



**“Working at the top end”:  
maximising business  
investment in schooling**

Presentation to JET conference on  
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By Margie Keeton



# Tshikululu Social Investments

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- R300 million of social development spend managed annually by Tshikululu Social Investments
- Largest specialist corporate donor support agency in South Africa
- Funds managed by Tshikululu Social Investments recognised among South Africa's highest rated by *Trialogue* over 10 years of annual CSI perception ratings
- CSI activity tailored to client's needs

# Premier Client base

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- Anglo American Chairman's Fund
- De Beers Fund
- FirstRand Foundation
- FNB Fund
- Momentum Fund
- WesBank Fund
- Rand Merchant Bank Fund
- Discovery Fund
- Discovery Foundation
- The Oppenheimer Memorial Trust
- Epoch & Optima Trusts



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- Education is major area of grant making
  - Cover spectrum from ECD to ABET
  - Public schools a special interest
  - Partnerships with national and provincial education departments.

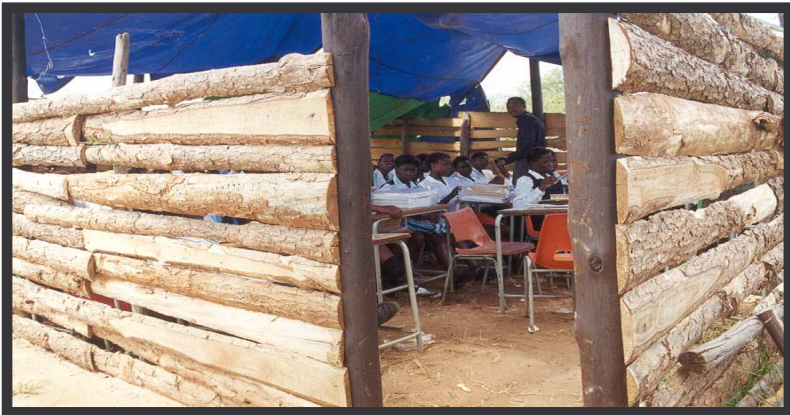
# LARGEST PRIVATE CORPORATE FUNDER OF PUBLIC SCHOOLS?



Total CF 2003 - 2005	Core Maths and Science	Infrastructure	Capacity Building	Learner Leadership	Matched Funding
190 projects/ programmes	Activities and initiatives that are directly targeted towards improving Maths and Science matric results	Grants for building projects, either for schools or classrooms or other infrastructural needs	Programmes or projects that target institutions, such as training of teachers	Individually focused programmes which contribute towards whole learner development	CSI funding that has been matched by the respective Education Department counterparts
R65,5m	R12,7m	R41,3m	R6,8m	R4,6m	R34,1m



# Biggest single focus is rural infrastructure



# Why Maths (and Science)?

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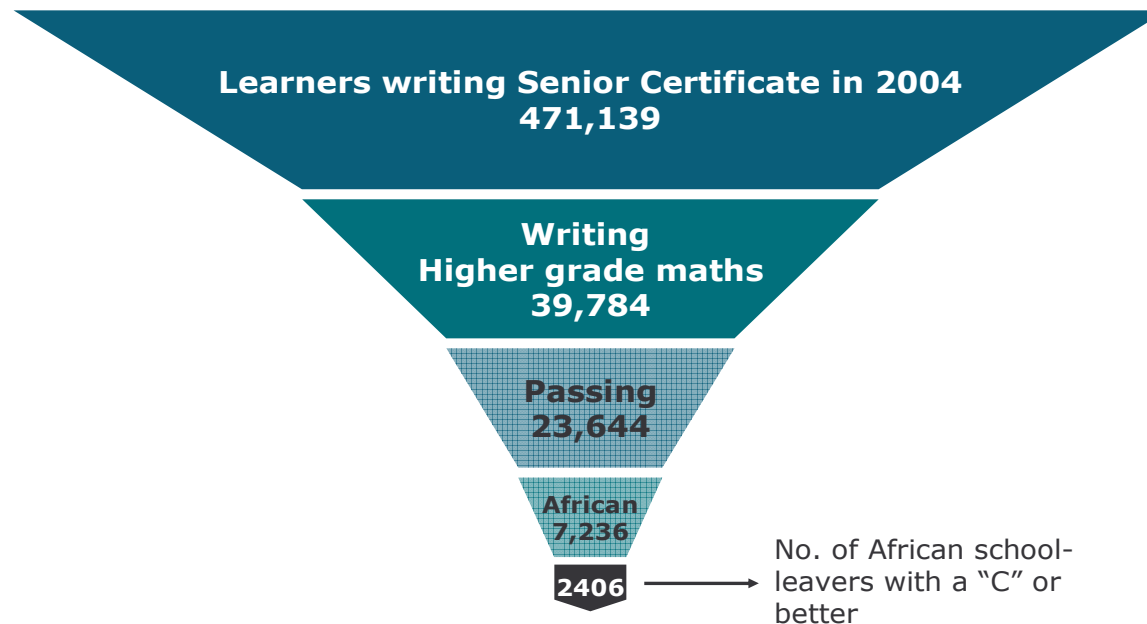
- Schooling system made quantitative progress in last 10 years but not qualitative
- Maths and Science performance at all levels is weak
- Poor performance in maths and science in matric examination represents “the single most important obstacle to black advancement in South Africa”.
- In addressing maths will also make breakthroughs in English and science

# The Problem: 2004 Results

(Acknowledgements to ISASA)



## THE TRICKLE OF AFRICAN MATHEMATICS HG PASSES





# The realities of maths in SA schools ...

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- Huge differences in school performance
- Far too few high performing schools
- Performance at good schools is at risk
- Half the learners passing maths HG study at 200 schools (2006)
- Half the schools offering maths HG had 100% failure rate in the subject (2006)
- Universities struggling with consequences of schooling failure

# Where is Government?

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- Maths and Science is a presidential and JIPSA / ASGISA priority
- Minister Pandor concerned about delivery and morale
- Deputy Minister Surty energised around flagship maths and science project but limited resources to secure ambitious goals
- Schools under pressure

# Opportunity to do something new and different



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- Epoch & Optima Trusts – single focus
  - R40 million a year on maths (and science)
  - Move money quickly to where it can be best utilised
  - Action learning
  - Low cost/high impact model



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- Increase ***participation*** in maths
  - Improve ***quality*** of maths passes
  - Increase **access** for disadvantaged learners



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- To complement and not replace Government's efforts
  - To work with schools that already deliver, and strengthen them to continue to do so
  - To support research by Government and independent think tanks
  - To monitor, evaluate and share learnings with stakeholders



## Strategy informed by:

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- Major research studies (CDE, JET, ZENEX)
- Networking with range of stakeholders
- Chairman's Fund and other CSI fund experience and learnings
- Working relationship with National Department of Education

# Learnings from the research

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- Much of private sector intervention well meaning but ineffectual
- Focus and strategic purpose lacking
- Too many “Cremora” interventions that have limited impact *inside* the system
- Gaps at so many levels that ability of system to maximise benefits is constrained
- Programmes piloting valuable new approaches intensively focused – high cost, long time frames, limited take on afterwards

# Lessons from experience

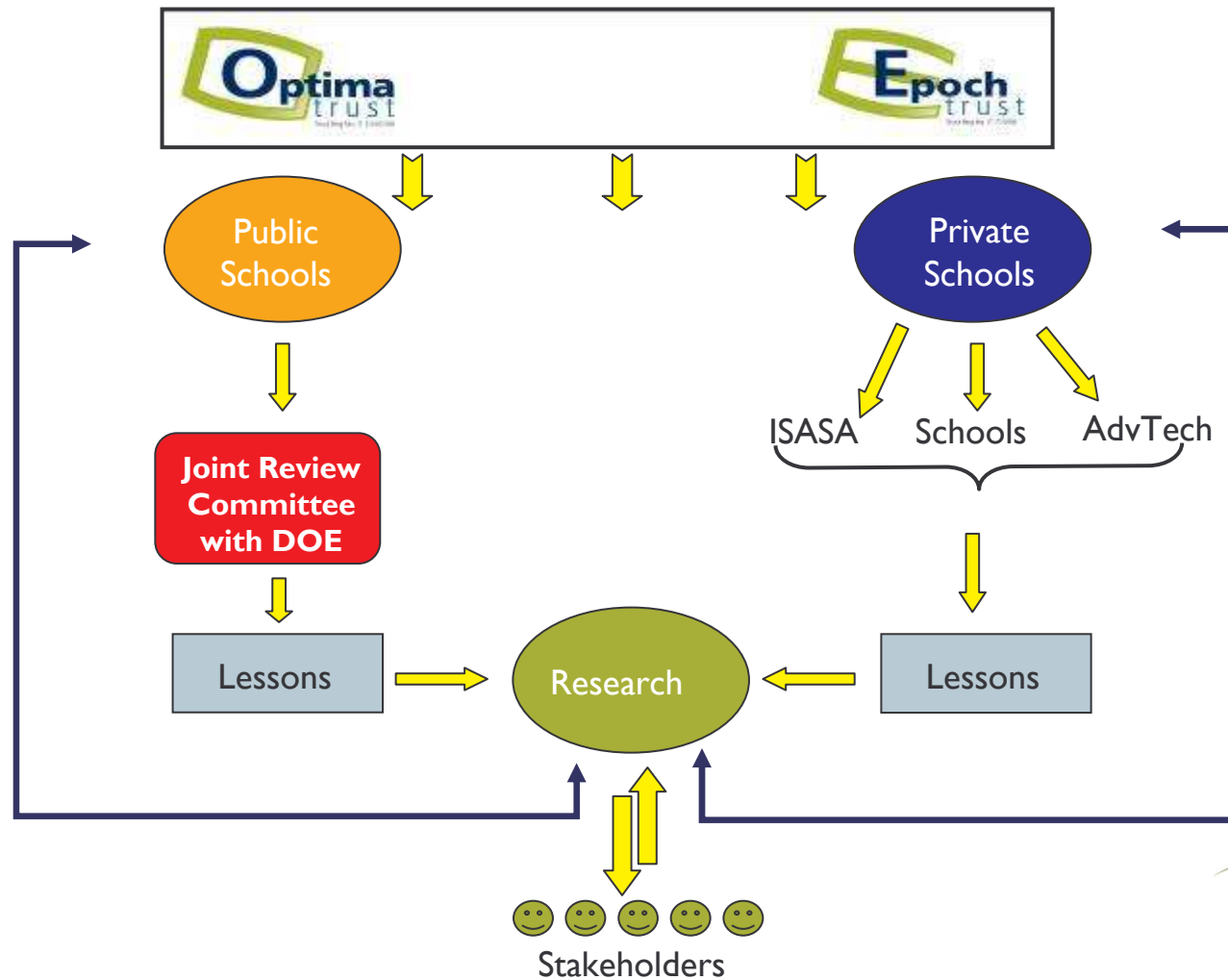
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- Always work with the champions
- Basis of selection of schools is crucial
- Can have systemic impact (not in terms of coverage, but as a catalyst)
- Can find ways ‘punch above our weight’
- Be realistic about what is possible and what is your achievement
- Understand and then work within real life constraints – yours, the system’s, your partners’ and the beneficiaries’



# High Level Strategy



# Public schools maths challenge



**Database of all Secondary School State Examination Results**

- Black top-performing schools
- Black schools that push numbers
- Ex-Model C schools
- Coloured and Indian top-performing schools

**158 state schools invited to apply**

**46 state schools selected 2007**

- Schools driven approach
- Schools state their needs and challenges
- Schools propose how to improve performance
- Measured on their own stretch targets

## Defining the 'top end' – public schools

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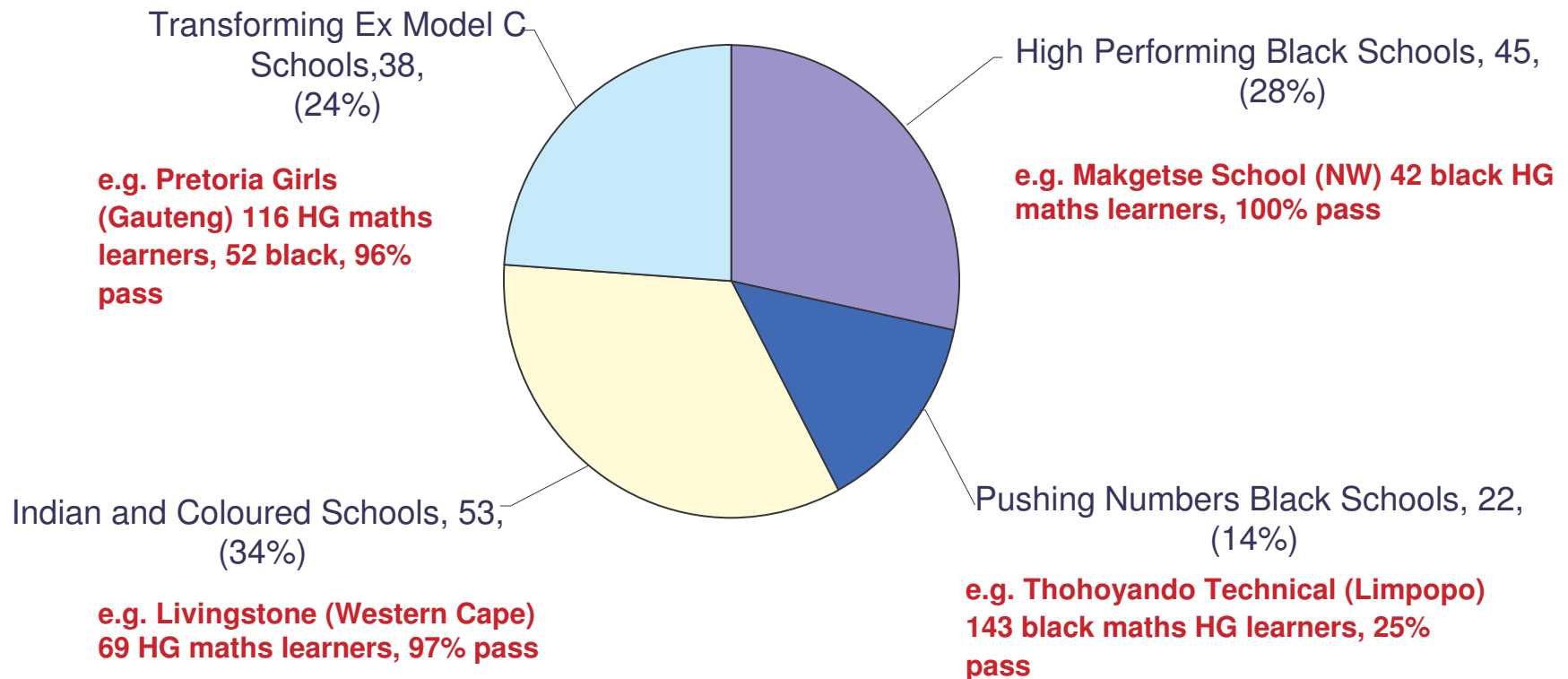
- Minimum HG maths class of 20 Black learners
- HG maths pass rate of two thirds

OR

- High participation rates and capacity to improve pass rate with significant impact in terms of numbers of successful Black learners

# Classification of Public Schools

158 identified



# Public Schools Maths Challenge

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- Schools invited to apply through public advertisement and select invitation
- Application form available to all interested schools
- Department of Education participated in final selection
- Assisting some 45 schools
- Support renewable annually if progress is maintained

# Learnings from the 50 top public maths schools

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- Growing obstacles to maths learning – progress made only with huge effort
- Learners entering high school with low skills base, growing learning deficit to make up
- Serious shortage of maths teachers everywhere
- New curriculum is very demanding
- Teacher morale is low and discipline is eroding even in good schools



# Learnings from the field

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- Examples of real energy and commitment to teaching
- Language and maths performance closely related
- Significant psychological obstacles for learners exacerbated by socio-economic circumstances
- All top schools under pressure and having to adapt to a range of challenges simultaneously
- Feeling from the front line that something may have to give

# New National Curriculum changes everything

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- Maths/Maths Literacy compulsory from 2008
- Indications are that half matric learners will attempt Maths – with what results?
- Maths – very challenging curriculum for teachers. Most schools only offering 2 out of the 3 papers
- Maths Literacy - All new content
  - Relevant life skills
  - Language demand high



# Independent Schools Challenge



**Support for Excellence in Maths Education**

- Ratio of Maths Higher Grade to Maths Standard Grade (More than 50%)
- Enrollment in Maths (20 or more taking Maths)
- Diversity

**25 independent schools met this criteria**

**12 schools selected**

- Schools driven approach
- Schools state their needs and challenges
- Schools propose how to improve performance
- Measured on their own stretch targets
- Matched funding\*\*

# Innovation in Independent Schools

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- SSB/SSP bridging programme
- Advtech Abbott's College Programme
- LEAP Science and Maths School
- ISASA's Maths and English Programme

# Independent Schools Maths Challenge

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- Focus on high-end, quality output and transformation
- Identified 12 high fee paying schools with strong maths record to partner on co-funding basis
- AdvTech partnership may be controversial but comes with money back guarantee
- ISASA and other projects explore low fee models in private education with explicit maths goals

# So what does make a difference?

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- Team teaching
- Extra materials (own worksheets)
- Homework
- Regular assessments
- Identification and filling of gaps
- After school tutorials (peer tutors)
- Teachers
- Technology
- Planning to cover the curriculum with meaningful revision time

# Measuring the difference

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Early days, but in time measurement on the basis of:

- Impact on schools
- Effort by schools
- Number of passes in high level mathematics
- Number of A's, B's & C symbols
- % change in number of mathematics matric learners entered (during programme period)
- % change in disadvantaged learners (Black, Indian and Coloureds) passing maths
- School development including innovation in maths curriculum delivery

# Early impressions

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- Addressing real needs
- Empowering schools
- Unique insights
- Important 'early warnings'

# Thank you!

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