

A stylized landscape illustration featuring a city skyline with various buildings and domes, a large orange sun, and three wind turbines on the right. The background consists of rolling hills in shades of yellow and orange, and a dark green foreground. The overall style is flat and modern.

SA-TIED

Southern Africa – Towards Inclusive Economic Development



Education Policy For Inclusive Economic Growth During Fiscal Consolidation

SA-TIED – Operation Vulindlela

GTAC Webinar

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Presentation goals

- Overview the State of Education
- Propose targeting learners who reach university but are unlikely to finish:
 - Those on the threshold of becoming tax-paying adults
 - Early gaps in literacy and numeracy often explain why they fall short
- Nine Key Policy Recommendations
 - Drawn from DBE, DHET, and global/local evidence
- Distribute slides for future quick reference

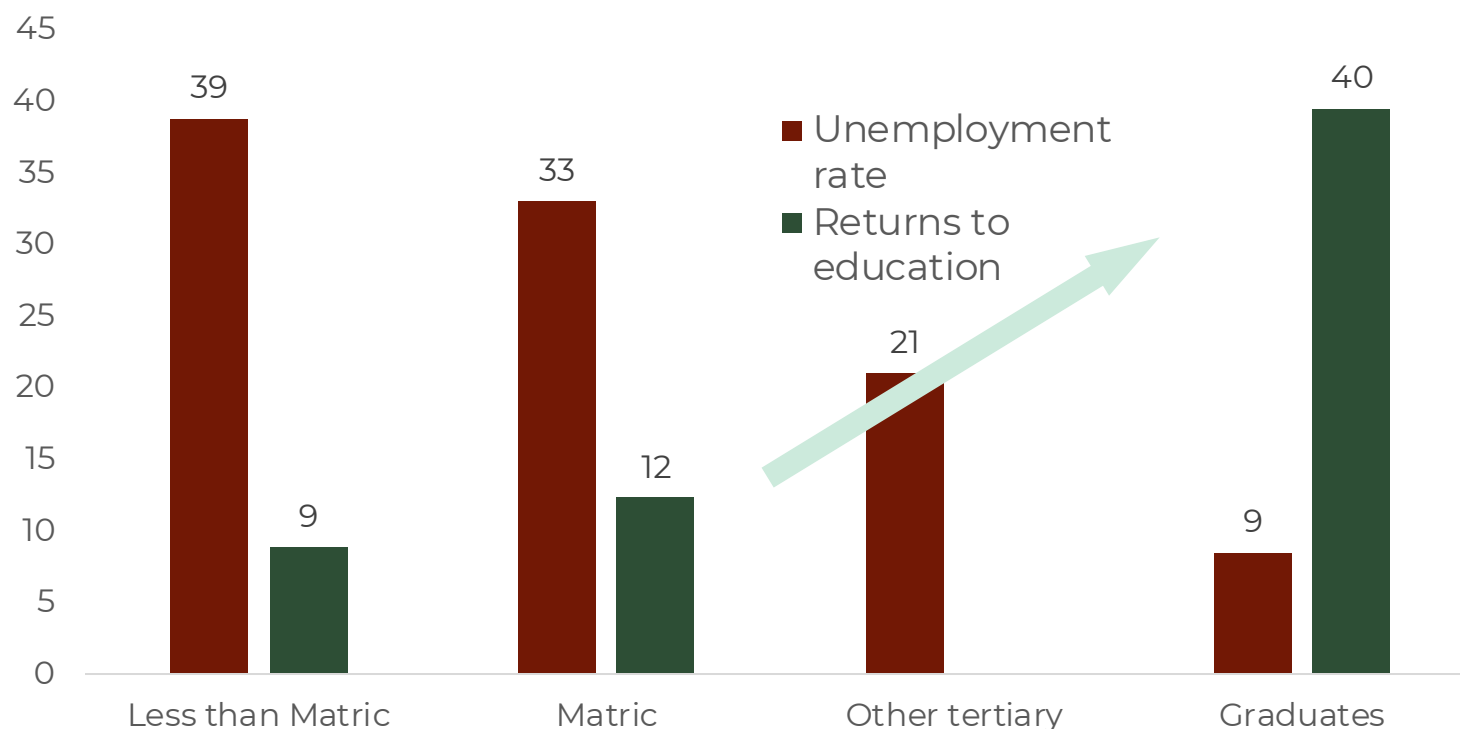


Part 1: State of Education in South Africa

Steeply convex returns to schooling & the marginal approach to ed for growth

Marginality

Unemployment rate & return to education by education level



Source: Author from StatsSA QLFS 2023 & Montenegro & Patrinos (2014)
Returns to education are calculated as the percent income increase on no education only amongst the employed

Implications

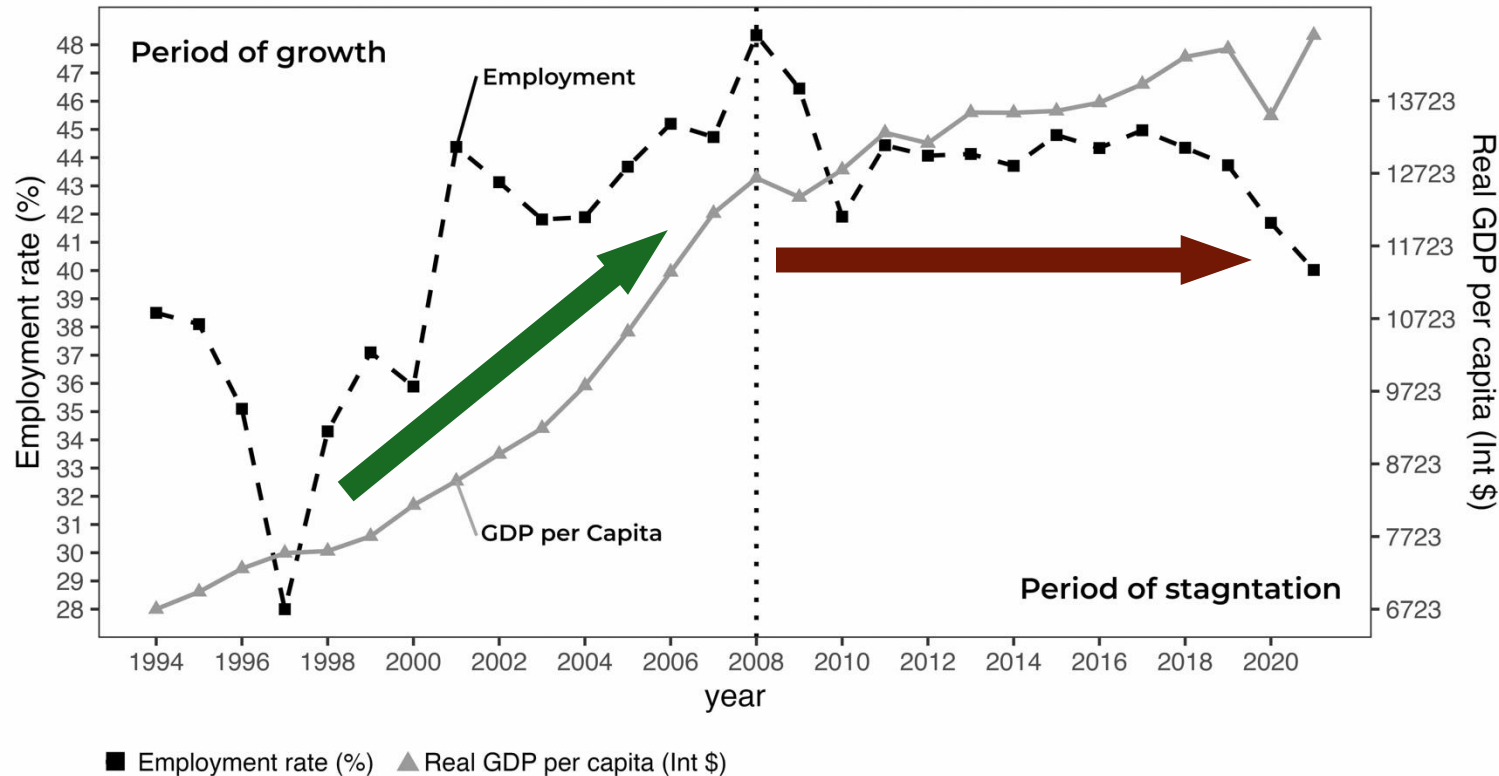
- **Employment** should be the primary aim of education policy.
- A year of schooling without matric offers no income or employment return (Broekhuizen, 2013). The GEC might change this.
- Returns to university remain far higher than matric, and are increasing (Köhler, 2025).
- To expand the tax base and make education fiscally sustainable, **focus should shift to those on the cusp of completing university.**
- South Africa ranks among the **top five countries for returns to education** (Montenegro & Patrinos, 2014).

It is a myth that South Africa experienced jobless growth

Growth

SA has only experienced job growth during rapid GDP growth

Implications



Source: Author from Statistics South Africa National Estimates
World Development Indicators database, World Bank
2021 International Dollar, Eurostat-OECD PPP

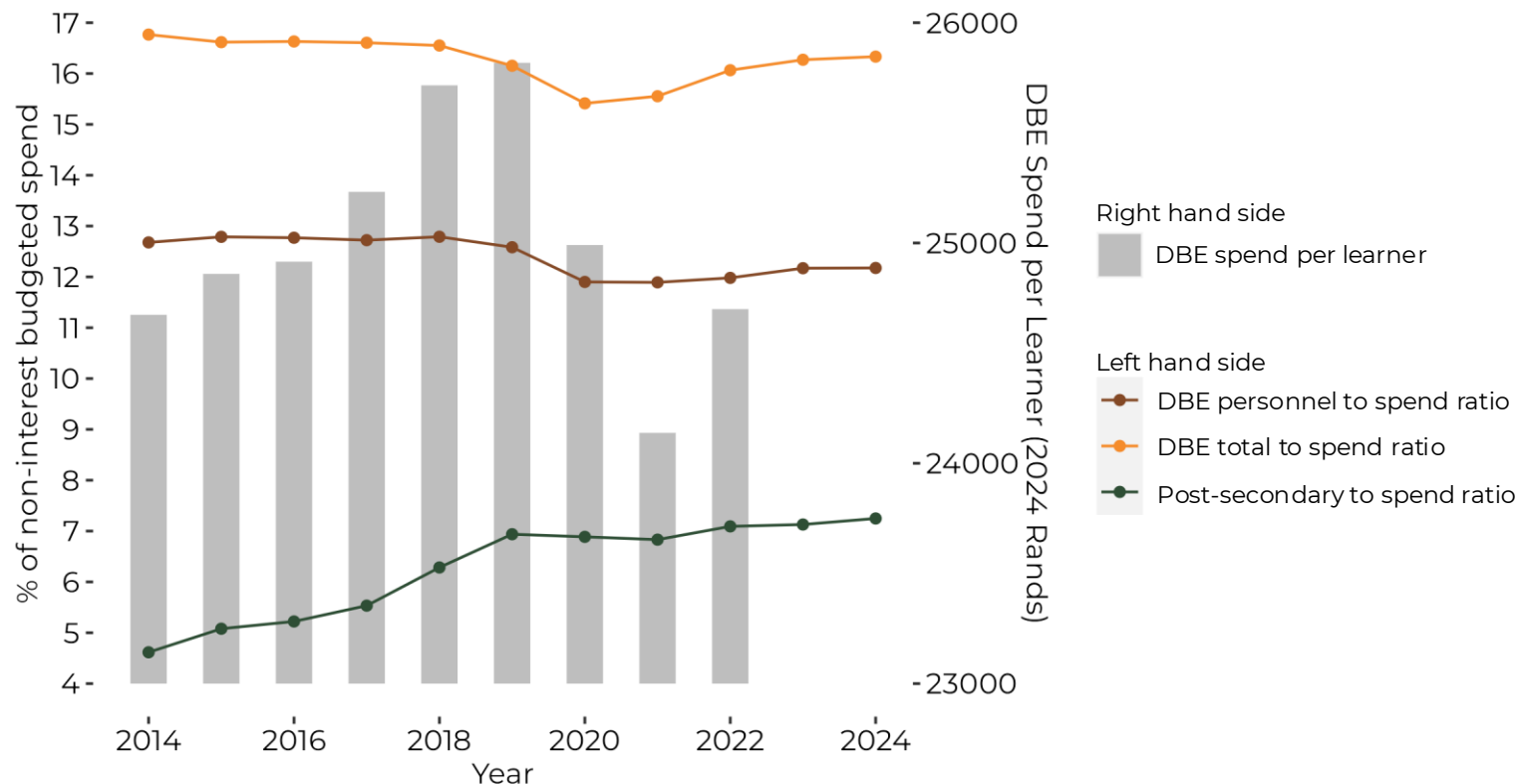
- Growth policies are often criticised as non-inclusive, yet South Africa's only real **employment growth coincided with rapid GDP per capita growth** (1998-2008).
- A **self-sustaining education system** that leads to employment and taxation is vital for average South Africans' welfare.
- Human capital is now widely recognised as the primary driver of long-run growth (Hanushek & Woessman, 2021).

Shift in budget: slight decline in basic education, increase in post-secondary

Budgetary

National education expenditure overview 2014 - 2024

Description



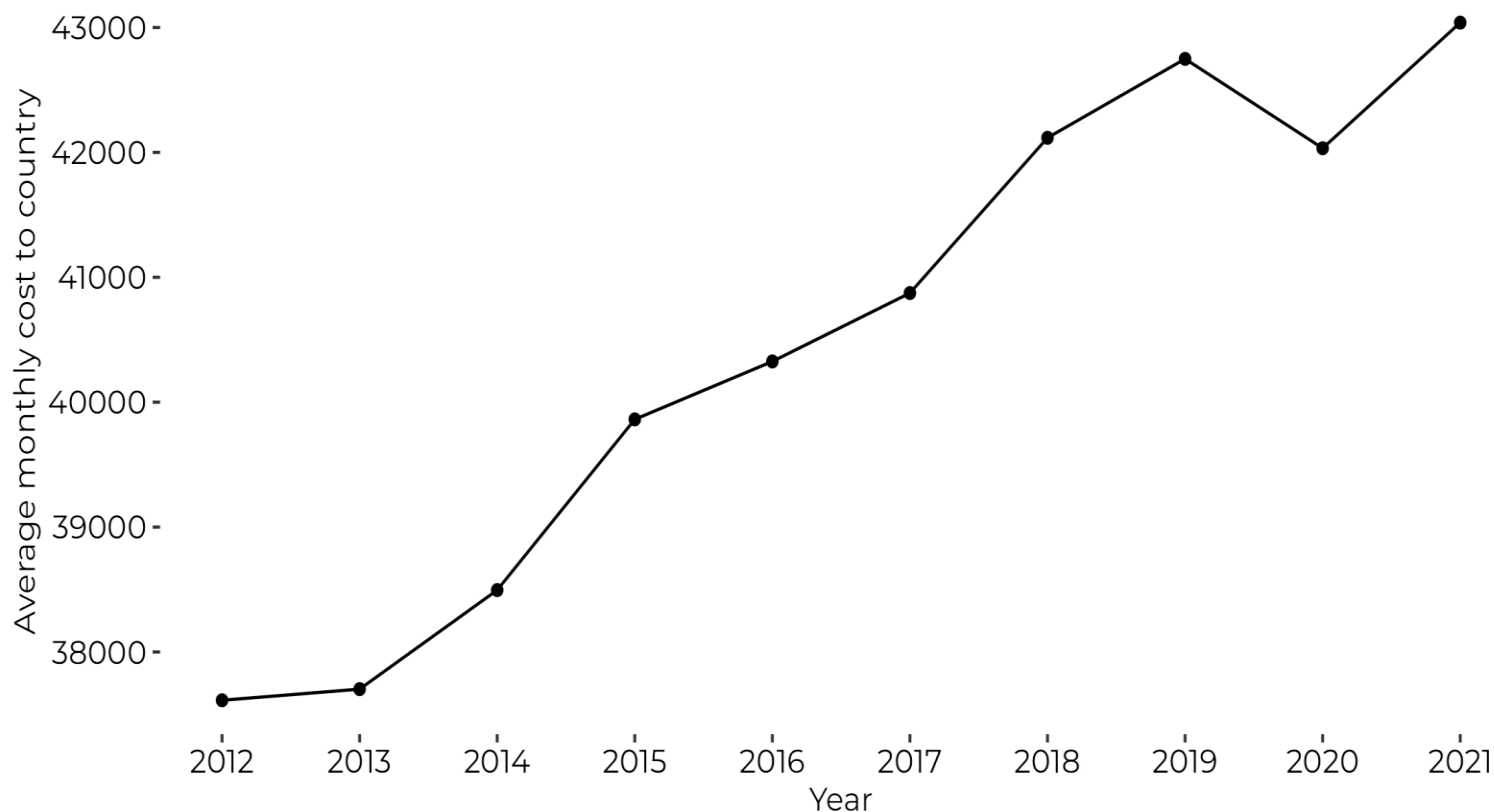
- Basic education budget declined slightly from 16.8% to 16.3% of non-interest expenditure, now **rising due to Grade R expansion**.
- Post-secondary education budget grew from 4.6% to 7.2% of non-interest expenditure, a **56% increase**
- Per-learner expenditure returned to 2014 levels (R25,000 in 2024 Rands) by 2022
- South Africa spends **30% more** on education as a percentage of total expenditure than the average Upper Middle-Income country (UNESCO, 2022)

Notes: 2023 and 2024 learner enrolment numbers are not yet available.
Unbudgeted wage bill negotiations are not accounted for in the figure.
Source: Author from National Treasury (2014-2024) & DBE (2015-2023)

Educators are well paid by international standards

Educators

Cost to country of South Africa's educators (2021 Rands)



Notes: 2017 interpolated

Source: Author, Payroll data: PERSAL, enrolments: DBE (2013 – 2022), CPI: Stats SA

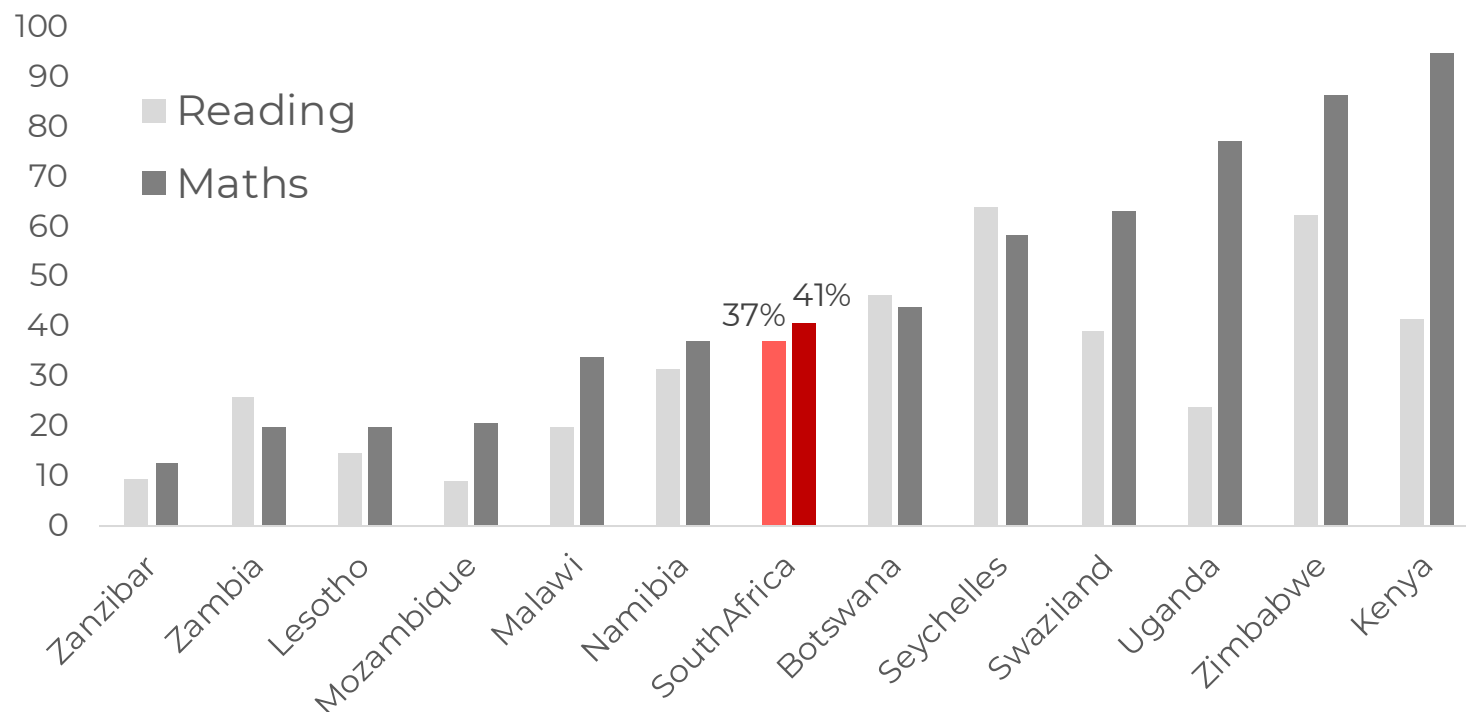
Discussion

- Educators earned **R43,000pm in 2021** vs R38,000pm in 2012 (in 2021 Rands), including benefits
- **Top 3% of South Africans earned R42,500pm in 2014** (2021 Rands) (Woolard, Bassier, 2021; SARS data)
- **Educator salaries increased 66%** in real terms between 2007-2021 (Sachs, et al., 2022)
- South African educators are paid 5x GDP per capita vs max 2x in OECD countries, average just over 1x (OECD, 2011)
- Evidence shows **increasing salaries doesn't improve learning** (de Ree et al., 2015); decreasing salaries doesn't impede it (Bau and Das, 2020)
- **Lower-paid contract teachers internationally outperform** permanent and/or unionised teachers (Duflo et al., 2015)

Poor educator content knowledge binds learning

Educators

Percent of Grade 6 educators achieving mastery in their subject in SACMEQ IV (2013)



Source: Author from Awich (2021)

These data are learner-weighted, such that they technically represent the % of learners with teachers reaching mastery

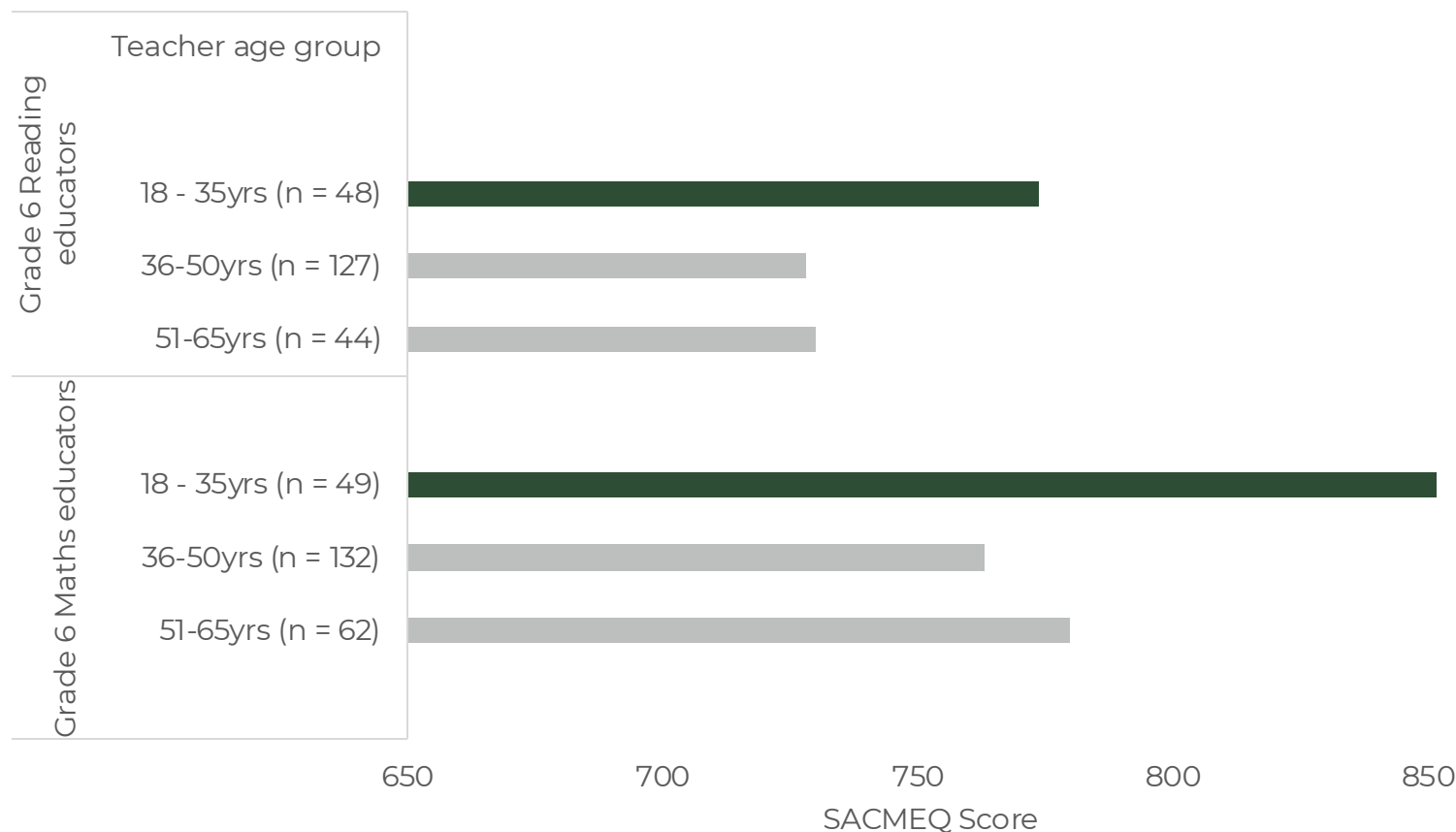
Implications

- Subject mastery is likely prerequisite for effective teaching
- South African teachers have poor content knowledge, even compared to less developed African countries
- South African learners underperform even relative to our low teacher content knowledge (DBE, 2013)
- Over 60% of Grade 6 Maths teachers have content knowledge below Grade 6/7 learner standards in international exams (Van der Berg et al., 2016)

Younger teachers have substantially higher content knowledge

Educators

Educator content knowledge in SACMEQ (2013) by age



Notes: these results use raw scores unadjusted for complex sampling
Source: Author from SACMEQ IV (2013)

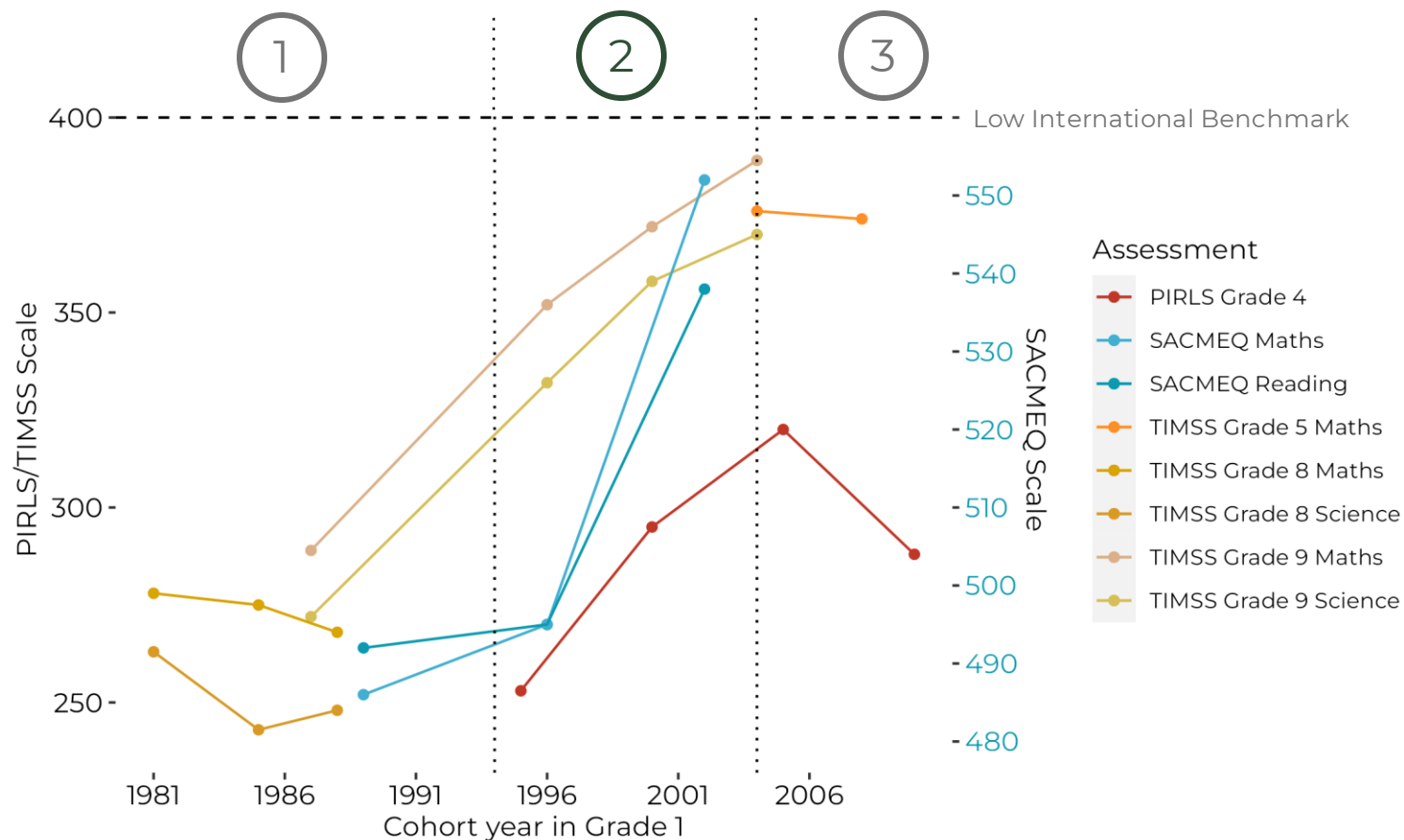
Implications

- Teacher knowledge gap between over/under 35s exceeds the gap between Eastern and Western Cape, the provinces with greatest disparity (Van der Berg, et al., 2016).
- Younger teachers replacing older cohort will raise average content knowledge but SA will still remain low for a middle-income country.
- OSD fails to incentivise retention of educators who improve learning outcomes as intended.
- OSD notches instead incentivise older teachers to remain.

South Africa has experienced three phases of learning

Learning

Maths, Science, & Reading outcomes in international exams



Notes: This figure follows the cohort at entrance to Grade 1, not year of assessment

2011 PIRLS result corrected per Gustafson (2020)

IEA does not validate the intertemporal comparability of the pre-democracy cohorts

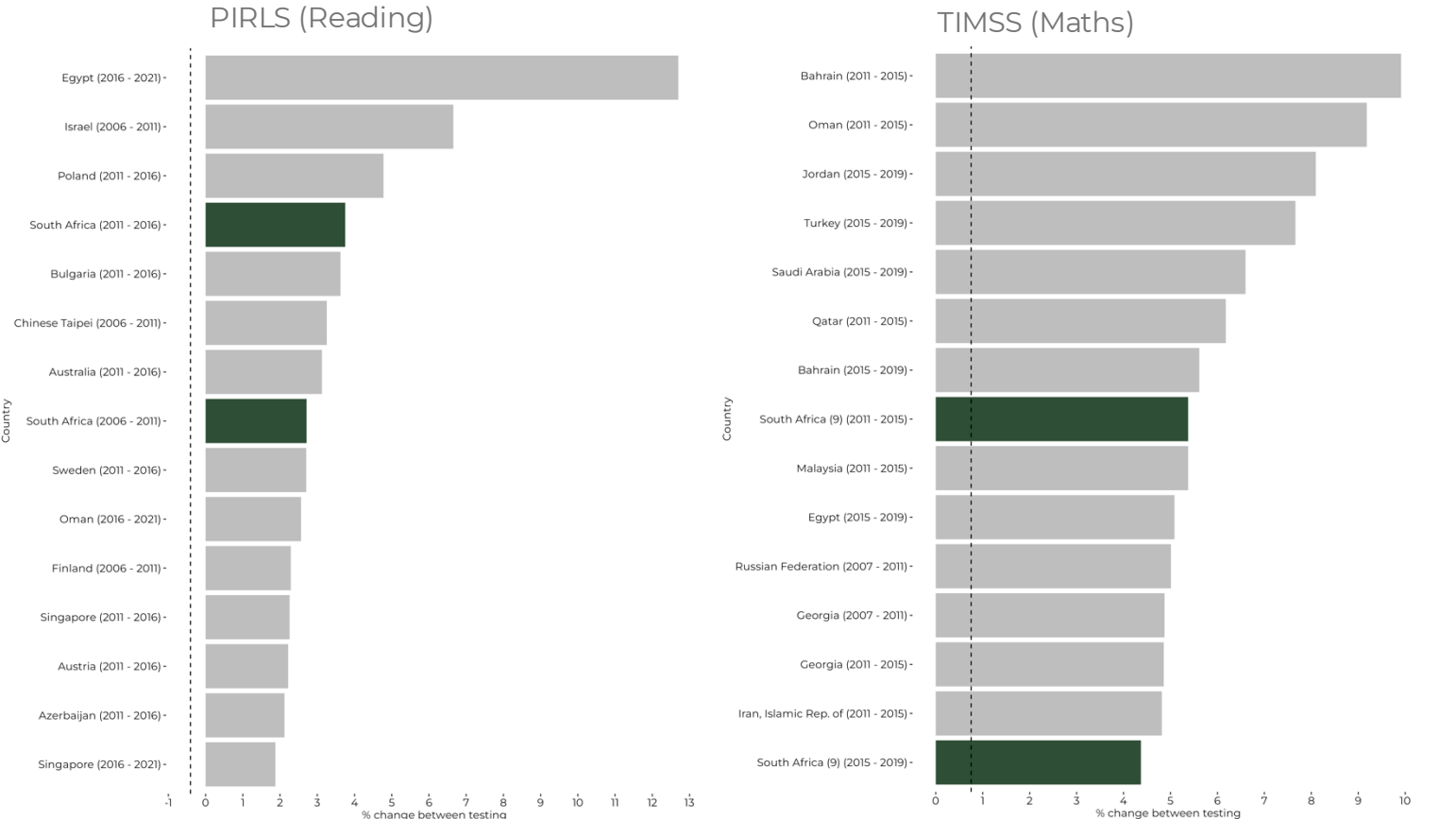
Source: Adapted from Gustafsson & Taylor (2022, 20). Data from PIRLS (2005, 2011, 2016, 2021), TIMSS (1995, 1999, 2007, 2011, 2015, 2019), & SACMEQ (2000, 2007, 2013).

Phases of learning

- 1 Pre-democracy stagnation
 - 2 Decade of Rapid Improvement
 - 3 Pre-pandemic Stagnation and pandemic learning losses
- South Africa's rapid & exceptional education success period warrants celebrating
 - Yet, success was short-lived, never exceeding Low International Benchmark (400 PIRLS/TIMSS points)
 - This benchmark represents "reading for meaning" and "calculating with confidence" in foundation phase

South Africa's Decade of Improvement was exceptionally rapid

15 fastest periods of improvement in PIRLS and TIMSS



Notes: Grade 9 TIMSS (a year above other countries) & grade 4 PIRLS assessments shown.
 Dashed lines indicate average improvement per period: -0.41% for PIRLS, 0.75% for TIMSS.
 Only periods consecutively tested are included.
 Improvement is shown as a percentage of IRT scores as assessments are comparable across periods, a more intuitive measure than SDs. See ["How Standard is a Standard Deviation"](#)
 Source: Author from (TIMSS 1995 – 2019) & PIRLS (2001 – 2021)

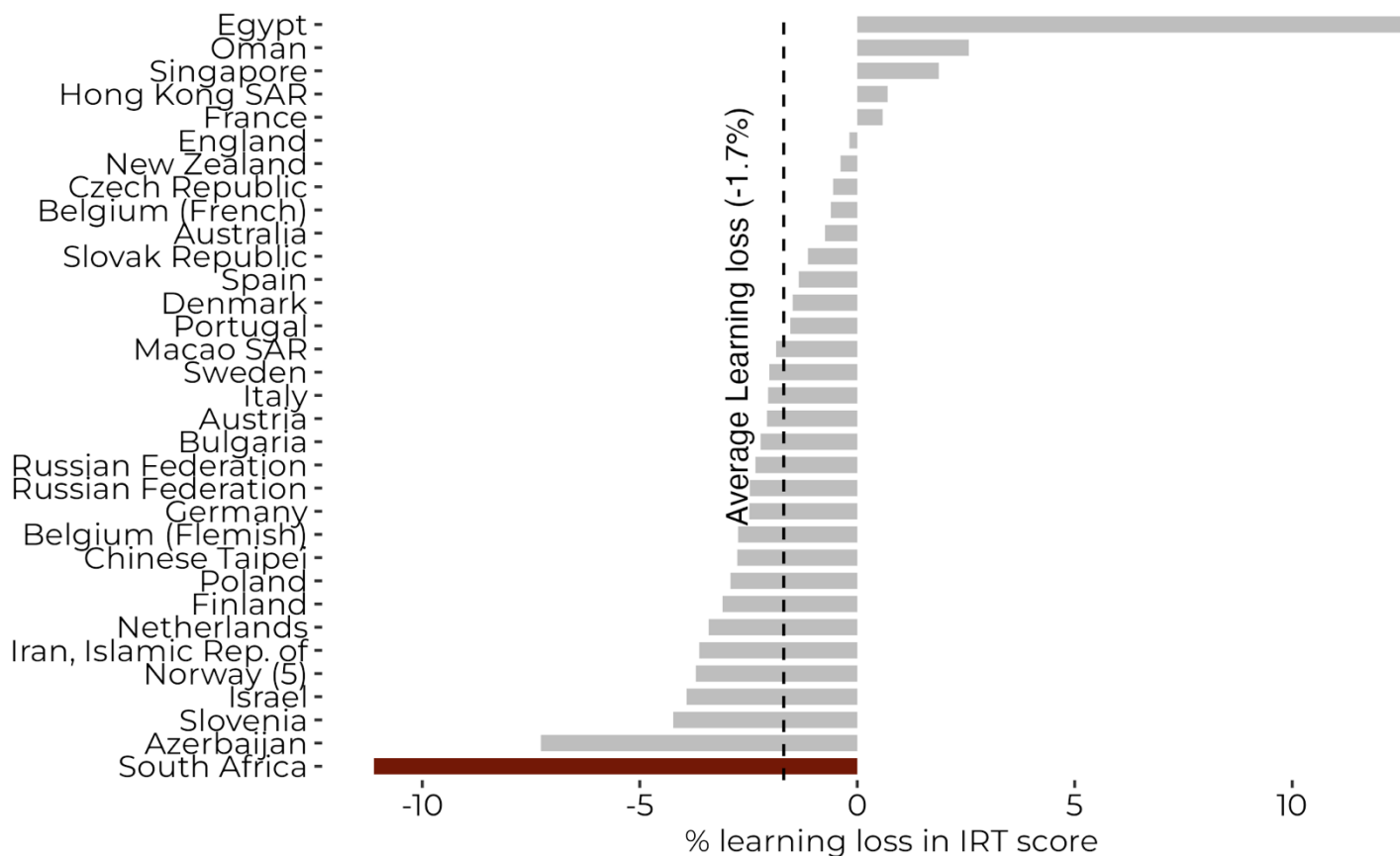
Discussion

- South Africa's decade-long improvement (period ②) was **world-leading**.
- We approached the systems-level improvement "Speed Limit" (Gustafsson, 2019).
- Amid education pessimism, **important to note we have achieved and can again achieve substantial improvements.**
- Improvements likely due to ambitious system-wide reforms like **School Nutrition Programme and Rainbow Workbooks.**
- Despite laudable progress, unclear if these were "low-hanging-fruit" improvements with potential stagnation at higher learning levels.
- Poland and Vietnam have achieved faster improvement from higher starting points.

South Africa had the largest learning losses in PIRLS over the pandemic

Learning losses

PIRLS 2016 -2021 learning losses



Discussion

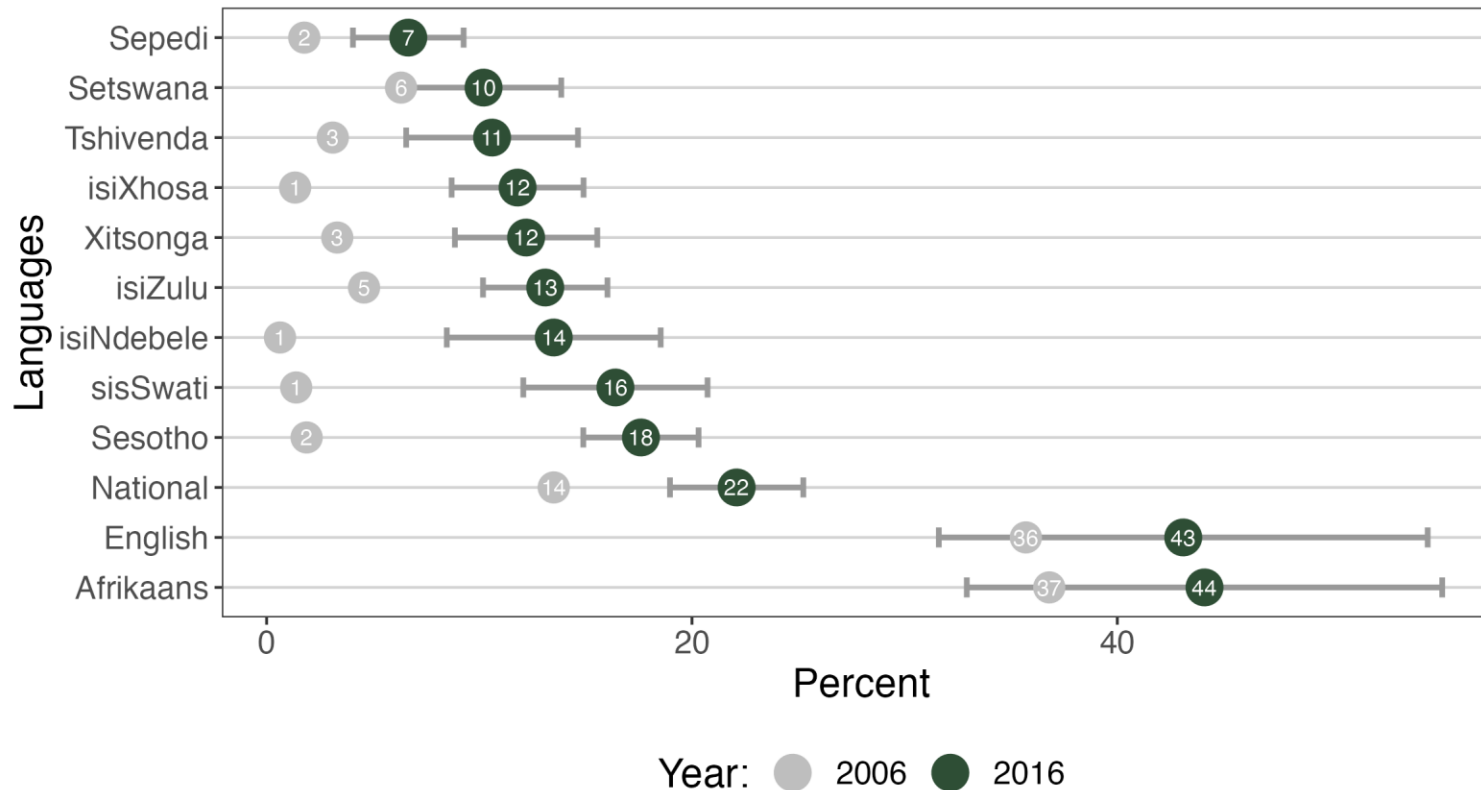
- **Pandemic erased ~10 years of learning progress**
- South Africa suffered largest IRT point loss among countries, from already lowest base
- Testing validity concerns affect international comparison reliability
- Results not solely pandemic-attributable, but cross-country comparisons remain mostly robust with caveats
- **Pre-Covid stagnation signs appeared in 2019 TIMSS Maths Grade 5**
- No other nationally representative, psychometrically valid pre/post-pandemic assessments exist for South Africa

Source: Author from PIRLS 2016 and 2021

African language learners improved fastest amid great inequality

Inequality

Percent reaching the low international benchmark in PIRLS



Notes: Error bars depict 95% confidence intervals

Learners tested in Grade 4

Source: Author from PIRLS (2006 & 2016)

Implications

- African language learners improved substantially between 2006 and 2016 (Mohohlwane, Mtatse, Courtney, 2023).
- English and Afrikaans showed no statistically significant improvement.
- The pandemic has erased much of this improvement & inequality reduction (Böhmer & Wills, 2023).

For our level of learning, South Africa was not particularly unequal until 2021

Inequality

Inequality in TIMSS vs learning level



Discussion

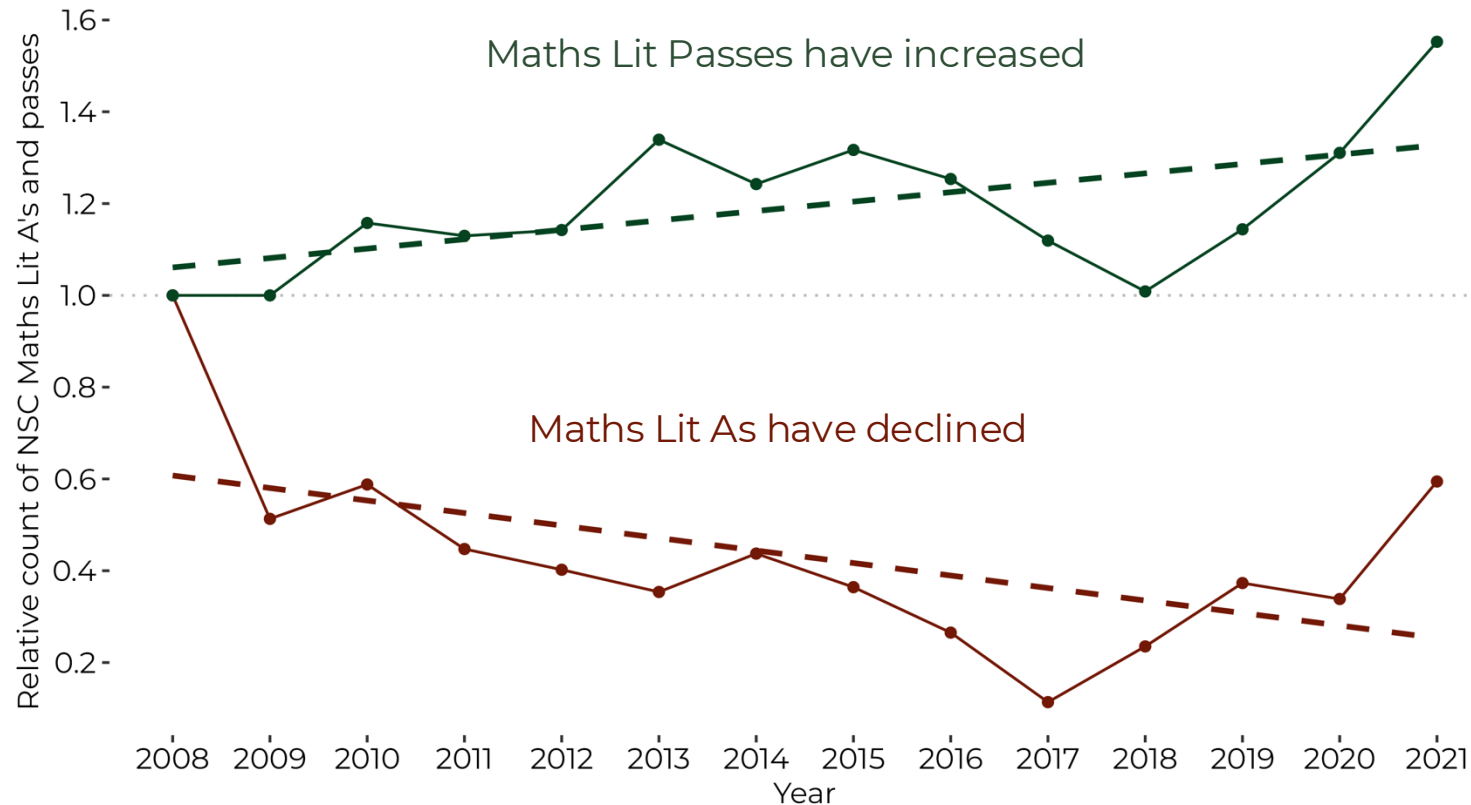
- Pre-pandemic, South Africa's learning inequality (measured with Gini) aligned with expected levels based on PIRLS scores.
- Permanence of pandemic learning losses and widened inequality remains uncertain.
- Given poor employment outcomes, raising employment levels may be more crucial than improving learning at the bottom of the distribution in South Africa's current development stage.

Source: Author adapted from Böhmer and Wills (2025)

Squeeze at the top may have troubling employment & tax implications

Inequality

NSC Maths Lit Passes (30%) and As (80%) relative to 2008



Source: Author from DBE NSC data

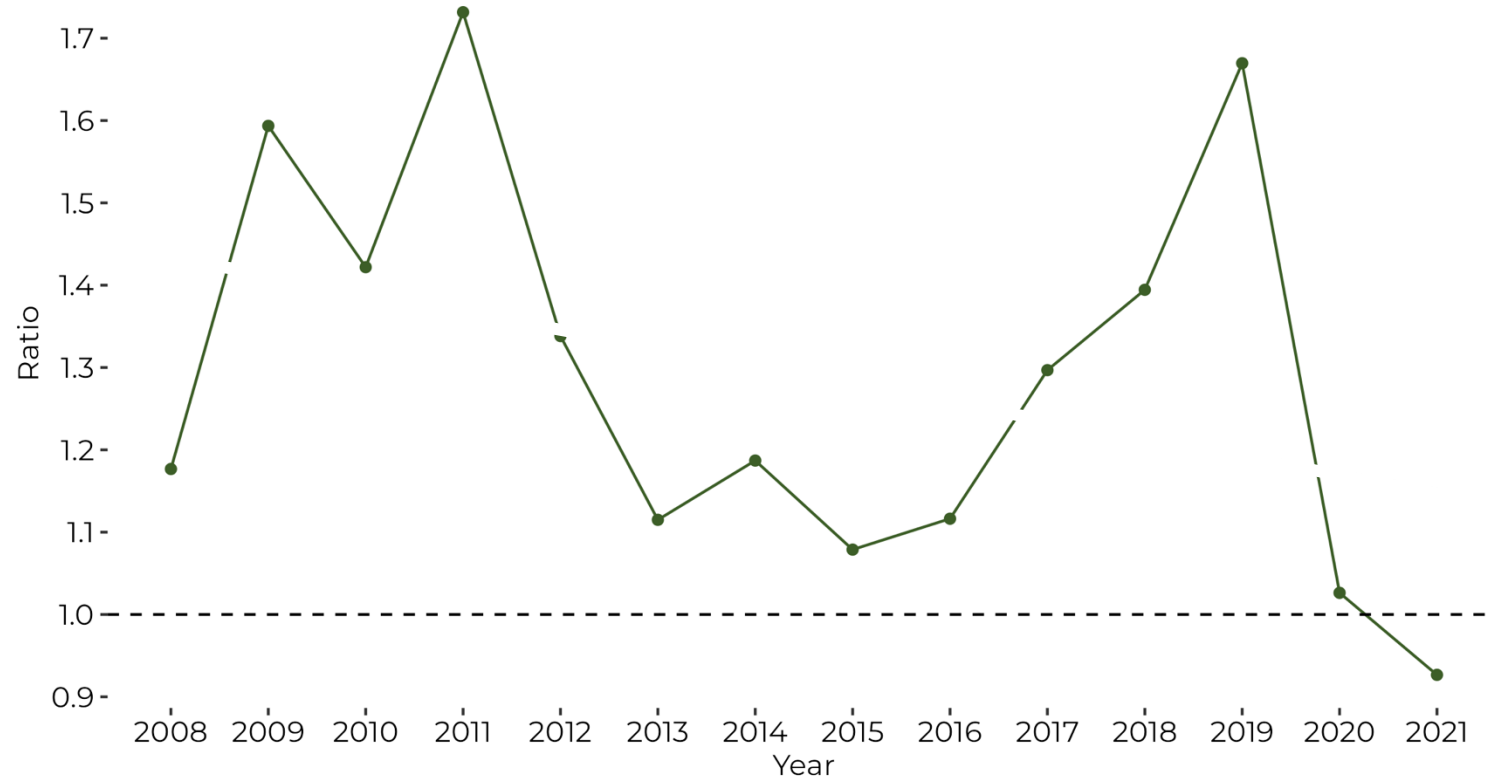
Discussion

- There has been a downward trend in the number of learners achieving Maths Literacy & Maths passes as well as those achieving 60% (a common university requirement) & As (80%) with some recent turn around.
- These subjects are vital for the creation of the human capital required to expand the tax base.
- At the same time, there has been an improvement or stagnation in the number of passes (30%) for Maths lit and Maths.

Capacitating a handful of schools could quickly increase Maths As

Inequality

Ratio of NSC Maths As in the top 200 schools to the rest



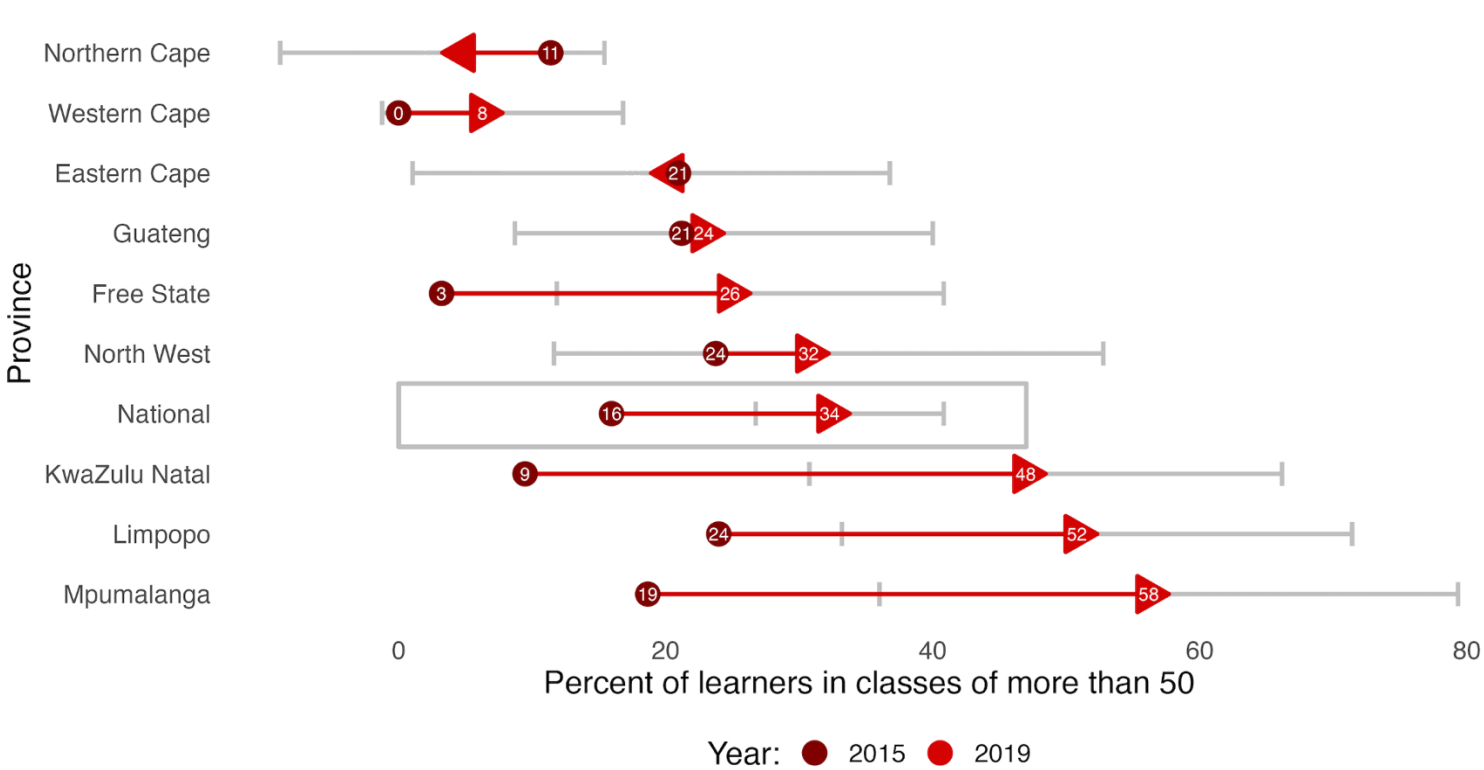
Notes: The horizontal dashed line is point where the top 200 schools produce the same number of NSC
Source: Author from NSC 2008 - 2021

Discussion

- The top 200 high schools by number of As achieved produce between 0.9x to 1.7x the number of As as **all other high schools combined**.
- The inequality implied by this ratio has declined, but seemingly **at the cost of the number of Maths As produced**.
- This high concentration in schools producing As suggests that increasing enrolment in these schools, or the next 200, could quickly increase the number of Maths As produced.
- Similar inequality exists in bachelor passes.
- The SES of the school you go to matters more for learning outcomes than your own SES (Servaas & Gustafsson, 2017).

Some subjects and grades saw growing class sizes, amid broader positive trends

% of learners in class sizes greater than 50, 2015-2019 (TIMSS Grade 5)



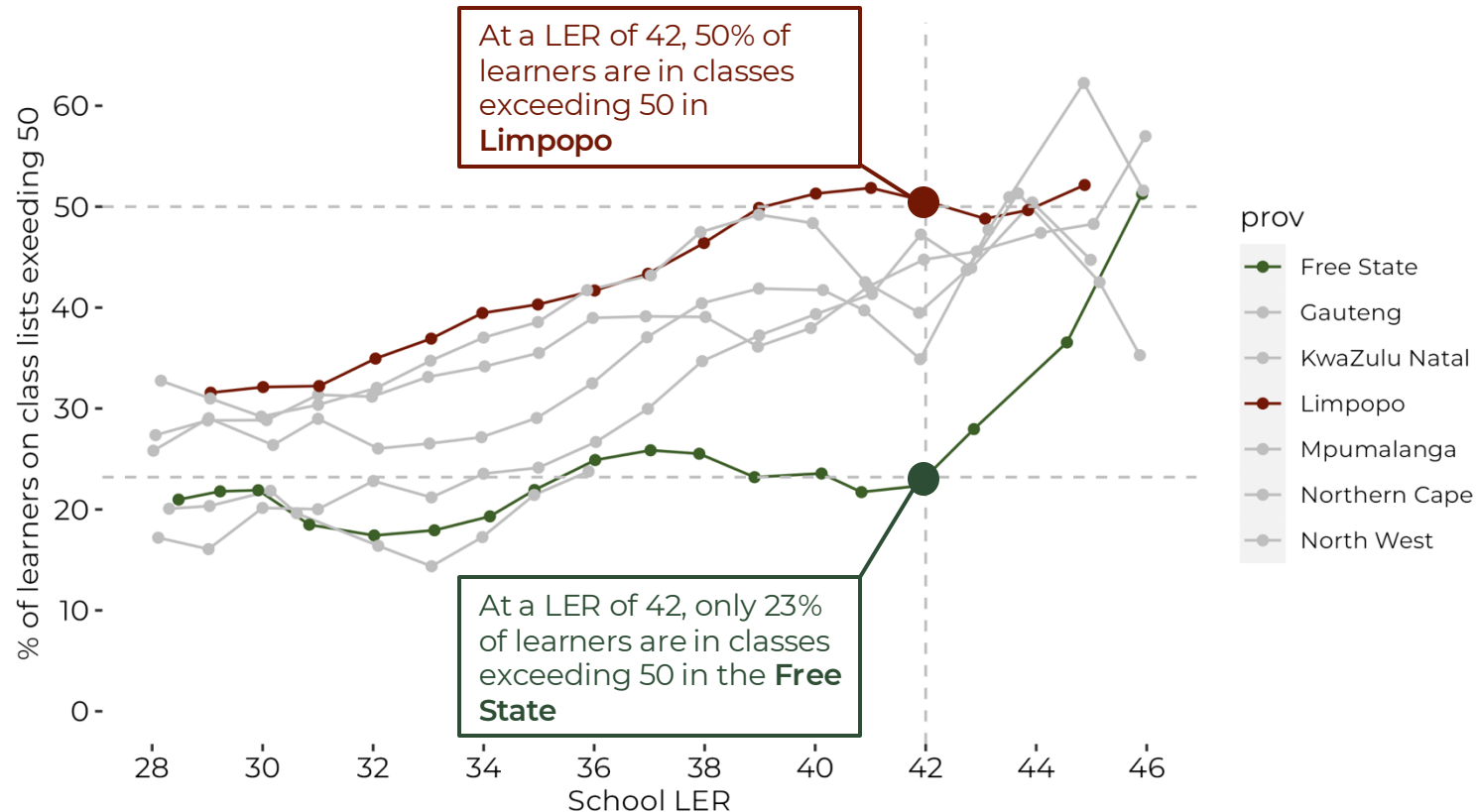
Note: Error bars represent 90% confidence intervals
Source: Author from TIMSS (2015-2019)

Implications

- From 2015-2019, Grade 5 **maths** learners in classes exceeding 50 rose from 16% to 34%.
- During this period, the national learner-educator ratio fell from 36 to 32 (learner-weighted).
- Nationally (2018-2021), the learner-educator ratio increased from 28.9 to 29.4 whilst Grade 1-7 class sizes decreased from 42.8 to 40.5 (excluding Eastern and Western Cape).
- Continuing this trend of smaller classes despite learner-educator ratios is essential.
- Improved efficiency is critical in determining additional educator requirements.

Class sizes can be reduced without additional teachers

Some provinces are able to contain class sizes at high LERs



Source: Author from DBE LURITS 2021

Implications

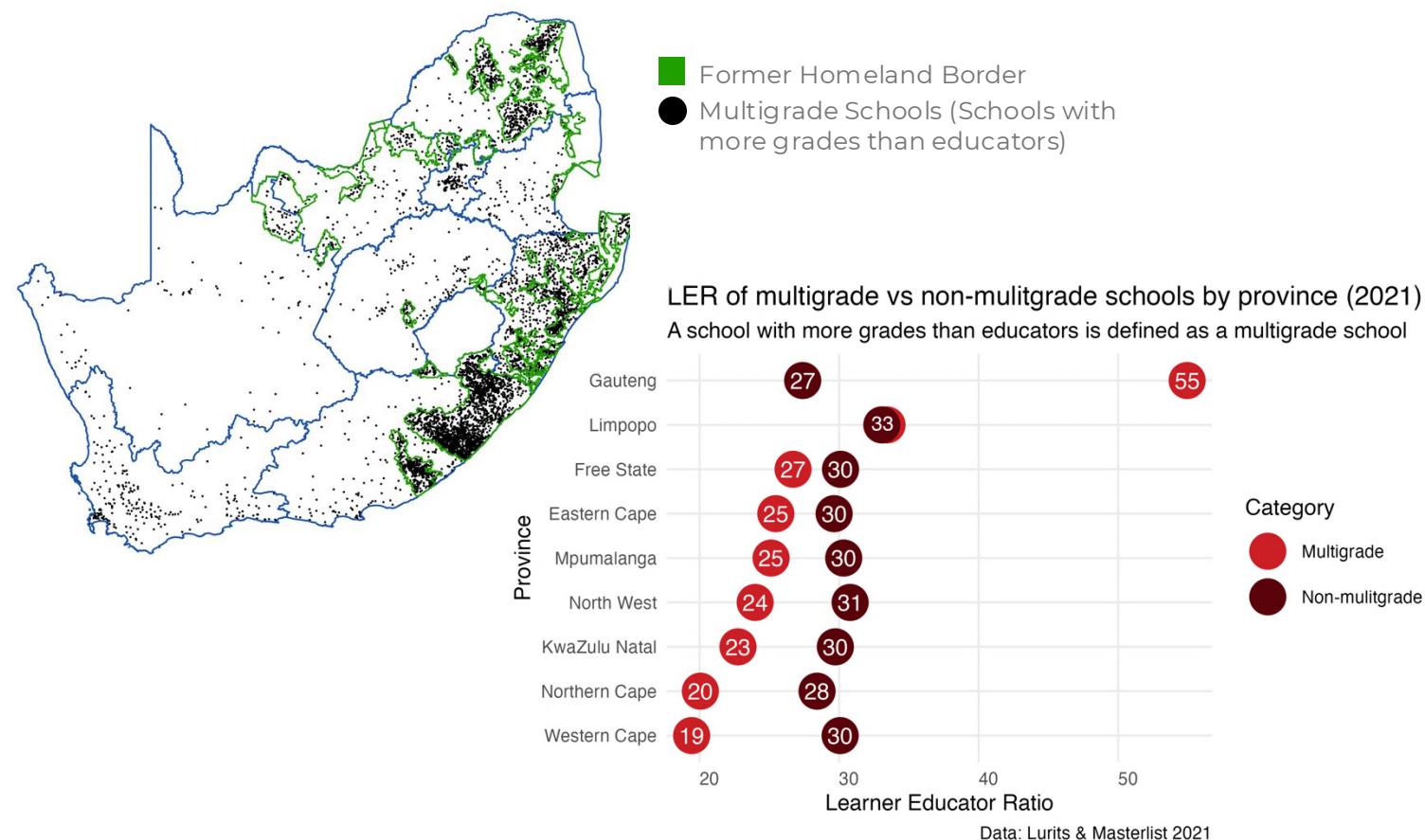
- Achieving efficiency levels of the Free State would allow reducing class sizes with fewer additional educators than anticipated
- When choosing between educator quantity or quality, the former likely has greater impact on learning
- Evidence **shows class size doesn't affect learning outcomes in South Africa** (Altinok and Kingdon, 2012)
- Reducing class sizes from 82 to 44 learners in Kenya yielded no learning improvements (Duflo et al., 2015), whilst classes of 54-100 learners showed no deteriorated outcomes in the Philippines or India (Datta and Kingdon, 2023)
- My calculations show that by efficiently utilising educators, **SA could maintain current class sizes with 22% fewer educators.**

Former Bantu Education schools persist as multigrade schools

Administration

Left: locations of South Africa's 5359 multigrade schools (out of 24k)

Right: disproportionate educator allocation to multigrade schools



Implications

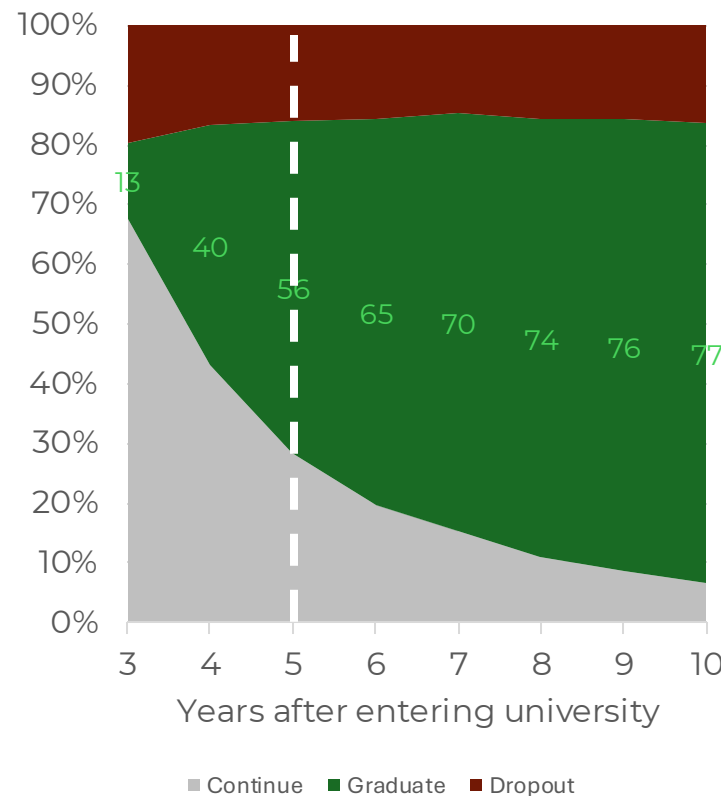
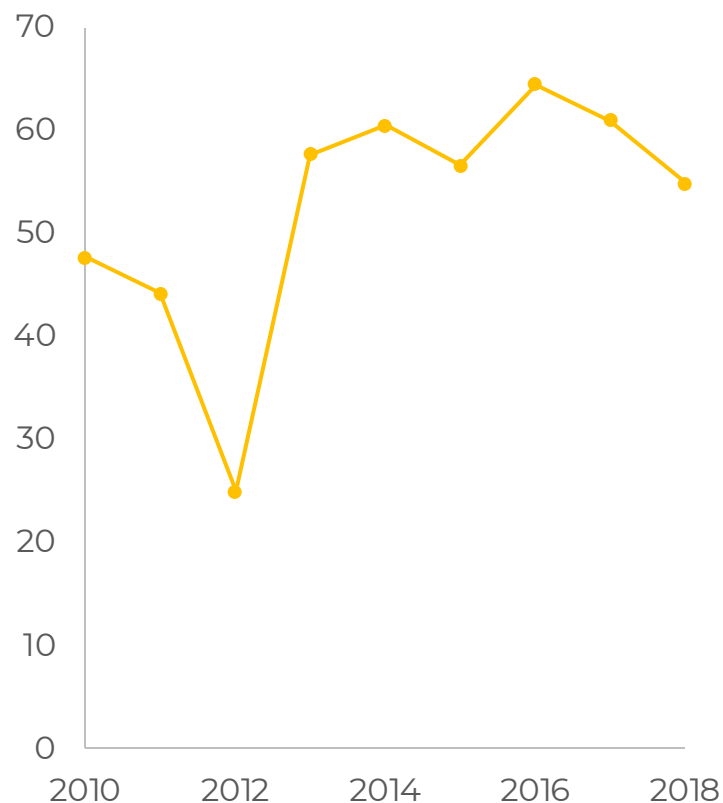
- Multigrade schools impede level-appropriate teaching
- Higher fixed costs per learner in multigrade schools, e.g. principal/learner ratios
- **Multigrade schools average only 2.2km from nearest school**
- Enrolment volatility suggests distance less constraining than assumed (Gustafsson, 2016)
- KZN+ beginning small school closures; data-guided approach needed
- Free State successfully closed 25% of small schools
- Multigrade learners: Eastern Cape 270k, KZN 160k, Limpopo 130k
- My Research *Rationalising micro, multigrade & under-subscribed schools in South Africa (2025)* shows **up to 2000 schools closable without increasing walking distances**

NSC results are likely predictive enough to rationalise NSFAS

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Left: % of NSFAS entrants graduating 5 years after entering (2010-2018)

Right: % of NSFAS 2013 cohort continuing, graduating, and dropping out



Implications

- Entrance and non-completion/funding cessation creates political discord, as seen in "FeesMustFall" (2015)
- **No evidence of economic returns for entering but not completing university**
- NSC & NBT results likely predict learners unlikely to graduate within bursary timeframe
- NSFAS awards cover degree duration plus 2 years; **44% don't graduate within 5 years, 35% within 6 years (maximum receipt period)**
- Historically, long tail of learners **remained NSFAS-enrolled 10+ years after first receipt** (De Villiers et al., 2013); recent data unavailable
- Universities incentivised to admit those unlikely to complete

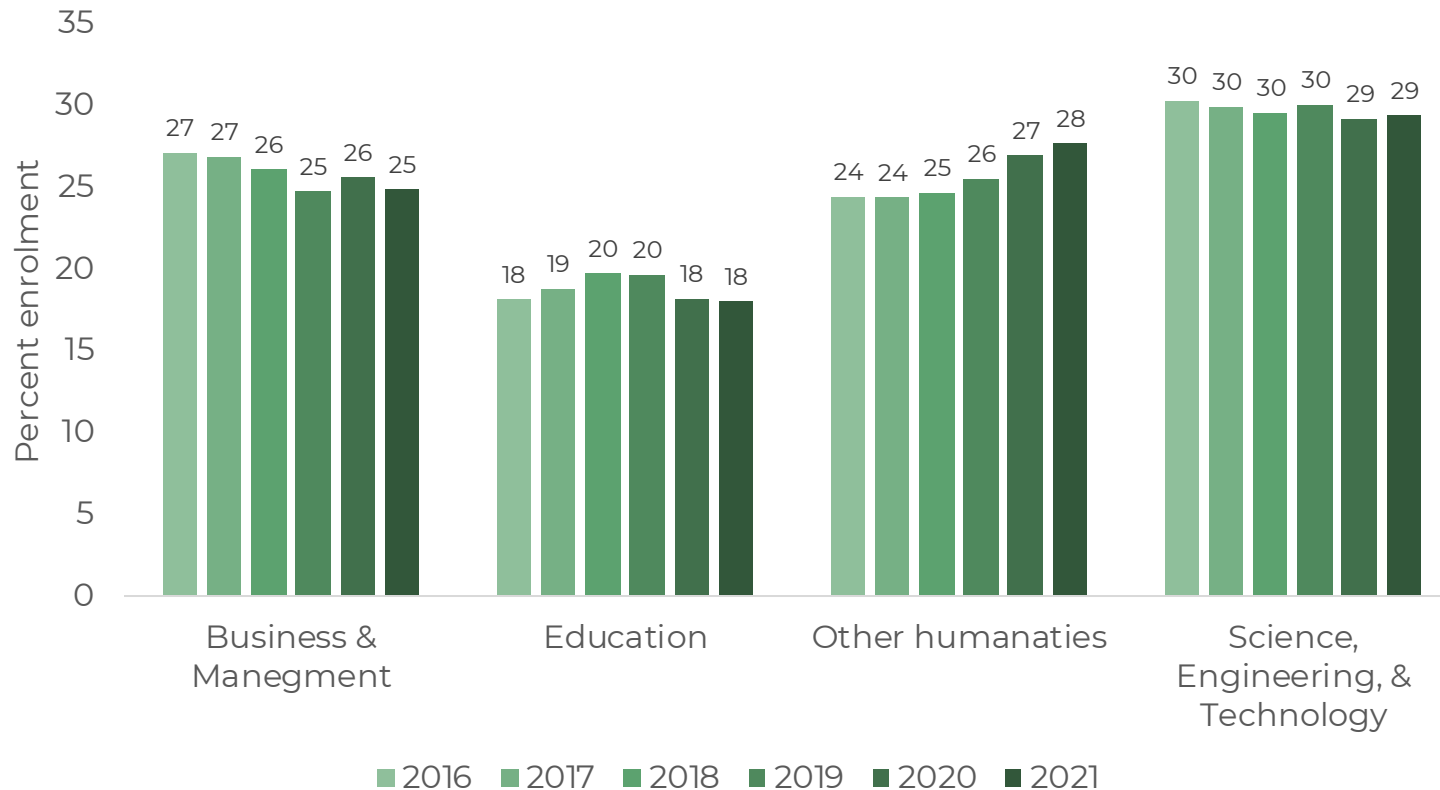
Source: Author from DHET (2023)

The cumulative number of dropouts declines in the original data. This is theoretically impossible unless rejoining dropouts are not counted as new entrants, but removed from the count of dropouts. These data follow learners who at some point received the bursary, it does not imply that they continue to receive the bursary in the years given.

Are employment priorities reflected in PSE enrolment?

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Percent enrolment in CESM categories 2016-2021



Implications

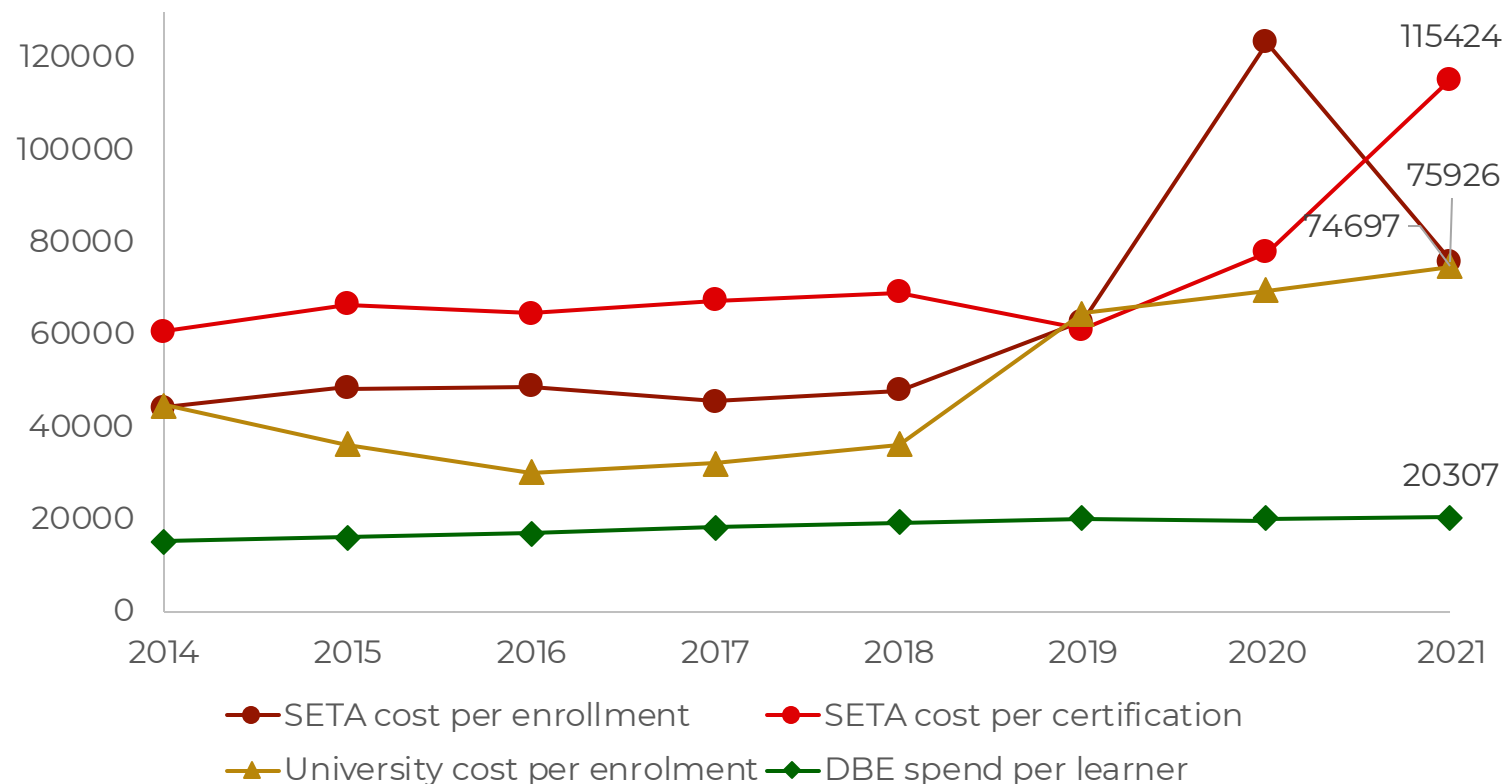
- 1-in-5 university learners is enrolled in an education program and half are enrolled in a humanities programme.
 - Is this adequately reflective of the skills shortages in South Africa?
- The humanities are growing and absorbing enrolment from disciplines with a likely higher public return on investment.

Source: Author from Department of Higher Education (2021)

Do Skills Development Learners cost the country more than universities?

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SETA & University cost per learner enrolled and certified



Notes: University costs include the NSFAS bursary (National Treasury Budget Review, 2014-2022) plus the DHET (2021) Public Higher Education Institute funding estimate.
Enrolments, and certification numbers from the Department of Higher Education & Training (2021)
SETA disbursed values from the Department of Higher Education & Training (2021)
Values are in nominal Rands

Implications

- **University enrolment typically costs less than SETA enrolment**
- Compared to universities SETAs are more costly despite no research obligations and shorter programmes
- QCTO transition hasn't reduced national costs
- **Non-qualifying SDL learners cost country ~R2.7b annually**
- Little evidence of employment benefits or state ROI from SETA/SDL programmes
- Currently 21 SETAs with multiple concurrent obligations
- **We tax employment a net R13b annually (2021/22)**
 - Skills development levy: R19b;
Employment Tax Incentive: R6b



Part 2: Policy Recommendations

For:

Educating South Africa during fiscal contraction

Reducing unemployment

Increasing inclusive economic growth

Increasing the tax base

Scoping fiscal rationalisation

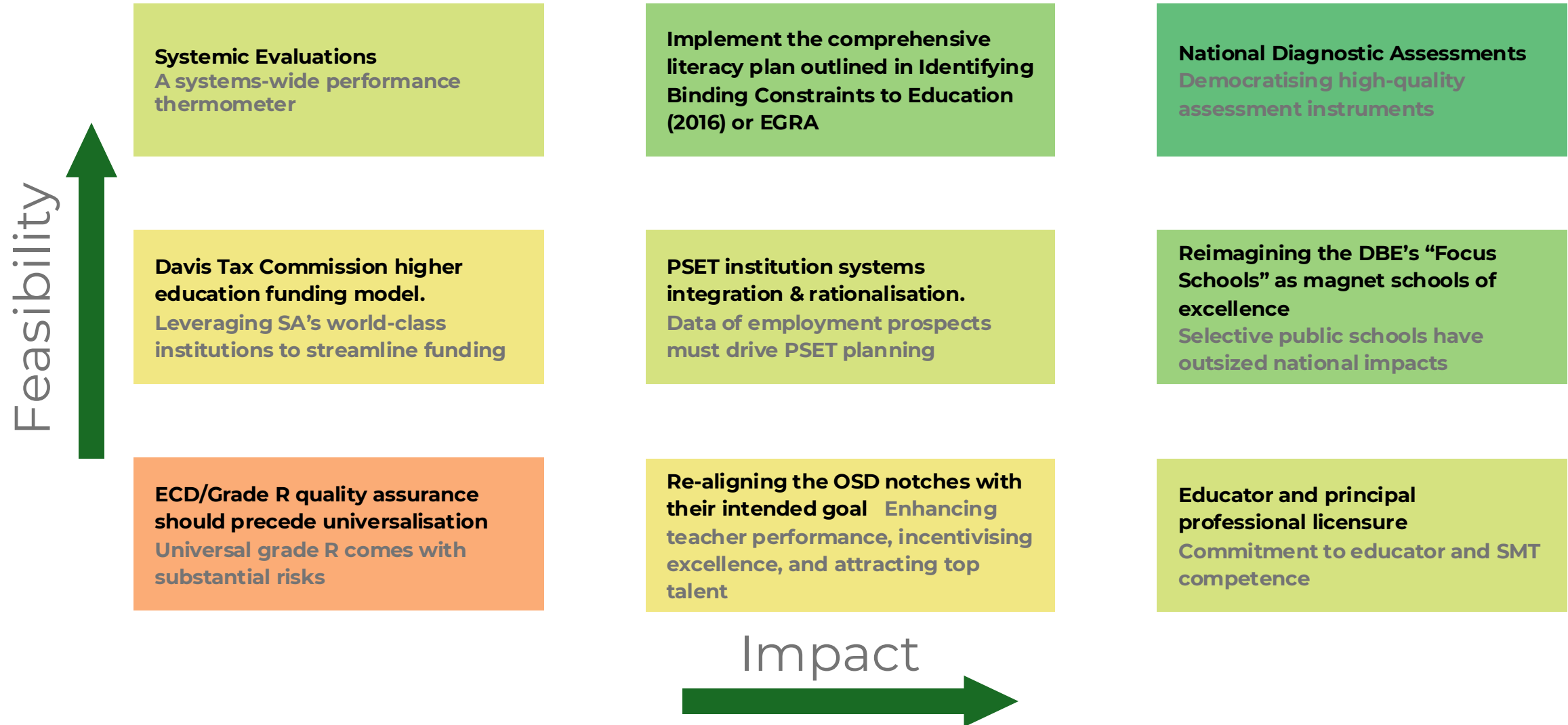
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- Van Der Berg, S., Spaull, N., Wills, G., Gustafsson, M., and Kotze, J. 2016. *Identifying Binding Constraints in Education: synthesis report for the Programme to support Pro-poor Policy development (PsPPd)*
- *National Plan for Post School Education and Training 2021-2030* (DHET, 2021)

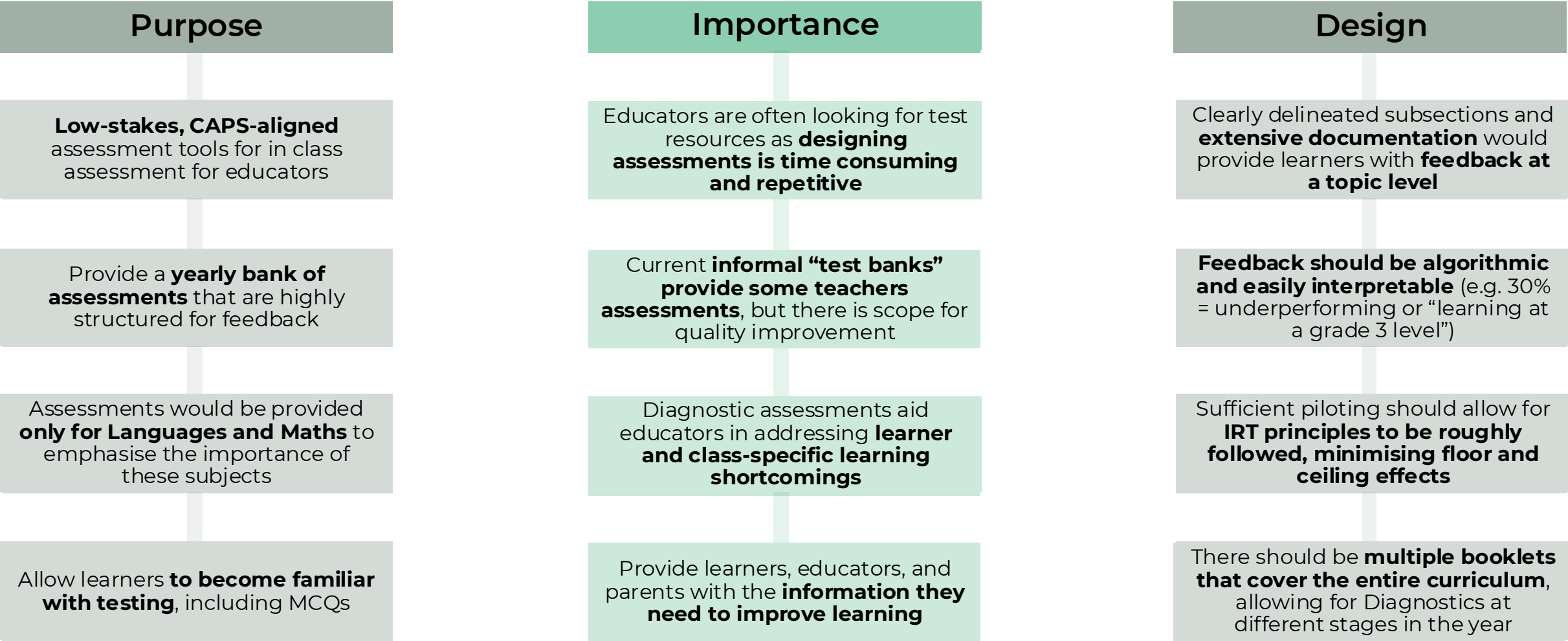
Executive summary of policy recommendations

Policy



1) Diagnostic/Formative Assessments

Democratising high-quality assessment instruments



2) Systemic Evaluations

A systems-wide performance thermometer

Purpose

South Africa participates in a number of international large-scale assessments: TIMSS in maths and science, PIRLS in reading, & SACMEQ in maths, reading, & HIV

South Africa needs a **higher frequency of assessments across the grades** (3,6, & 9) to better understand the health of the education system

These assessment will provide a learning score that is **robust to comparison between provinces and over time**

Importance

Current measures of education systems level improvement **are not fit for purpose**, notably the NSC pass rate

Refocusing the system on foundational literacy and numeracy requires a measure of progress at those grades

Information of where the learning system needs assistance is crucial

Design

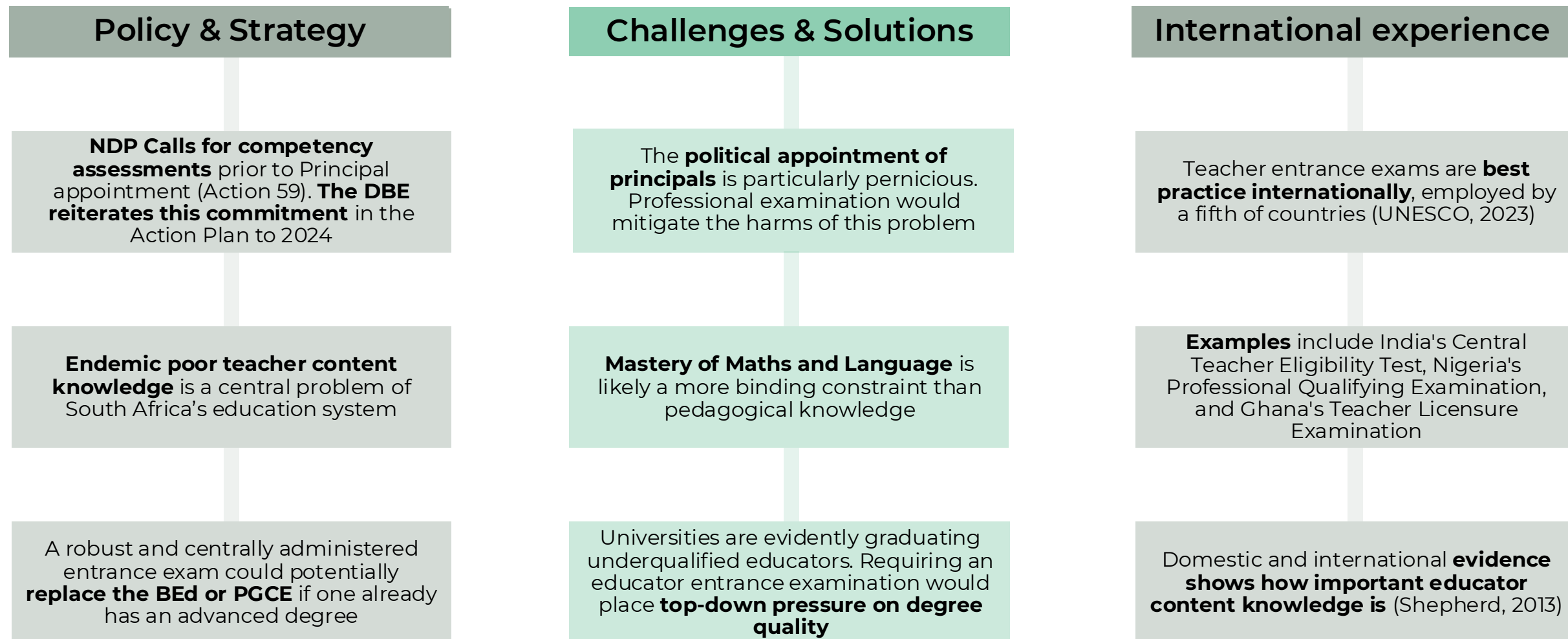
The assessment should **follow IRT principles, be externally monitored, and collect extensive anonymous learner information**

These results will also allow robust analysis of the **determinants of learning** at the learner level

The assessments should be **coupled with current assessment initiatives**, such as the School Monitoring Survey

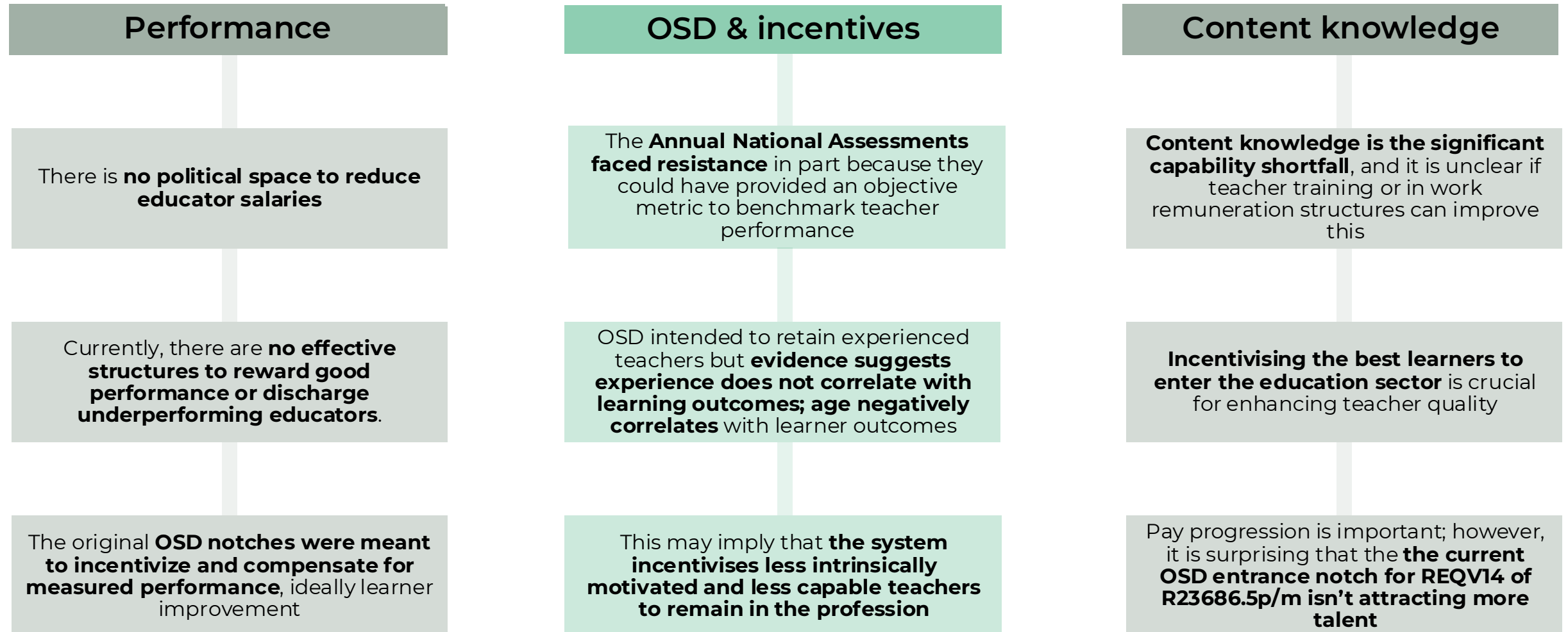
3) Educator and principal professional Licensure

Commitment to educator & SMT competence



4) Re-aligning the OSD notches with their intended Goal

Enhancing Teacher Performance, Incentivizing Excellence, and Attracting Top Talent



5) Reimagining the DBE's "Focus Schools" as magnet schools of excellence

Basic Ed Policy

Selective public schools have outsized impacts

Pedagogical assumptions

The DBE Action Plan (2022), emphasise on robotics, coding & entrepreneurship, is **predicated on a level of maths proficiency that is unattainable** in the short term.

Universities experience high dropout rates in technical subjects not due to lack of early exposure, but due to **inadequate maths skills**

The learning **foundation of the Fourth Industrial Revolution is still mathematics**, as evidenced by the focus on mathematics in the leading industrial nations, such as China and Singapore

The **mathematics teaching capacity in South Africa is severely constrained**. Focusing on gifted learners as the future industrial leadership could have outsized effects

Revised focus

Focus Schools expanded as highly selective, magnet-style schools of excellence

Educators and principals could nominate learners for entrance assessments

These schools would integrate advanced education in language and mathematics, aligning with **successful international models from Vietnam, Singapore, and South Korea, & Kenya**.

Formalised processes of **streaming within schools**, perhaps relying on Diagnostic Assessments, will likely also improve teaching at the right level

6) ECD/Grade R quality assurance should precede universalisation

Universal grade R comes with substantial risks

Risk

“They pretend to do the reforms that look like the kind of reforms that successful countries do, but **without their core underlying functionalities**” (Pritchett, 2011)

The Millennium Development Goal of universal basic education has been criticised for prioritising quantity of quality of education

Currently, **grade R is being universalised without a deeply embedded quality assurance** mechanism

Evidence supporting the expansion of grade R is limited and sometimes negative even in developed countries (Baker, Gurber & Milligan, 2008). Reduced caregiver exposure is a substantial risk factor.

Mitigation

Working backwards from outcomes to policy can be more important than mimicking the appearance of appropriate policy

Improve the evidence base for expanding enrolment and progressively measure outcomes as ECD is universalised

Many countries **have school readiness assessments, administered by grade 1 educators**. Tracking these results and staggering rollout could provide vital information (including on stunting)

Norms and standards are important, but with capacity in the education system already spread thin, **it is a concern whether ECD can be appropriately monitored**

7) Binding Constraints (2016) Literacy Plan

An ambitious but realisable plan to get SA reading for meaning

Priority Early Grade Reading Goal for the DBE: "All learners read fluently and with comprehension by the end of grade 3."				
	1. PRIORITISE	2. PREPARE	3. IMPLEMENT	4. SUSTAIN
(A) Beginning	Fast-track plans to establish a Directorate of Primary Literacy.	Effectively brand and communicate the national early grade reading strategy and reading goals across all education tiers.	IN-SET on 'how to teach reading' administered across all districts for all foundation phase teachers.	Bi-annual feedback to all education tiers about school and district performance against measurable reading goals.
(B) Collaboration	Request an implementation analysis (IA) of prior early grade reading and literacy strategies.	Engage with DHET and education faculties to address system weaknesses identified in organisational capacity audit.	Developed PRE-SET course on 'how to teach reading' implemented across HEIs offering teacher training courses.	Independent and nationally representative test of Gr. 3 reading proficiency linked to national assessments.

8) Davis Tax Commission higher education funding model

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Leveraging our world-class institutions to streamline funding

Design & Implementation

Leverage the banking and financial services sector to administer loans to reduce administrative burden

Integrate loans into SARS, ensuring loans are repaid and leverage tax returns to enable repayment progressivity

Recognise the **limited crowding in of private financial institutions** in the provision of education loans

Loans & repayments

Repayment should be income contingent. Banks could have further discretion to finance degrees with government backing

Interest rates could be subsidised for the missing middle

Repayment **reductions or forgiveness could be implemented** for those in certain sectors, such as public service

Hybrid financing

A sliding scale where the **poorest receive NSFAS**, the missing **middle receives incentivised and subsidised loans** and the **wealthiest pay full tuition fees**

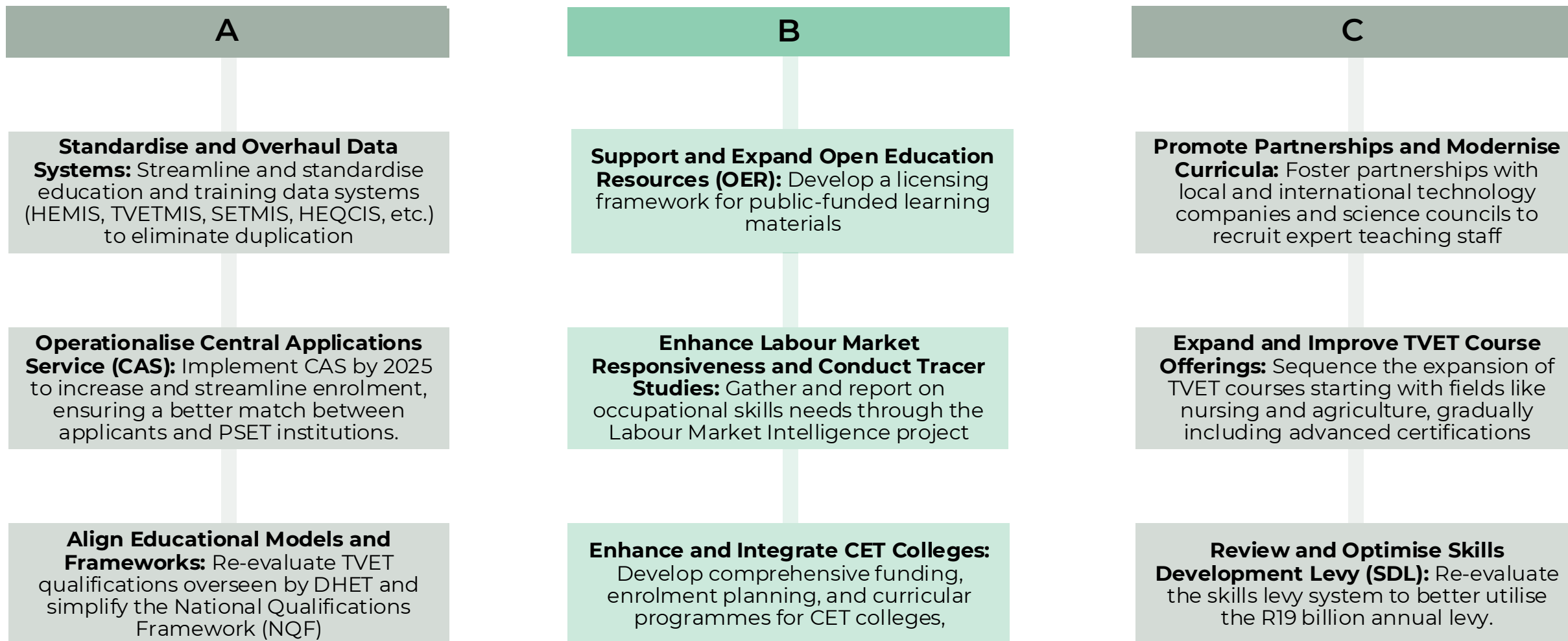
Banks would have an ambit to increase loans with government backing to leverage current capital

Explore additional revenue sources to support this model and ensure it is economically sustainable with minimal fiscal pressure on the government

9) PSET institution systems integration & rationalisation.

PSET

Data of employment prospects must drive PSET planning



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Education Policy For Inclusive Economic Growth During Fiscal Consolidation

SA-TIED – Operation Vulindlela

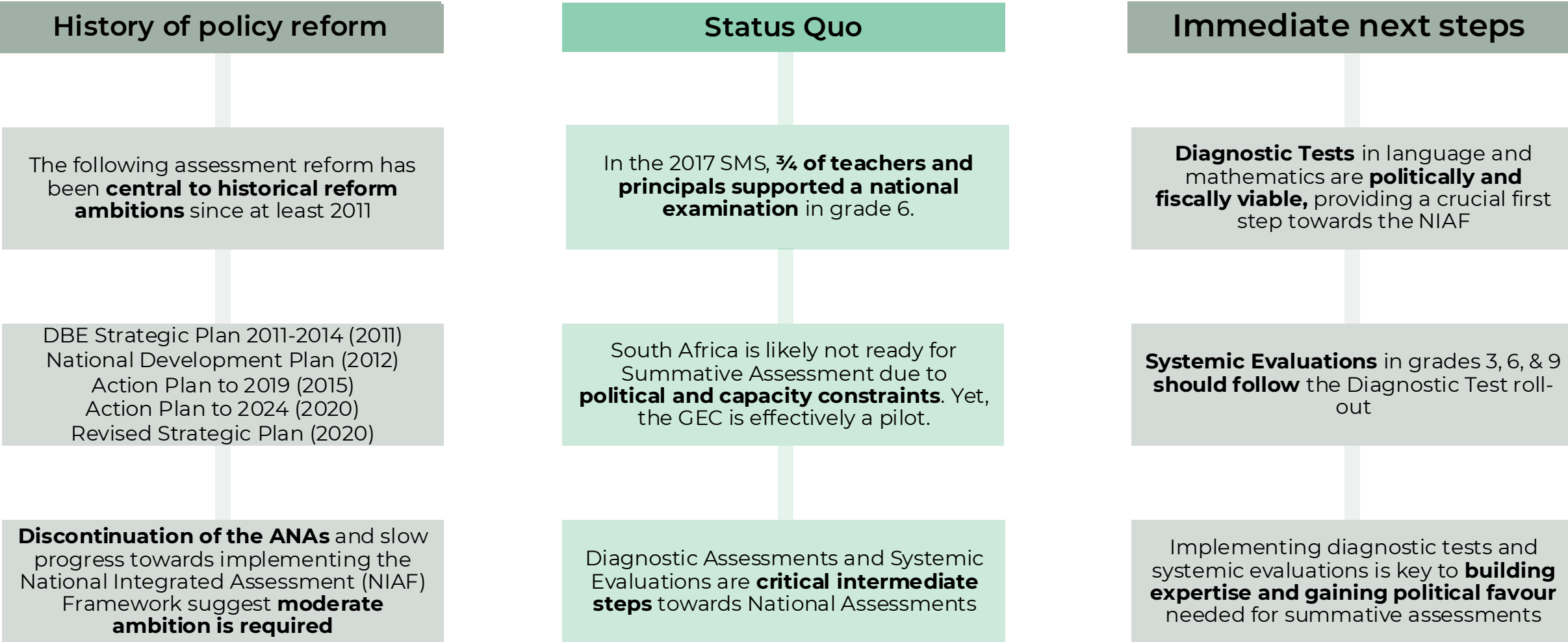
GTAC Webinar

Peter Courtney

pcourtney.quarto.pub/peter-courtney

Overview of assessment policy reform in South Africa

Improvement necessitates measurement



Appendix slides

The value of Diagnostic Assessments for different stakeholders

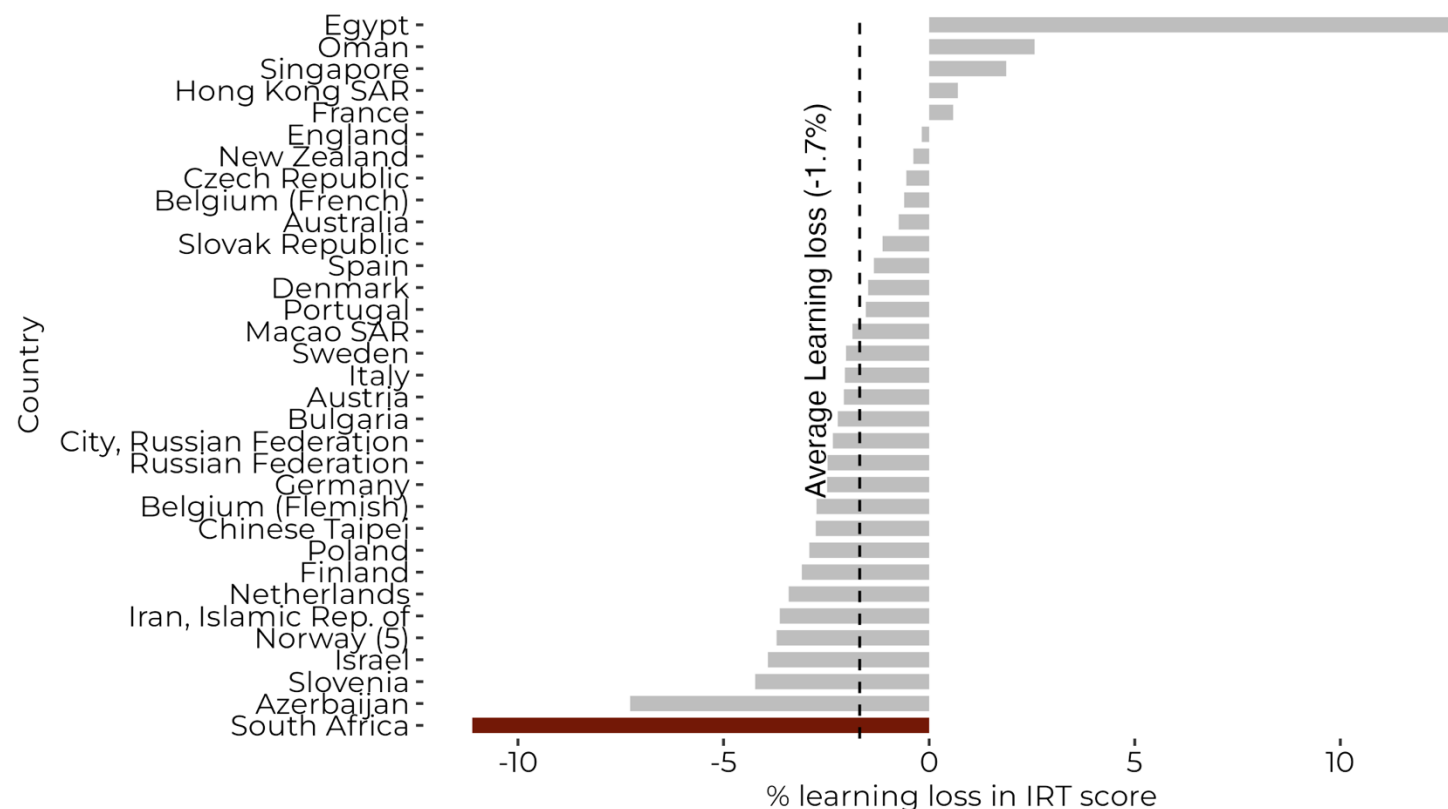
Value for all actors

Stakeholder	Value provided
Learners	Receive detailed results to identify educational ability and focus areas
Educators	Gain sophisticated tools to understand and address learner needs , guiding syllabus-focused lesson planning.
Parents & SGB	Obtain clear measures of child’s learning level, enhancing engagement and support.
Education systems	Assessments could inform planning and policy, though integration into systems like SA-SAMS must be carefully managed to avoid negative impacts.

Pandemic learning losses have significantly erased improvements

Learning

International comparison of PIRLS Learning Losses 2016 - 2021



Notes: South Africa's decline of 0.04SDs was nearly double the 0.23 mean but only the 10th largest.

.Improvement is shown as a percentage of IRT scores, which are more intuitive than SDs.

Refer to "[How Standard is a Standard Deviation](#)" for more details.

South Africa was assessed in 2022 in Grade 4

Source: Author from PIRLS Grade 4 2016 – 2021

Discussion

- The pandemic has erased about ± 10 years of progress in learning
- Compared to other countries, South Africa fared particularly poorly, losing the largest number of IRT points, while starting at the lowest base
- Although these results cannot be attributed to the pandemic alone, comparison between countries remains robust, with some caveats regarding delayed assessment
- There were signs of stagnation prior to Covid-19, notably in TIMSS Maths Grade 5, tested in 2019
- There have been no other national representative, psychometrically valid assessments pre and post-pandemic in South Africa

Overview of growth-oriented education policy recommendations

Policy

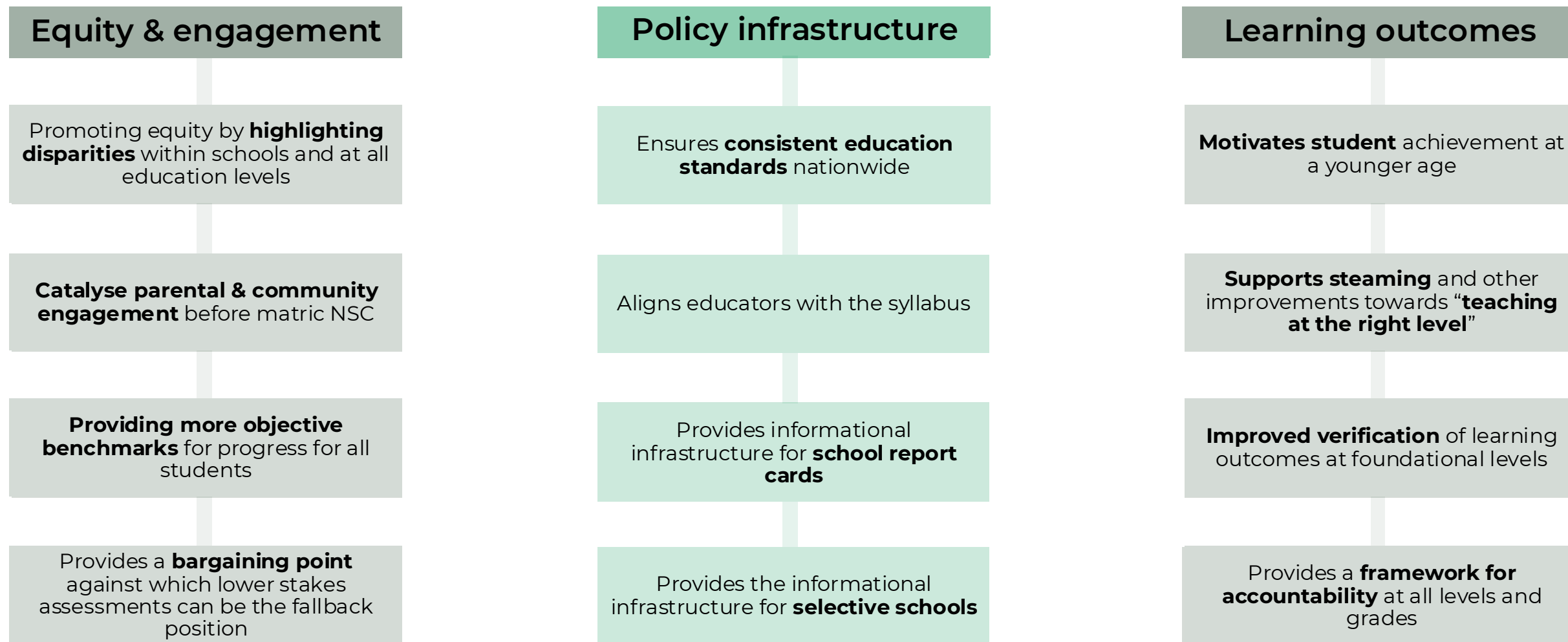
A rough Feasibility/Growth Potential policy matrix

Feasibility Growth Potential	1	2	3	4
1	Monitor anthropometric data in SA-SAMS	Quintile system rationalisation	School report card	ECD Expansion
2	Skills development levy rationalisation	Curriculum rationalisation towards literacy & maths & science	Increased fixed term contracts	New matric results indicator using % passing from Grade 10
3	Rationalise Post-provisioning norms	Aligning the OSD notches with their intended goal	ECD monitoring & quality Assurance with Thrive by Five	Systemic evaluations
4	Educator & Principal professional & promotional examinations	Focus Schools/National Schools of Excellence	Binding constraints (2016) literacy plan & universal Graded Readers	Diagnostic Assessments

Why should we still aim for Summative Assessments?

Assessment

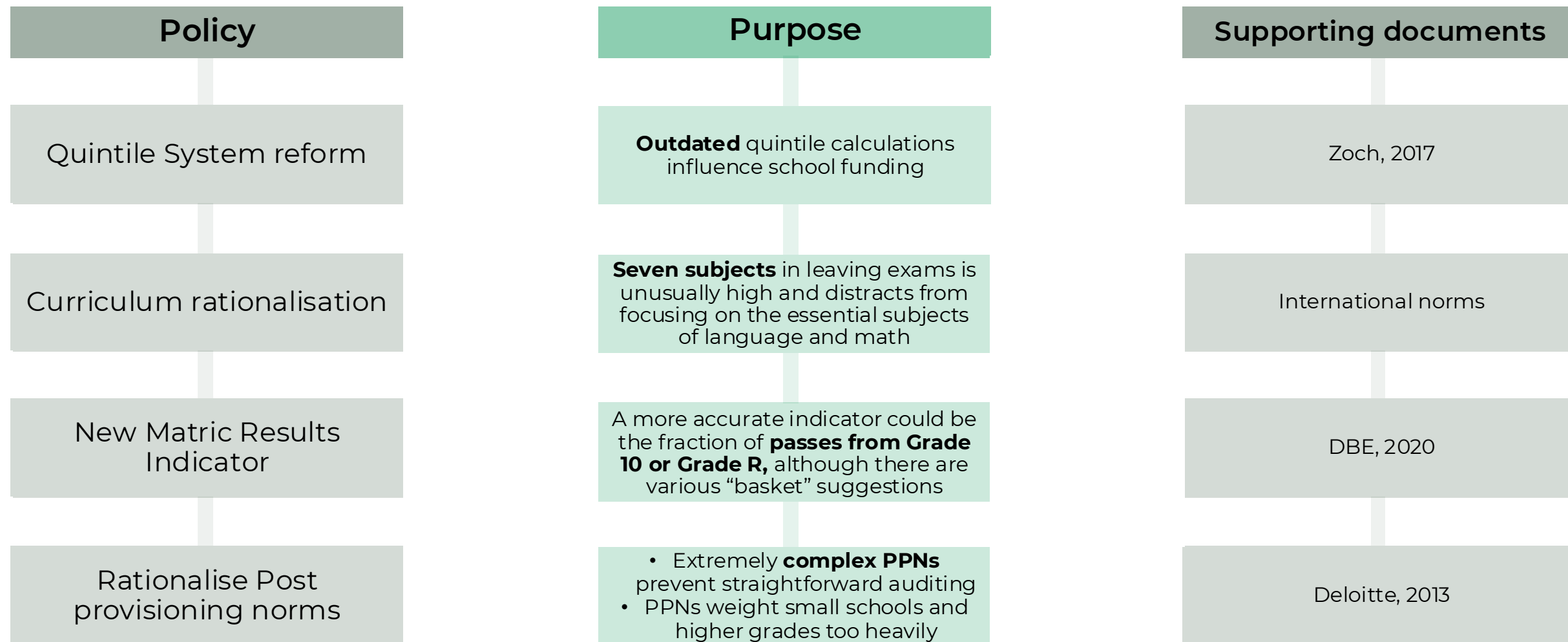
The enduring value of comprehensive assessments



(C) Capacity	Request a capacity audit of the education system to effectively teach reading to learners in early grades. Early literacy research in African languages declared a NRF priority area	Collaborative engagement with the DHET and education experts to develop PRE-SET and IN-SET training courses on 'how to teach reading'.	Foundation phase teachers and HODs track oral reading fluency and DBE workbook coverage of individual learners using SA-SAMs.	A ministerial performance agreement linked to reading goals housed outside the DBE.
(D) Accountability	Establish shared and independently benchmarked standards for reading in both English and mother tongue language.	Develop SA-SAMS module to capture oral reading fluency scores of Gr 1–4 learners and track curriculum as reflected in DBE workbook coverage.	PDEs and national DBE monitor system performance using the SA-SAMs reports on oral fluency and DBE workbook coverage.	Public awards for districts and schools for effective implementation of foundation phase reading strategies.
(E) Alignment	Reformulate a national early grade reading strategy using earlier strategies and findings from the IA.	Education experts to train current and newly appointed foundation phase reading specialists from province and district offices.	Public awareness campaign of early grade reading competencies in all provinces and in all official languages.	All important DBE planning documents to explicitly prioritise the early grade reading competency goal.
(F) Budget	Comprehensive budget analysis of the cost of implementing the national early grade reading strategy.	Specialist Foundation Phase reading experts deployed across districts and Foundation Phase class sizes reviewed	Ensure Foundation Phase classes are not overcrowded and no Foundation Phase class exceeds 45 learners	Create viable career paths for Foundation Phase teachers and specialists

Miscellaneous policy reforms

Small reforms sum to important improvements



Part 2.2: Post-Secondary Education & Training

This section draws heavily from the *National Plan for Post School Education and Training 2021-2030* (DHET, 2021) and will follow its structure

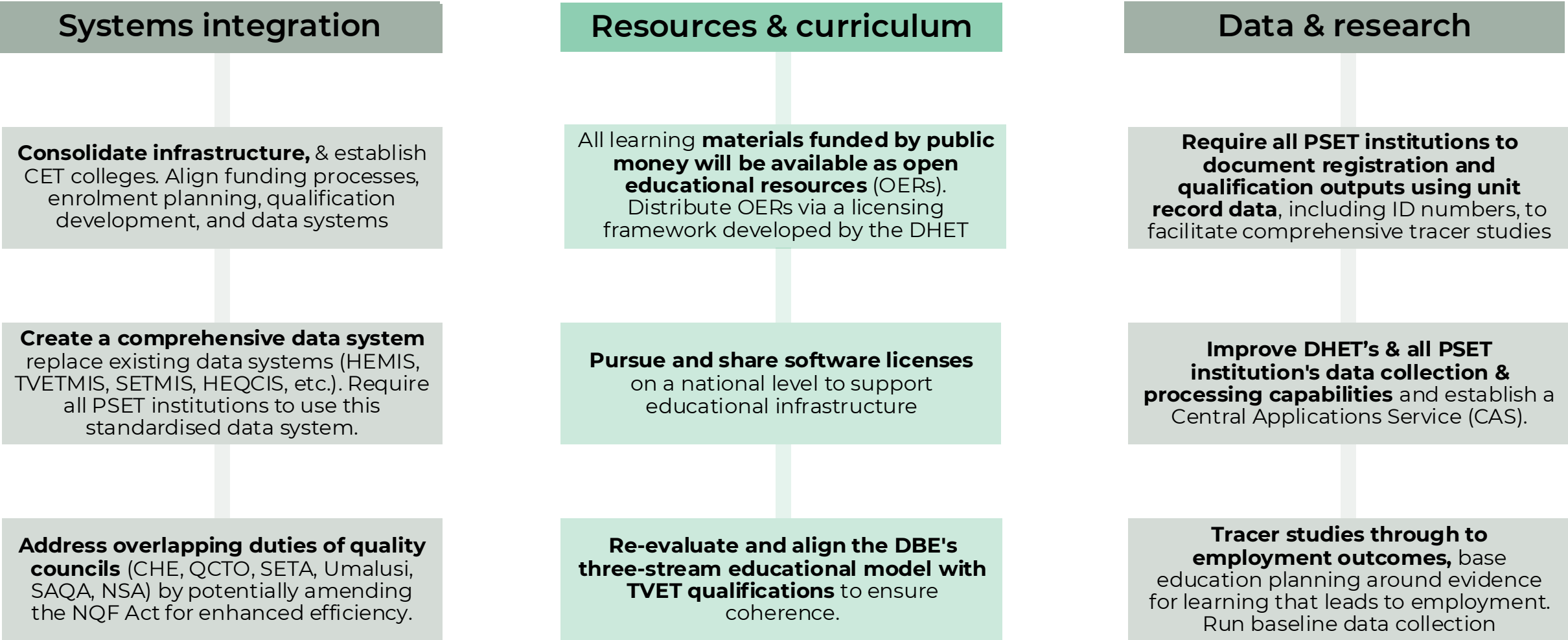
The reforms and plans that most aligned with growth will be highlighted

Some additional comments on policy for PSET

Outcome 1.1: Clear and streamlined roles and responsibilities of all key stakeholders

PSET

Data of employment successes must drive PSET



DHET (2021) Outcomes 1.3, 1.4, 2.1, 2.4

PSET

Inject clarity into the complex of PSET institutions

Outcome	Growth focused summary
Outcome 1.3: A simplified National Qualifications Framework (NQF)	Simplified NQF: Streamline the National Qualifications Framework to increase clarity and accessibility as detailed in DHET (2021).
Outcome 1.4: Increased articulation for students between and within the NQF sub-frameworks, and between and within institutions	Develop an integrated quality assurance and data system across quality councils to improve learner legibility of NQF sub-frameworks and institutions.
Outcome 2.1: Increased enrolment in all PSET sectors	Operationalise the Central Applications Service by 2025 , and increase SDL funding for skills development.
Outcome 2.4: A sustainable student financial aid system	Develop a learner funding model that ensures full coverage for the disadvantaged and continues cost-sharing for those who can afford it (This aligns well with the DTC)

Outcome 2.7: Sufficient staff to support expansion & Outcome 3.4: 4IR

PSET

Strategic Initiatives for PSET Advancement and Responsiveness

Technological Integration

Forge partnerships to **understand and strategically prepare for the impacts of the Fourth Industrial Revolution**, incorporating both local and international insights

Research optimal lecturer-student ratios to enhance student success across various academic fields

Enhance data gathering and analysis to support the development of a skilled workforce, aiding in the country's growth and global positioning (PC: maths, maths, maths!)

Develop a responsive PSET system by understanding and **interacting with demand and supply dynamics** through local to international community engagement & **tracer study analysis**

Collaborative Advancements

Collaborate with South African diaspora to strengthen teaching and research, turning brain drain into brain gain.

Start with higher certificates and advanced diplomas in nursing and agriculture, with plans to offer Level 7 and 8 qualifications as capacities develop

Implement socially responsive research and collaborations to build capacity and inclusivity in education

Gradually expand educational offerings to include advanced certifications as institutional capacities develop, meeting the evolving needs of the educational landscape

Outcomes 3.2: A diverse range of programmes responsive to the world of work

PSET

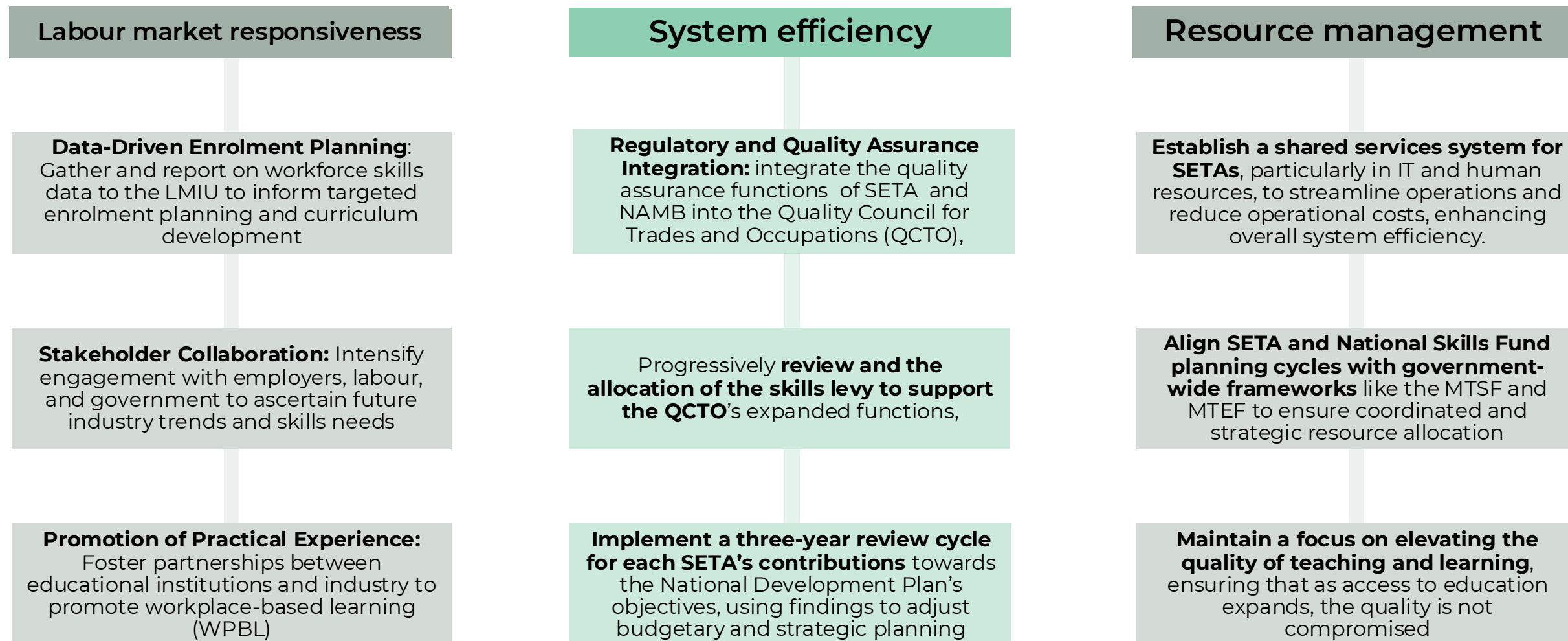
Inject clarity into the complex of PSET institutions

Outcome	Growth focused summary
Outcome 3.2: A diverse range of programmes responsive to the world of work	Enhance PSET programmes to better meet industry needs through data-driven enrolment planning by the LMIU, and improve responsiveness to employment
Outcome 3.3: A diverse range of mechanisms to improve research, innovation, commercialisation, and entrepreneurship in higher education	Collaborate with the DSI and NRF to identify and promote centres of excellence in research and innovation to foster institutional differentiation and growth
Outcome 2.1: Increased enrolment in all PSET sectors	Operationalise the Central Applications Service by 2025 , and increase SDL funding for skills development.
Outcome 2.4: A sustainable student financial aid system	Develop a learner funding model that ensures full coverage for the disadvantaged and continues cost-sharing for those who can afford it (PC: This aligns well with the DTC)

Outcome 4.1: Improved interface between education and training institutions and skills levy

PSE

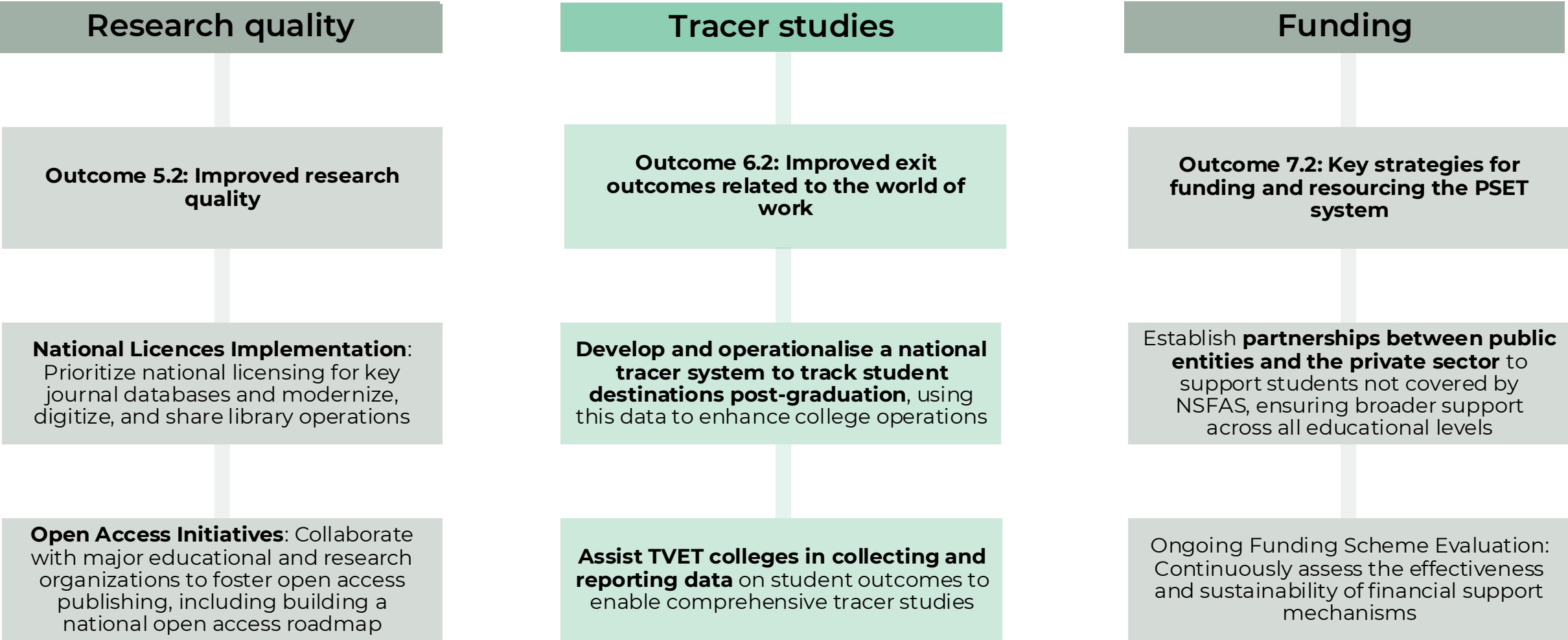
Optimising SDL institutes for workplace readiness



Infrastructure and quality while increasing throughput



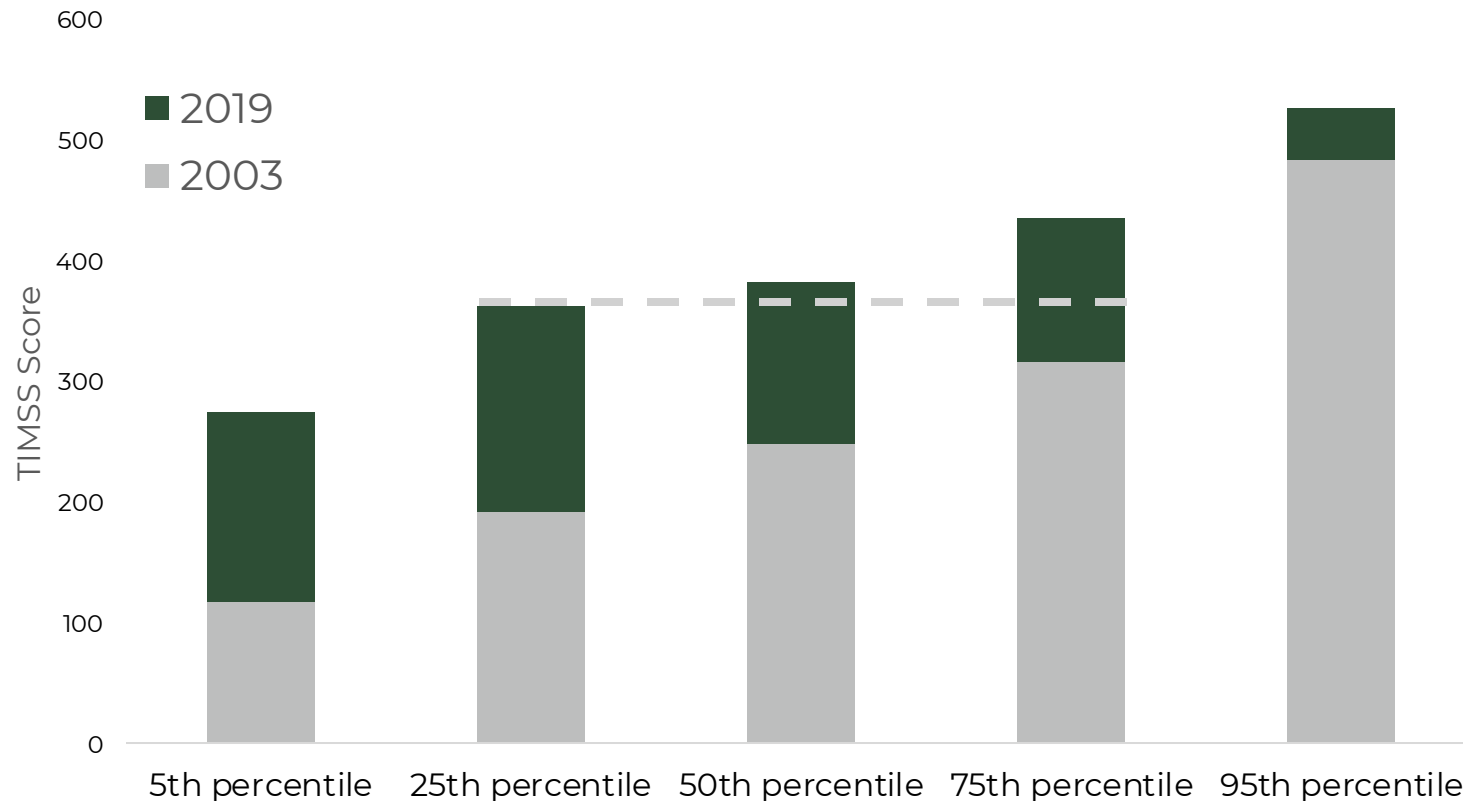
Quality research towards understanding PSET & employment



Learning inequality has reduced dramatically, but remains high

Inequality

Declining Inequality in TIMSS Grade 9 Maths 2003-2019



Source: Author from TIMSS (2003 & 2019)

The sample sizes of the top and bottom 5% are not large enough for statistically significant conclusions

Implications

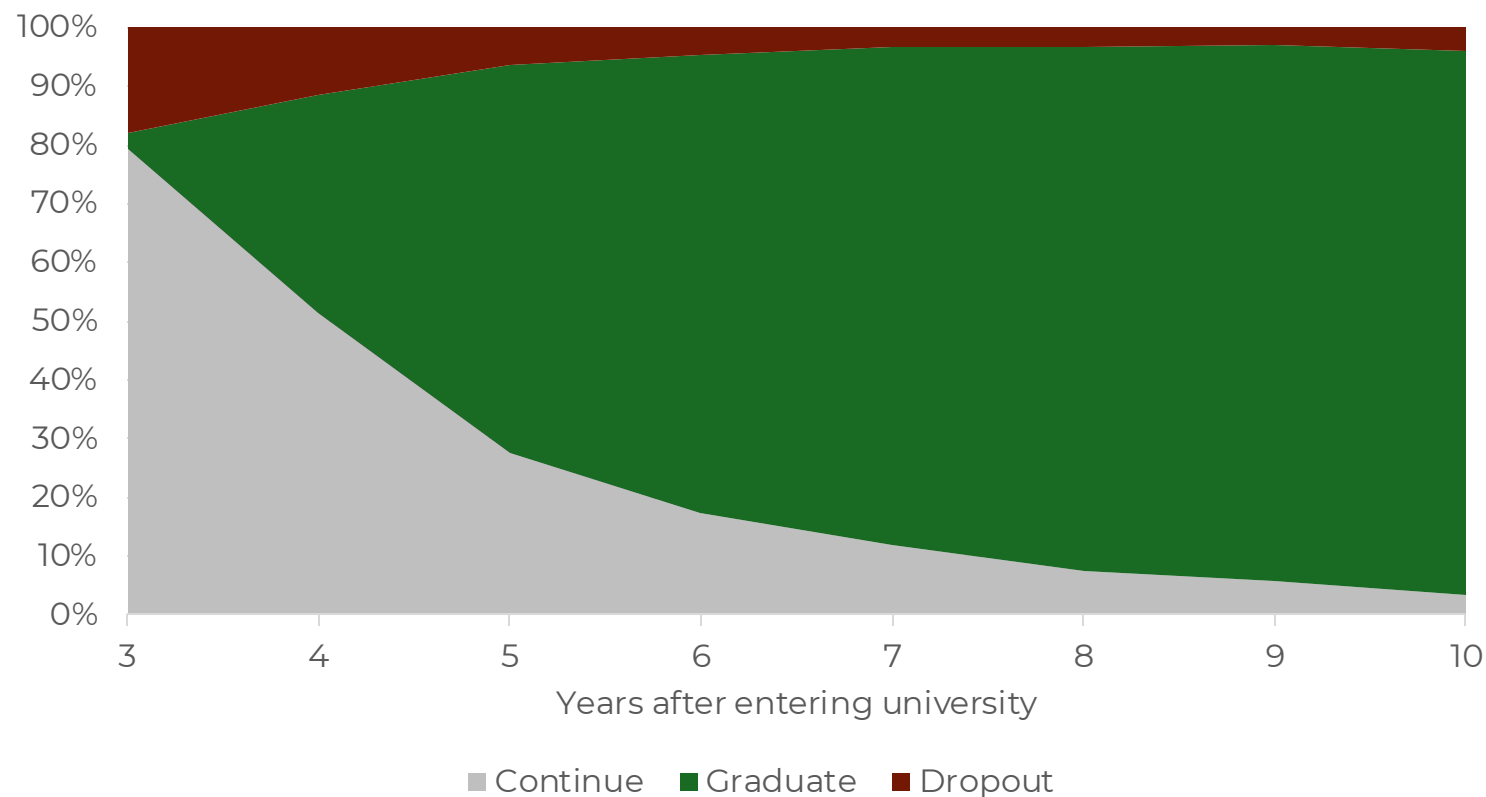
- Between 2003 and 2019, test scores more than doubled for the bottom 5% of South Africans in TIMSS Grade 9 Maths
- In the same period, learning only improved by 9% for the top 5%
- The top 5% threshold in TIMSS Grade 9 maths in South Africa is 527 points (2019). This is only 7% above the median for all TIMSS participating countries, **which are assessed in grade 8**
- These results must be carefully interpreted as 5% of the sample is not a statistically significant sample size. Nonetheless, the same pattern recurs at the 25 and 75 percentiles

Funza Lushaka recipients enjoy a high graduation rate

PSET

% of FL 2013 cohort continuing, graduating, and dropping out

Implications



- It is remarkable how high the graduation rate of Funza Lushaka recipients is
- Although this success must be lauded, without teacher quality assurances, and historically poor teacher content knowledge, the trade-off between quality and quantity must be carefully analysed

Source: Author from DHET (2023)