For more about Go for Gold, **go to goforgold.org.za** or **educationinnovations.org/program/go-gold**.

Follow the programme: @GoforGoldSA gofor.gold.56

TSIBA

WHILE TEACHING ITS GRADUATES THE VALUE OF INDEPENDENCE AND GIVING BACK TO THEIR COMMUNITY, THIS NON-PROFIT BUSINESS SCHOOL HAS LEARNED THE VALUE OF REDUCING ITS OWN DEPENDENCE ON DONOR FUNDING.

Tertiary tuition fees are beyond reach for many learners in low-income communities, and few have access to a level of education that would qualify them for tertiary education. The Tertiary School in Business Administration (TSiBA) is a non-profit business school that since 2004 has been offering scholarships and bridging programmes to students to study towards their accredited degree, based on a "pay it forward" principle.

TSiBA has two campuses: an urban campus in Pinelands, Cape Town, and a rural campus in remote Karatara, near Knysna. TSiBA has four accredited qualifications, ranging between Level Four (vocational certificate) and Level Eight (post-graduate studies). They offer four main programmes in Business Administration, with a focus on entrepreneurship and leadership.

These courses have been designed to meet industry needs that relate to all aspects of business operations (eg. finance, marketing, human resources, management, IT and strategy), but a strong focus is placed on preparing the students to be leaders and to start their own businesses. Uniquely, TSiBA incorporates all aspects relating to growth and "graduateness" into their qualifications as credit bearing endeavours. Students therefore continuously engage with the development of the "Self" and their careers.

TSiBA Ignition Centres on both campuses offer support to entrepreneurs and leaders who may be unable to undertake full-time study. The Cape Town campus specialises in supporting enterprises who are trying to strengthen their footprint into the supply chains of larger companies.

Eleven years of implementation have highlighted many lessons. TSiBA's founders confess that their initial business plan was somewhat basic, relying entirely on donor funding. From 2012 the organisation committed to an increased focus on income generation via entrepreneurial activities. TSiBA is clear that sustainability is synonymous with reducing donor reliance and is now teaching and supporting other non-profits how to do the same.

Their strategy is gaining traction, with one component of this being the establishment of the TSiBA Education Trust back in 2006. The Trust is designed to facilitate mutually beneficial relationships with organisations that seek empowerment credentials in accordance with the Broad Based Black Economic Empowerment Act. The primary advantage to any enterprise in which the Trust holds an equity share is that all income transferred into the Trust from that enterprise will fund the education of talented South Africans, who could otherwise not afford the type of tertiary education offered by TSiBA Education. Other benefits for TSiBA's corporate partners include opportunities for real involvement in all the pillars of the B-BBEE codes, from skills development and supplier and enterprise development, to socio-economic development programmes.

The success of this shift in focus is evident in TSiBA's balance sheet. Their efforts in sustainability now mean that donor funding stretches further for higher impact.

The team has also seen the value in keeping up to date with the changing expectations of employers, and in letting that inform how they approach the curriculum and each learner's development. To date TSiBA has a 95% placement record of degree graduates into employment or postgraduate studies, and their graduates have gone on to win prestigious awards for postgraduate studies such as the Mandela Rhodes Scholarship and Kofi Annan Scholarship. Ultimately, TSiBA's track record proves that their emotional support and emphasis on soft skills benefits the learners. In addition to other partners, TSiBA has links with the South African College of Applied Psychology for example, which supplies coaching and counselling interns and assists with the group work that focuses on personal development and leadership. During – and on completion of – their studies, graduates are expected to "pay it forward" through supporting other learners: mentoring, lecturing and tutoring, or taking on roles that have potential social impact.

On completion of their qualification, TSiBA graduates go on a nine-day wilderness camp to reflect on their journey and consider how they can help younger learners follow that same path to success.

GRADUATES ARE EXPECTED TO "PAY IT FORWARD" THROUGH SUPPORTING OTHER LEARNERS.
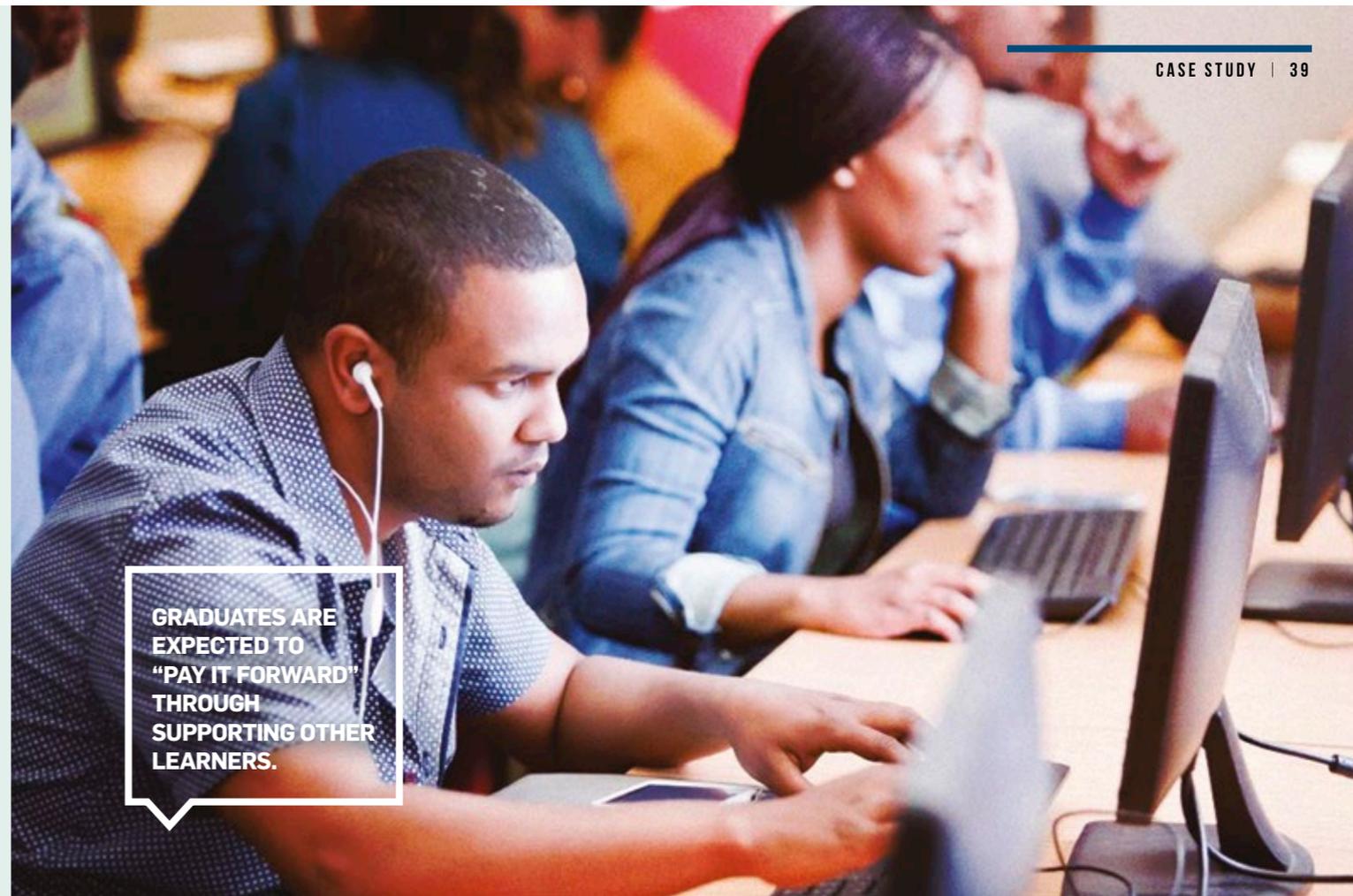
KEY LEARNING

The secret to a programme's sustainability lies in reducing its reliance on donor funding, and in generating income independently.

LEARN MORE

For more about TSiBA, go to **www.tsiba.org.za** or **educationinnovations.org/program/tsiba.**

Follow the programme : 🐦 **@TSiBA_Education** 📘 **TsibaEducation.**

05 TEACHER DEVELOPMENT

> **INITIATIVES MUST BE BASED ON THE PROFESSIONAL NEEDS OF TEACHERS, AND MUST AIM TO ENHANCE AND IMPROVE LEARNING OUTCOMES.**

LIFELONG LEARNERS

THE CAMPAIGN TO IMPROVE LEARNING CAN ONLY SUCCEED IF IT IS ACCOMPANIED BY A CAMPAIGN TO IMPROVE TEACHING.

The National Development Plan[1] (NDP) states that "the single most important investment any country can make is in its people… By 2030 South Africans should have access to education and training of the highest quality, leading to significantly improved learning outcomes."

The NDP emphasises schooling, further education and training, and higher education as three focus areas. The plan specifically identifies the need for schools to be supported by properly qualified, professional, competent and committed teaching staff. The role of teachers, and teacher development, is paramount.

As pointed out in a working document prepared for the 2009 Teacher Development Summit: "Teacher development is both a right and a duty of teachers, and necessary for improved education in the nation's schools"[2]. The fact that South Africa spends 19.5% of its total budget on education, and that 78% of that figure is spent on personnel, gives an indication of the value attached to teachers.

In order to ensure a return on that investment, and that the education delivered in schools by teachers is of the best possible quality, the Department of Basic Education (DBE) is focused on developing teachers' ability to teach by improving both pre-service and in-service training.

But access to quality development opportunities for prospective and practising teachers is uneven, and there is a mismatch between the provision of and demand for teachers of particular phases and subjects[3]. Furthermore, changes to the schooling curriculum leave many teachers in the system with irrelevant skills and competencies. Due to a lack of qualified Mathematics, Science and Languages specialists, the DBE has filled the gaps by employing teachers from abroad.

This is the context within which teacher development must be mediated.

A number of important factors need to be considered before embarking on ambitious and lofty teacher development initiatives.

First, teachers, who are both the beneficiaries and the implementers of these development initiatives, must be convinced of the relevance of the interventions to their professional development. The initiatives must be based on the professional needs of teachers, and must aim to enhance learning outcomes.

LESLEY ABRAHAMS

Lesley Abrahams is the Acting Executive Manager of the School and District Improvement Division at JET Education Services.

STATS

THE NUMBER OF

NEW TEACHERS

NEEDED PER YEAR [TO REPLACE THE NUMBER OF TEACHERS LEAVING THE SYSTEM] IS BETWEEN

20 000 – 30 000

BUT HIGHER EDUCATION INSTITUTIONS ONLY PRODUCED

15 655

TEACHER GRADUATES IN 2014

Teachers must frankly assess the problems they face, both individually and collectively. They must confront these issues in their classrooms as individuals; in their staffrooms as colleagues; and in their broader professional communal spaces. Recognition of the emotional challenges facing teachers is important, as is a holistic development approach that gives teachers the tools to address these challenges

Teacher-led development does not infer that support is not required. Rather, the resources that exist in the public and private sectors to support teachers must be used through initiating partnerships.

It must also be acknowledged that the problems facing teacher development are not going to be solved overnight. This is a long-term project that will be sustained by the improved confidence and commitment that will be engendered by better practice, and by public recognition of teachers' efforts. The support of teachers also needs to sustained; once-off workshops are unlikely to achieve lasting change.

Turning teachers into learners and promoting the principle of a teacher as a lifelong learner should underlie all initiatives.

There are four vital requirements for success: enhanced collaboration among role-players; a coordinated national system for teacher education and development; adequate time for quality teacher development (a 15-year timeframe has been adopted); and sufficient funding.

I would argue that teacher development coupled with the notion of professionalisation would have the most profound impact. This would involve teachers contributing to their own development through, for example, self-directed learning or establishing professional learning communities. This would result in more meaningful changes – in contrast to the short-term, light-touch training approach, which has been shown to have no long-term effect on teacher knowledge or learner performance.

Whatever solution is adopted, the current challenges can only be addressed if we are clear on what needs to change: namely, the low level of teacher content knowledge and teachers' understanding of curriculum requirements and assessment. We also need sustained programmes which will focus on needs-driven interventions that will improve learner performance. Taking cognisance of these factors will safeguard the investment in and quality of teacher development programmes.

INNOVATIONS TO WATCH

CREATE A WIN-WIN SITUATION

Edunova identifies unemployed young adults and trains them in ICT support. They, in turn, provide specialised ICT services and teacher training to schools. The schools benefit from the increased ICT capacity, while the young adults develop long-term career skills.

EMPOWER ALL LEARNERS

Inclusive Education run advocacy campaigns for the rights of children with learning difficulties, disabilities or other special needs. They help teachers and families, who don't have the required knowledge or services, by training them on inclusive education and providing support networks.

DEVELOP YOUR OWN ADVOCATES

Teach SA recruit university graduates to teach for at least two years in an under-resourced school. This provides the schools with additional capacity, while creating a social movement where the young leaders experience first-hand the challenges their learners face.

MAKE IT ACCESSIBLE

Ukufunda is a Unicef project which fosters the professional development of teachers. Using the Mxit platform, it delivers CAPS-aligned learning resources and provides an affordable, easily-accessible online support community between the Department of Education and even the most remote learners and teachers.

REFERENCES: 1/ NATIONAL PLANNING COMMISSION (2012). NATIONAL DEVELOPMENT PLAN 2030, OUR FUTURE – MAKE IT WORK. PRETORIA: NPC; 2/ EDUCATION LABOUR RELATIONS COUNCIL (ELRC). (2009). TEACHER DEVELOPMENT SUMMIT WORKING DOCUMENT. PRETORIA: ELRC; 3/ TAYLOR, N. (2014). INITIAL TEACHER EDUCATION RESEARCH PROJECT: AN EXAMINATION OF ASPECTS OF INITIAL TEACHER EDUCATION CURRICULA AT FIVE HIGHER EDUCATION INSTITUTIONS. SUMMARY REPORT. JOHANNESBURG: JET EDUCATION SERVICES.

GIRLS & BOYS TOWN

GROUNDING THEIR METHODOLOGY IN A COMBINATION OF SKILLS AND KNOWLEDGE, THIS PROGRAMME IS TAILORED TO FIT THE SPECIFIC NEEDS OF EACH SCHOOL IN WHICH IT OPERATES.

The Girls and Boys Town Education Model comprises a series of training programmes for educators and school administrators. The facilitators teach skills, strategies and techniques to manage academic and behavioural challenges of learners, while providing remedial courses for struggling learners to increase their chances of academic success.

The overall programme design is grounded in a methodology of skills coupled with knowledge, and training is done in a way that helps participants engage with the practical application of the skills, for example role-playing.

The training programme is administered through two national Training and Resource Centres, which provide training services in their regions and surrounding provinces. It includes courses such as The Well Managed Classroom; Administrative Intervention;

Effective Staff Development Through Consultation; and Specialised Classroom Management. Since its launch in 2002, the Education Model has worked with 1055 schools, institutions and crèches, with 10,333 educators, and with 349,797 learners throughout South Africa.

There are negative perceptions in South Africa about teachers' willingness to develop their skillset, but Girls and Boys Town believes that the real reason for this perceived reluctance is the time constraints faced by those teachers. To solve this, the organisation hosted development workshops during the school holidays.

One of the core learnings of the Girls and Boys Town programme is that securing buy-in – through cultivating relationships that seek to understand teachers' needs – is a valuable contributor to sustainability. The teachers

and management of each school are involved in identifying and creating awareness of the need for the training. This enables meaningful engagement with the facilitators, and creates a sense of ownership of the process, which, in turn, helps to ensure the process continues after the facilitators have moved on.

The training is not simply given to the school in a "one-size-fits-all" format, but is tailored to meet the school's specific needs. The School Management Teams and Heads of Department are also trained to sustain the programme as a school-based programme.

The relationship with the teacher is vital. The facilitator must understand the unique challenges and context in which each teacher has to work, and must tailor the approach to best help them. The service options are selected to match each teacher's unique circumstances and needs, and to support

and develop them using the Girls and Boys Town education programme as a basis for further development. The facilitator continues on this journey with the teacher, reflecting on the use of

the new skills in the classroom and addressing despondency when challenges arise.

The stated mission of Girls and Boys Town is to remove the

barriers that challenge at-risk youth. By providing bespoke training for the teachers of those young learners, Girls and Boys Town is achieving a large part of that mission.

KEY LEARNING

It is vital to build relationships that seek to understand teachers' needs – both in terms of securing buy-in, and in contributing towards sustainability.

LEARN MORE

For more about Girls and Boys Town, go to **gbtown.org.za** or **educationinnovations.org/program/girls-and-boys-town-education-model.**

Follow the programme: 🐦 **@GirlsBoysTownSA** 📘 **GirlsandBoysTownSouthAfrica**

THANDULWAZI-ROKUNDA TEACHER DEVELOPMENT

BY OFFERING AN INCLUSIVE PROGRAMME WHERE TEACHERS SELF-SELECT TO ATTEND PROFESSIONAL DEVELOPMENT WORKSHOPS, THIS PROGRAMME FACILITATES EXPOSURE TO BEST PRACTICE AND NEW METHODOLOGIES, BY TEACHERS FOR TEACHERS.

Over the past decade, the Thandulwazi-Rokunda Teacher Development programme has provided professional development and skills training to over 8000 teachers from more than 400 schools, working in under-resourced and low-income areas of Gauteng and Limpopo.

The programme comprises 11 Saturday morning workshops, facilitated by experienced teachers who share strategies that work effectively in a typical classroom. These workshops are structured around three sessions. The first builds communities of practice among teachers working in the same phase. The second offers curriculum-based workshops focussed on the effective delivery of content, improved learning strategies and exposure to new methodologies. The last session explores themes around classroom management and upskilling of computer and technology skills.

Workshop learning areas include numeracy and literacy in the Foundation Phase, and Mathematics, Science, English and Technology in the Intermediate and Senior Phases. Participants are given teaching materials, log-in details for *Mathletics,* and USB drives loaded with educational resources. Teachers should be able to implement the skills learned at a workshop in their classrooms the next day.

The programme is facilitated by teachers who work daily with the curriculum and learners. They are passionate about their craft, and provide practical tips that can be used in the typical classroom.

The programme has grown from 80 teachers, drawn from 10 selected schools by the provincial Education Department to attend the pilot programme in 2006; to over 1 750 teachers from over 400 schools, attending the programme in 2015. Given the demand, the programme has extended its footprint into Limpopo, facilitating six Saturday sessions with partner schools in the Sekhukhune district in 2015.

School leaders and principals are also invited to attend the Thandulwazi leadership programme, which provides practical skills training and focuses on topics like budgeting, strategic planning, staff management and appraisal, how to deal with bullying, leveraging the school community, and health and safety.

Key ingredients for this programme's efficacy include effective partnerships, an inclusive model and self-selection, and exposure to best practice and new methodologies by teachers for teachers. Transparency and fiscal discipline are critical to the continued operation of programmes like Thandulwazi. Securing funding, sourcing new strategic partnerships, maintaining successful symbiotic relationships with current partners, anticipating and meeting the needs of educators and learners, and expanding the reach and impact of the programmes are also key.

The Thandulwazi Maths & Science Academy, which hosts this programme, is an example of an effective educational partnership between a host of partners. These include the independent and public school sectors, tertiary institutions, volunteers, and corporate partners whose funding allows teachers from under-resourced schools to attend workshops at no charge. The St Stithians Foundation, which comprises volunteers from the St Stithians community, drives the fundraising for Thandulwazi.

Thandulwazi is inclusive, with teachers self-selecting to attend the workshops – thereby making a personal commitment to become better educators. No registration fee is charged for Saturday workshops, ensuring no further disadvantage for those who are marginalised by socio-economic circumstances.

The programme caters for educators teaching across the educational phases, in a caring, non-judgmental, inclusive environment. Teachers are made to feel valued as professionals, empowered through improved skills, and encouraged to become the best professional educators they can be.

KEY LEARNING

Upskilling that is curriculum-relevant, hands-on, interactive and practical, and which is provided in a caring, professional and non-judgmental environment, encourages and empowers educators to be better, more professional teachers.

THESE TEACHERS ARE PASSIONATE ABOUT THEIR CRAFT, AND PASS ON METHODOLOGIES THAT WORK WHILE PROVIDING PRACTICAL TIPS THAT CAN BE USED IN THE TYPICAL CLASSROOM.

LEARN MORE For more about the Thandulwazi-Rokunda Teacher Development programme, go to **stithian.com/thandulwazi** or **educationinnovations.org/program/thandulwazi-rokunda-teacher-development.**

06 LEADERSHIP & INFRASTRUCTURE

FIT TO LEAD

SUCCESS OR FAILURE IN A SCHOOL'S LEARNING OUTCOMES ARE LINKED DIRECTLY TO THE QUALITY OF ITS LEADERSHIP. BUT ARE OUR SCHOOL LEADERS ADEQUATELY PREPARED AND SUPPORTED TO CARRY THAT RESPONSIBILITY?

There is a clear relationship between a school's leadership and its learning outcomes. One study[1] shows that "school leadership is second only to classroom teaching as an influence on pupil learning", concluding that "there is not a single documented case of a school successfully turning around its pupil achievement trajectory in the absence of talented leadership". Another[2] adds, simply, that "failure often correlates with inadequate school leadership".

The leaders of South Africa's schools, then – just like the country's corporate leaders – must be held accountable for what goes on in their institutions, and the results they achieve. At the same time, however, these leaders also require support, in the form of resources and professional development.

The core function of a school leader is to manage and implement quality curriculum delivery, but many school leaders have not been trained to do this. Principals progress through the ranks with limited training, and if they have never seen a model of best practice, they won't know what it looks like or how to implement it.

Sadly, despite enormous investments, our education departments and a wide range of organisations have, I believe, failed to improve the quality of learning and management in South African schools.

As we find so often, many of the solutions lie in addressing the basics. A big part of a school functioning well is its infrastructure, and in the management of its resources. This means creating a safe and enabling environment for learning. Through their successes, programmes like Equal Education and Project Build have demonstrated how critical infrastructure is to success. Yet a National Education Infrastructure Management System (NEIMS) report published in October 2014 revealed that of 23 740 public schools, 77% were without libraries, 86% without laboratories, 68% without computer labs. Even more alarming: 3% had no water supply, 5% had no electricity and 2% had no ablution facilities.

Thousands of our schools lack the infrastructure necessary to provide learners with the quality education they are legally entitled to receive.

Another reason for our failure to improve the quality of schools management lies in our fixation with school improvement methodologies, rather than turnaround

EUGENE DANIELS

Eugene Daniels was a district director in the Western Cape Education Department for 11 years. He is currently an independent education consultant.

STATS

18 301
WERE WITHOUT LIBRARIES

20 463
WERE WITHOUT LABORATORIES

OF 23 740 PUBLIC SCHOOLS:

604
HAD NO WATER SUPPLY

1131
HAD NO ELECTRICITY

474
HAD NO ABLUTION FACILITIES

16 146
WERE WITHOUT COMPUTER LABS

REFERENCES: 1. LEITHWOOD K, DAY C, SAMMONS P, HARRIS A & HOPKINS D 2006. SEVEN STRONG CLAIMS ABOUT SUCCESSFUL SCHOOL LEADERSHIP. LONDON: DEPARTMENT FOR EDUCATION AND SKILLS / 2. HUBER SG 2004. CONTEXT OF RESEARCH. IN: HUBER SG (ED.). PREPARING SCHOOL LEADERS FOR THE 21ST CENTURY: AN INTERNATIONAL COMPARISON OF DEVELOPMENT PROGRAMS IN 15 COUNTRIES. LONDON: ROUTLEDGEFALMER.

methodologies in the sphere of leadership and management. In too many cases, school improvement involves clinging to the strategies we have always implemented, and trying to improve on them. Thus many interventions focus on managing more competently or teaching more effectively, without emphasizing that a different approach is needed.

Times have changed. Our context has shifted. We need to look at school transformation differently.

School management needs transparency and accountability, yet many schools have data management systems which aren't properly organised, so school management teams (SMTs) lack access to the data they need to make informed decisions. Throughout the system, there is very little factual and accurate data-driven decision making. As a result, districts and provinces struggle to provide relevant and appropriate support to schools.

In the past, school governance in South Africa was characterised by a top-down approach. Educators, learners, parents and communities were excluded from the decision-making process, with principals and inspectors acting as the main decision-makers. Today the school governing body (SGB) is the 'government' of the school, and it gets its mandate from the different members (learners, parents, teaching and non-teaching staff) of the school

community. The transformation and reform of our education landscape has influenced all parties involved.

Who, then, leads a school today? And who manages it? Is it the district, principal, SMT or SGB? Or is it all of the above? And are they adequately skilled to do the job? One of the key challenges facing our schools is that many SGB members, for example, lack the necessary financial knowledge and skills, and find themselves under tremendous pressure because they are unable to develop practical solutions to practical problems.

Leadership capacity must be created in our schools and districts to drive the vision. This requires training and support – but the district cannot always provide this support, and often falls into the old inspector role, where "support" becomes a tick box exercise rather than an exercise in coaching and trouble-shooting.

Leadership is about culture, ethos and drive – and accountability must be shared. The community has a role to play, as do parents, teachers, the SGB, the SMT and the district. The credit for success and the weight of failure cannot rest solely on the shoulders of the school leader.

Our window of opportunity is rapidly closing and we would do well to interrogate our options, and to promote innovative solutions that will give our learners a better tomorrow.

INNOVATIONS TO WATCH

LEAD THE LEADERS

Pearson MARANG Education Trust serves as a good example of a public/private partnership. An effective in-service model for under-resourced and underperforming schools, it enhances district and school leadership by training leaders to improve on governance and deliver on school management expectations. There is a strong focus on effective curriculum implementation.

NETWORKS ENHANCE KNOWLEDGE

South African Extraordinary Schools Coalition shares knowledge and skills around impact schools (no-fee and low-fee independent schools). Its network approach builds in quality assurance and provides a space for this growing sector to share innovation.

FIND PARTNERSHIPS

Streetlight Schools is an independent, low-fee primary school model. They have partnered with a housing association to bring down capital costs, and have embraced a blended learning model that promotes the integration of ICT.

ENCOURAGE ACTIVISM

Equal Education is a social movement which demands access to quality public education for all, and holds government accountable to that promise. Learners are empowered by actively participating in campaigns and driving change for the education system.

PROJECT BUILD

THIS COMMUNITY DEVELOPMENT ORGANISATION HAS BUILT MORE THAN 5300 CLASSROOMS, USING RESPECT AS ITS FOUNDATION AND COMMUNICATION AS ITS BUILDING BLOCKS.

Project Build, formerly known as Natal Schools Project Trust, is a community development non-profit that builds schools, clinics and Early Childhood Development (ECD) centres, mainly in KwaZulu-Natal. Over the course of more than 37 years, the organisation has built in excess of 5300 classrooms.

Each project follows a similar process: schools register their needs with Project Build, and pay a small deposit as a sign of commitment and buy-in. Project Build then sets about raising funds for the materials and labour costs. Here, the organisation has two components: one being the development of a community through the tangible, intensely regulated process of building the school or centre; and the other being the emotional development commitment that drives Project Build's community engagement. Local contractors, like electricians and plumbers, are identified, and in many cases the building site labourers are the learners' parents.

Project Build sees the development of skills and income

for these small businesses as being part of its community-building role. Collaboration with the local community is a critical aspect of any project, and meetings with stakeholders and community leaders help to shape the scope of work. The track record speaks for itself: zero cases of vandalism of infrastructure have been reported in any of Project Build's completed schools or centres. The organisation believes that a major contributing factor to this, is the buy-in they received from the local communities.

The ethos that permeates every facet of this organisation is an emphasis on respect in all its interactions: respect for the learner's dignity; respect for the school educator and leadership's approval; respect for the mandate of the Department of Education; and respect for the community in which the school is located.

Project Build's experience has shown that respectful and consistent communication with those multiple stakeholders is key to developing buy-in, managing expectations and improving cost-efficiency. The

organisation has found that when it develops this sense of collaboration early on, it lays the foundation for better ongoing maintenance of its completed projects in the future.

The sustainability of the infrastructure depends, in large part, on a careful alignment with the Department of Basic Education's (DBE) plans. To this end, the DBE identifies schools in need, and gives permission for Project Build to build the required classrooms and restore the necessary infrastructure. Project Build then follows the technical specifications and quality assurance as directed by the Department of Public Works. Once work is complete, the ongoing maintenance of the project is handed over to these provincial departments.

Last year Project Build adopted a revised approach to pay more careful attention to monitoring, evaluation, and the mitigation of risk. Delays in the building process pose a significant challenge to managing the costs of the project, and there is risk in supporting local emerging businesses which supply the

tradesmen needed for the building project.

Project Build also appreciates the benefits of finding "fresh eyes" to look at and assess their approach. They are

currently offering learnerships through the Durban University of Technology, and are inviting experts to contribute to thinking around their enterprise development model.

That level of humility, and openness to outside opinions, forms the basis of Project Build's community-centred, respect-based approach.

> THE ETHOS THAT PERMEATES EVERY FACET OF THIS ORGANISATION IS AN EMPHASIS ON RESPECT IN ALL ITS INTERACTIONS.

KEY LEARNING

The foundation of any successful project is respect. Respect for the learner, the educator, and the Department of Education, and – above all – respect for the community in which the project is located.

LEARN MORE

For more about Project Build, go to **projectbuild.org.za** or **educationinnovations.org/ program/project-build**.

Follow the programme 🐦 @projectbuildkzn 👍 ProjectBuildTrust

BEYERS NAUDÉ SCHOOL DEVELOPMENT PROGRAMME

THIS RURAL SCHOOLS DEVELOPMENT PROGRAMME WORKS HAND-IN-HAND, STEP-BY-STEP WITH COMMUNITIES AND GOVERNMENT, SHARING JOINT ACCOUNTABILITY FOR THE SUCCESSFUL PLANNING, IMPLEMENTATION AND FUNDING OF ITS PROJECTS.

KEY LEARNING

By seeking to collaborate through every step of a project, a programme can drive success by establishing a shared sense of accountability and responsibility.

The Beyers Naudé Schools Development Programme (BNSDP) seeks to strengthen the quality of schools in rural communities, doing so by harnessing principles of good governance and management. The programme, established by the Kagiso Trust, believes that the best way to achieve a lasting, positive impact on South Africa's schooling system and wider rural communities is through a comprehensive, guided and reward-driven approach.

BNSDP works through five key phases of activities: formalisation; school selection; capacity development; infrastructure development; and, finally, consolidation and exit.

Formalisation entails signing a service agreement with the provincial Departments of Education, and identifying the poorest districts that could benefit. Management capacity at provincial and district levels is then allocated to solicit administrative and political buy-in.

The provincial DoE identifies schools, and BNSDP then invites those schools to participate in an interview to justify why and how their school would benefit from the programme. Experience continues to show that there are no quick fixes or general purpose solutions when it comes to turning underperforming schools around. The key is to identify and support committed stakeholders to drive change from within the school.

The third phase involves capacity development, which includes school retreats; curriculum management and implementation; school management and governance; and student leadership instruction. The retreats are teambuilding exercises for each school, with selected students, representatives of the school governing body, and all educators attending. Honest conversations are facilitated to identify why the school is performing poorly, and participants sign commitment statements where they undertake to play an active role in improving within the identified areas. Schools are then required to obtain a minimum pass rate of 70% among Grade 12 learners in order to be rewarded with infrastructure development.

The programme's final phase entails the institutionalisation of good practices in terms of curriculum implementation and school management and governance. Continued learner support is also provided in the form of motivational speakers, and career education and bursaries are awarded to high performing students to further their studies at tertiary level in the field of engineering and commerce.

BNSDP has modelled exceptional collaboration with the Department of Basic Education – so much so, that the Department matches BNSDP's financial contribution to each project. There are valuable lessons to learn from the way BNSDP has facilitated this mutually beneficial collaboration. It has opted to support change at a district level, as it doesn't want to compete with other regional programmes. It also makes joint decisions with the officials regarding the intervention, thereby securing the district's buy-in and commitment to holding service providers accountable.

Furthermore, the programme seeks to understand the challenges that circuit managers face, and how to best align with their work. That way, the department officials become ambassadors of the programme. The planning for implementation is taken to the district officials for a reflection on the lessons learned, thus ensuring that all parties understand the problem in the same way, and share a common understanding of how the solution will work.

BNSDP works with stakeholders at every step of the process, creating a shared understanding of challenges and a shared sense of responsibility. The final component to this successful collaboration, then, is a joint accountability. When a district succeeds, BNSDP celebrates with them; if they fail, BNSDP is held accountable with them.

> THERE ARE NO QUICK FIXES OR GENERAL PURPOSE SOLUTIONS WHEN IT COMES TO TURNING UNDERPERFORMING SCHOOLS AROUND.

LEARN MORE

For more about the Beyers Naudé School Development Programme, go to **kagiso.co.za/projects/bnsdp** or **educationinnovations.org/program/beyers-naude-school-development**

Follow the programme 🐦 **@Tkagiso_Trust** f **kagisotrust**

07 COMMUNITY & SCHOOLS

> "SCHOOLS CANNOT SOLVE ALL THEIR PROBLEMS ON THEIR OWN, BUT THEY CAN TAP INTO THE ASSETS OF THE COMMUNITY AND COLLABORATE WITH ITS MEMBERS AND PARTNERS."

CLOSING THE GAP

SCHOOLS OPERATE IN THEIR COMMUNITIES, BUT COMMUNITIES DON'T ALWAYS OPERATE IN THEIR SCHOOLS. A STRONG LINK BETWEEN THE TWO IS IMPORTANT FOR SEVERAL REASONS – AND NOT ALL OF THEM ARE OBVIOUS.

Before we talk about the connections between schools and communities, let us clarify the concept of "community". By "community" I mean all parents, community members and organisations, and any other institutions (the "education publics") who come together around the common purpose of supporting a school or a group of schools to achieve a particular goal.

This goes beyond the more common understanding of community as being identified by geographic proximity to a school; it can include businesses, universities, and national and international NGOs.

Schooling in many of South Africa's township communities is characterised by high absenteeism, poor academic performance, violence on and around the school premises, a lack of infrastructural and financial resources, a lack of qualified teachers, and low educator morale. These challenges often have a negative effect on learners' cognitive and psychosocial development.

Schools cannot solve all of these problems on their own, nor can they afford to ignore them. But schools can tap into the assets of the community and collaborate with its members to address some of these challenges.

Strong connections between schools and communities bring direct benefits to children. Research in other countries has shown that schooling becomes more meaningful to learners, and their learning is enhanced, when schools reach out to parents and access the social and cultural resources of the community.

Connections between schools and communities promote civic participation in education. This increases accountability for learning, and ensures sustainability by empowering the stakeholders as authentic partners in the educational enterprise.

When learners see the community as an extension of themselves, they start to the see themselves as an extension of the community. This sense of belonging creates better citizens.

Linking schools to communities matters because it allows a broad constituency to develop a "public voice" that can call attention to the problems in education, and engage the state around addressing these. Recent examples of this include the shortage of textbooks and non-payment of teachers in some provinces, where civil society organisations, working together with schools and communities, took up these issues with government.

Schools form an integral part of the communities they serve, and should have natural links to their communities. This is often not the case. So, what are the reasons for this?

Schools discourage relationship building when they have cultures that are unwelcoming of parents and other community members. In many schools, leaders and teachers fail to develop a deeper understanding of the lives of their learners, and often hold "deficit views" of families, regarding them as problems rather than as partners.

Many teachers are territorial about the school as their professional domain, and some might see outside involvement as an intrusion. While improvement initiatives encourage schools to involve parents and community members, many teachers fear that this will lead to diminished public regard for their professional status, a loss of authority, and increased levels of accountability. Because of this, the school as an organisation remains closed and inward-looking, unresponsive to the possibilities of community collaboration.

While these challenges to effective school-community connections may seem daunting, overcoming them is not impossible, and the benefits to both the school and the community can be widespread.

A growing body of research shows that meaningful and authentic partnerships between schools and community stakeholders can result in positive learning and developmental outcomes for learners, can strengthen civic participation, can enhance social responsibility, and can attract additional resources into the community.

"The NGO sector can act as an external lever, functioning as an intermediary between policy mandates and actualised effects in people's daily lives. These organisations are close to the communities in which they operate, and can respond quickly to needs. NGOs can also communicate more efficiently with government to make known the successes and failures of various policy actions."[1]

Connecting schools to communities is important anywhere. In South Africa, these efforts will enable schools to become important sites – not only for learner development, but also for the development of communities as a whole.

DR AL WITTEN

Dr Al Witten is Director of the Centre for the Community School at Nelson Mandela Metropolitan University.

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NON-PROFIT ORGANISATIONS WORKING IN **EDUCATION AND RESEARCH** IN SOUTH AFRICA

INNOVATIONS TO WATCH

TAKE A LONG-TERM APPROACH

Penreach takes a cradle-to-career approach, offering services from birth to post-secondary school. Ten integrated programmes focus on teacher development, learner support, school leadership development, IT-assisted teaching and learning in under-resourced schools in rural communities.

BE COMMUNITY LED

The Philippi Collective is a cross-sector collaboration between schools, parents, organisations, NGOs, government departments and other community leaders. They identify challenges facing schools, map existing services, and come up with local community-led solutions.

LINK PARENTS AND TEACHERS

Epworth Children's Village recognises that psychosocial stressors impact negatively on learning, and gives teachers the skills to better manage learner needs. It also shows parents how to play a meaningful role in their children's education, while encouraging learners to take leadership roles.

LEARNERS AS CHANGE AGENTS

Enke's Trailblazer Programme empowers young people to design and run projects that address the most pressing social issues in their communities. These projects give the learners a sense of social responsibility, while giving them practical project management and leadership experience.

REFERENCE: 1. AMANDLADEVELOPMENT.ORG/IMAGES/AMANDLA_WHITEPAPER.PDF

BRIDGE

BY BRINGING PLAYERS TOGETHER IN A COLLABORATIVE SPACE, THIS ORGANISATION IS DRIVING INNOVATION BY FACILITATING CONVERSATION, REFLECTION AND ACTION.

BRIDGE operates on the belief that, if you connect the things that work, the system will improve. Based on that, it aims to create linkages between instances of effective practice, thereby building communities of practice for education innovators in South Africa. Its focus is on Early Childhood Development (ECD), Information Communication Technology (ICT), learner support, school leadership and teacher development.

BRIDGE's innovative use of the Community of Practice (CoP) process encourages reflective practice: the idea that everyone could do what they do better, and can get the support of others to do it. CoPs are built on a platform of collaboration and knowledge sharing, with this facilitation methodology applied nationally, provincially and at a district level.

As a tool of innovation, CoPs provide three main levers of change: developing confidence, trust and a sense of shared identity. This methodology assumes that learning is collective and social, and that

it comes from our experience of participating in daily life rather than from an isolated or academic pursuit.

BRIDGE recognises that its CoP facilitators cannot create or predict change; nor can they solve the problems for the communities. Rather, the interactions between participants in these sessions can empower them to achieve the change that is possible. The CoP methodology stresses the importance of voluntary participation, with participants encouraged to set their own collective agenda. Their developmental needs emerge organically from within their own contexts, and they are encouraged to engage in reflective practice, learning from experience and gaining new insights into their work and their role within the education system.

The intention is explicitly to impact the system, both horizontally and vertically: horizontally in the sense of collaboration; and vertically through the relationship between

practice and policy (and the influence each can have on the other). For example, when the members of the Early Childhood Development CoP come together to share working practice, tools and resources among different ECD stakeholders (horizontal), there is a clear link between the practice on the ground and the creation and implementation of provincial and national policy (vertical).

South Africa's education sector exhibits a clear need for integration of the good work that is being done, so that all players can increase their impact on the system, avoid competition and no longer function in isolation. Already, BRIDGE is focussing on data mapping through the Educollaborate1 portal in the Western Cape, which will enable it to visually represent the work that takes place at organisational and school level. This will allow all the players in education, across the spectrum, to get a good sense of what's out there, who's doing what, and where they're doing it.

KEY LEARNING

The greatest positive impact on the system will come through working together, avoiding competition, and integrating the good work that is already happening.

AS A TOOL OF INNOVATION, COMMUNITIES OF PRACTICE DEVELOP CONFIDENCE, TRUST AND A SENSE OF SHARED IDENTITY.

LEARN MORE

For more about Bridge, go to **bridge.org.za** or **educationinnovations.org/program/bridge**
Follow the programme: **BridgeProjectSA** BridgeProjectSA

REDCAP SCHOOLS

THIS PROGRAMME EMPOWERS SCHOOLS, PARENTS AND COMMUNITIES TO RAISE – AND MAINTAIN –THE LEVEL OF EDUCATION FOR THEIR CHILDREN.

The aim of the RedCap Schools Project is to bring together schools, parents, communities and local businesses, and to empower them to improve the performance of school learners. A partnership between the KwaZulu-Natal Department of Education and the JET Education Services, the project focuses on intensive training for teachers in Mathematics, English, Science and Early Childhood Development (Grade R). RedCap also works with School Governing Bodies to help individuals appreciate the difference they can make, and to give them the skills they need to be effective in their roles.

The project was designed as a short-term boost to raise the levels of education in the selected schools. At its inception, it had a clear exit strategy. However, halfway through the first five-year commitment, it became obvious that the higher levels of teaching and operating would not be sustained once the project was completed. The reality was that the schools simply did not have

the support structures needed to maintain the progress they had made with RedCap. Despite the initial disappointment, RedCap committed to strengthening the relationships with the schools even further, and built trust by pushing through the difficult times with them.

That commitment proved to be the tipping point. The project grew to incorporate new ways of supporting the school community. In the teacher development component, a mentoring journey has been added alongside the training workshops, and a safe space created for principals to share their experiences, problems, solutions and ideas of how to grow their schools. Parents are encouraged to take active roles, not only in the education of their children through involvement in literacy and homework programmes, but also in non-academic school activities. The community is invited to establish a vegetable garden, both for fundraising and for school nutritional purposes.

The results speak for themselves. In 2014, the performance of every grade between 1 and 6 in the Redcap Foundation Schools was between 15 and 22% above National, Provincial and District averages.

Challenges still exist. Faced with the leadership and systemic challenges of one subject advisor serving 300 schools, RedCap is constantly reflecting on the most meaningful way to partner with government at a district level. School management teams identify each school's needs themselves, and become the catalysts for bringing about the necessary changes in their own environment. Through building the capacity of school leadership, educators and district officials are empowered to bring about and maintain the changes taking place in their schools.

In this way, no culture of dependency is formed, and the project becomes sustainable and of benefit to many more learners who will attend these schools in the future.

KEY LEARNING

Avoid a culture of dependency. Projects should be independently sustainable, with beneficiaries trained and empowered to identify – and overcome – their challenges.

THE REALITY WAS THAT THE SCHOOLS SIMPLY DID NOT HAVE THE SUPPORT STRUCTURES NEEDED TO MAINTAIN THE PROGRESS THEY HAD MADE.

LEARN MORE

For more about RedCap schools, go to **mrpfoundation.org/Programmes/redcap-schools.aspx** or **educationinnovations.org/program/redcap-schools-project**.

Follow the programme 🐦 **@MRP_Foundation** 📘 **MRPFoundation**

ECD HACKATHON HOSTED
BY BERTHA CENTRE

SHINE LITERACY

WHAT HAVE WE LEARNED?

SOUTH AFRICA'S FIRST EDUCATION INNOVATOR'S REVIEW EXPLORES
THE POSITIVE EXPERIMENTS AND INNOVATIONS THAT ARE BUILDING
THE COUNTRY'S FUTURE SUCCESS.

DR FRANÇOIS BONNICI

Dr François Bonnici is founding Director of the UCT GSB Bertha Centre for Social Innovation & Entrepreneurship.

CREDIT: SHINE LITERACY

> "EDUCATION IS ABOUT SO MUCH MORE THAN JUST THE LEARNER'S JOURNEY."

"If you can read this, thank a teacher." It's a slice of bumper-sticker wisdom, but it contains a textbook's worth of truth. The importance of quality education cannot be overstated. Those early years spent in a classroom, doing exercises, writing exams and learning about the world, are fundamental building blocks of your future success.

Why, then, does South Africa's education system continue to slip behind the rest of the world despite significant policy changes, attention and investments to improve it? And what can we do about it?

That's what South Africa's first *Education Innovator's Review* is exploring. Behind the alarming statistics and benchmarked results, lie a set of positive experiments run by committed professionals and citizens who have demonstrated outstanding progress. This publication serves to recognise the innovative game changers and social entrepreneurs (most of whom are working from the bottom up), extract the lessons that can

be shared, and understand the components of the innovations that have the potential to transform the system.

We've followed the learner's full journey, from cradle to career, taking in early childhood development (ECD), examining the acquisition of vital skills in literacy and numeracy, and Mathematics and Science, and mapping the pathway that links what we learn in the classroom to what we implement in the workplace, and in society.

But education is about so much more than just the learner's journey. Other important factors are considered, from the accountability of the school's leadership and the quality of its teaching to the stability of its bricks-and-mortar infrastructure. Crucially, we must also understand that no school exists in a bubble. There has to be support from, and engagement with, the community and families that the school serves.

So, this being a contribution to the dialogue around education,

we have to ask the question: What have we learned? We've learned that identifying a problem and the places where we're stuck is only the first step. These social innovations show that real progress can come from responses at the front lines that put learners first, by putting our institutional agendas to work better together, and by integrating the good work that is already happening in classrooms and places of learning across South Africa.

We've learned about the importance of relationships. Between schools and their communities; between learners and the subjects they are being taught; between programmes and donors; and between teachers and learners. These relationships must be built on mutual respect and co-operation. There needs to be a mutual benefit, and a clear sense of balance. An imbalance in one direction could remove opportunities for independence and empowerment; and an imbalance in the other

direction could take a perfectly sound solution, and make it unsustainable.

And we've learned about the importance of practical solutions to real problems. This is a common theme across the projects and programmes showcased in this Review: each has, as its foundation, an always simple implementation of a sometimes complex solution to an often complex problem. Some function at a national level, some at a district level, some at

a school level. Some focus on a classroom setting, while others work at an even more focused level. Each, however, uncovers an effective, affordable and inclusive education solution – and each provides a pattern of a scaleable model than can be adapted and implemented in different contexts.

None, however, act in isolation. Every solution in this Review functions in cooperation or collaboration with donors, schools, teachers, Government

and communities. And every one deserves recognition for making real innovation for real results possible, visible and sustainable within South Africa's education change landscape.

Here's to them, and here's to you. To a country and continent filled with opportunities, filled with innovators, and filled with people who care enough to make a difference. And here's to the greatest lesson education offers: the idea that we all have something new to learn.

GLOSSARY

A BRIEF PRIMER ON EDUCATION TERMS

ECD Early Childhood Development is a comprehensive approach to policies and programmes for children from birth to eight years of age, their parents and caregivers. Its purpose, according to UNICEF, is to protect the child's rights to develop his or her full cognitive, emotional, social and physical potential.

CREATIVE COMMONS A non-profit organisation devoted to expanding the range of creative works available for others to build upon legally and share. The organisation has released several copyright licences, known as Creative Commons licences, free of charge to the public. These licences allow creators to communicate which rights they reserve, and which rights they waive for the benefit of recipients or other creators.

ANAs Standardised national assessments for languages and Mathematics in the Senior Phase (Grades 7 to 9) and Intermediate Phase (Grades 4 to 6), and in literacy and numeracy for the Foundation Phase (Grades 1 to 3).

DBE Department of Basic Education. This Government Department oversees primary and secondary education in South Africa.

CAPS Curriculum Assessment Policy Statements. With the introduction of CAPS, every subject in each grade has a single, comprehensive and concise policy document that will provide details on what teachers need to teach and assess on a grade-by-grade and subject-by-subject basis.

DHET Department of Higher Education and Training. This Government Department oversees post-secondary school education in South Africa.

BLENDED LEARNING MODEL A formal education programme in which a learner learns, at least in part, through delivery of content and instruction via digital and online media, with some element of learner control over time, place, path or pace. Proponents of blended learning cite the opportunity for data collection and customisation of instruction and assessment as two major benefits of this approach.

ICT Information and communication technology is the combination of informatics technology with other, related technologies, specifically communication technology.

GRADE R Foundation Phase includes a pre-school grade known as Grade R, for 'reception'. Grade R is compulsory, but not all primary schools offer Grade R. Grade R may also be attended at a pre-school facility.

LCPS Low Cost Private Schools are defined either as those with tuition rates less than 50 percent of the minimum wage (USAID), or where schooling costs do not exceed four percent of the household budget (Barakat). LCPS include 'for profit' and 'not for profit' providers, and a range of provisions – from conventional schools to contracting LCPS to provide services under public funding arrangements.

MATRIC The final year of secondary school and the qualification received upon graduating from high school. Strictly speaking, it refers to the minimum university entrance requirements.

NDP National Development Plan is a plan for the country to eliminate poverty and reduce inequality by 2030. It aims to achieve this by uniting South Africans, unleashing the energies of its citizens, growing an inclusive economy, building capabilities, and enhancing the capability of the state and leaders working together to solve complex problems.

TIMSS The Trends in International Mathematics and Science Study is a series of international assessments of the Mathematics and Science knowledge of learners around the world.

PUBLIC PRIVATE PARTNERSHIP A government service or private business venture which is funded and operated through a partnership of government and one or more private sector companies.

NGO A non-governmental organisation is a non-profit, citizen-based group that functions independently of government. NGOs, sometimes called civil societies, are organised on community, national and international levels to serve specific social or political purposes, and are cooperative, rather than commercial, in nature.

SAQMEQ The Southern and Eastern Africa Consortium for Monitoring Educational Quality is an international non-profit developmental organisation in Southern and Eastern Africa that decided to work together to share experiences and expertise in developing the capacities of education planners to apply scientific methods to monitor and evaluate the conditions of schooling and the quality of education.

NYDA National Youth Development Agency plays a leading role in ensuring that all major stakeholders (i.e. government, the private sector and civil society) prioritise youth development and contribute towards identifying and implementing lasting solutions which address youth development challenges.

NEIMS National Education Infrastructure Management System is an electronic planning and management tool, which allows for 'real-time' access to information about the condition of infrastructure and facilities at each of the public schools across the country.

PSYCHOSOCIAL NEEDS Psychological development in, and interaction with, a social environment.

SGB The School Governing Body is a statutory body of parents, educators, non-teaching staff and learners (from Grade 8 or higher) who seek to work together to promote the well-being and effectiveness of the school community and thereby enhance learning and teaching.

TVET Technical Vocational Education and Training courses are vocational or occupational by nature, meaning that the student receives education and training with a view towards a specific range of jobs or employment possibilities.

SMT School Management Team.

"AT THE BERTHA CENTRE FOR SOCIAL INNOVATION AND ENTREPRENEURSHIP, WE WORK TO UNCOVER, CONNECT, PIONEER AND ADVANCE SOCIAL INNOVATORS AND ENTREPRENEURS WHO SHARE OUR PASSION FOR GENERATING INCLUSIVE OPPORTUNITIES AND ACHIEVING SOCIAL JUSTICE IN AFRICA."

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