



Western Cape
Government

Education

FOR YOU



WORLD BANK GROUP



Western Cape Education Sector Analysis

© 2024 International Bank for Reconstruction and Development / The World Bank
1818 H Street NW, Washington, DC 20433
Telephone: 202-473-1000; Internet: www.worldbank.org

This work is a product of the staff of The World Bank and the Western Cape Education Department with external contributions. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of The World Bank, its Board of Executive Directors, or the governments they represent.

The World Bank does not guarantee the accuracy, completeness, or currency of the data included in this work and does not assume responsibility for any errors, omissions, or discrepancies in the information, or liability with respect to the use of or failure to use the information, methods, processes, or conclusions set forth. The boundaries, colours, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

Nothing herein shall constitute or be construed or considered to be a limitation upon or waiver of the privileges and immunities of The World Bank, all of which are specifically reserved.

Rights and Permissions

Photographs used in this publication have been supplied by the Western Cape Education Department (WCED). The WCED holds the copyright for all these photographs and has received all the required permissions to take these photos.

This work is available under the Creative Commons Attribution 3.0 IGO license (CC BY 3.0 IGO) <http://creativecommons.org/licenses/by/3.0/igo>. Under the Creative Commons Attribution license, you are free to copy, distribute, transmit, and adapt this work, including for commercial purposes, under the following conditions:

Attribution: Please cite the work as follows: "World Bank. 2024. Western Cape Education Sector Analysis. © World Bank."

Translations: If you create a translation of this work, please add the following disclaimer along with the attribution: *This translation was not created by The World Bank and should not be considered an official World Bank translation. The World Bank shall not be liable for any content or error in this translation.*

Adaptations: If you create an adaptation of this work, please add the following disclaimer along with the attribution: *This is an adaptation of an original work by The World Bank. Views and opinions expressed in the adaptation are the sole responsibility of the author or authors of the adaptation and are not endorsed by The World Bank.*

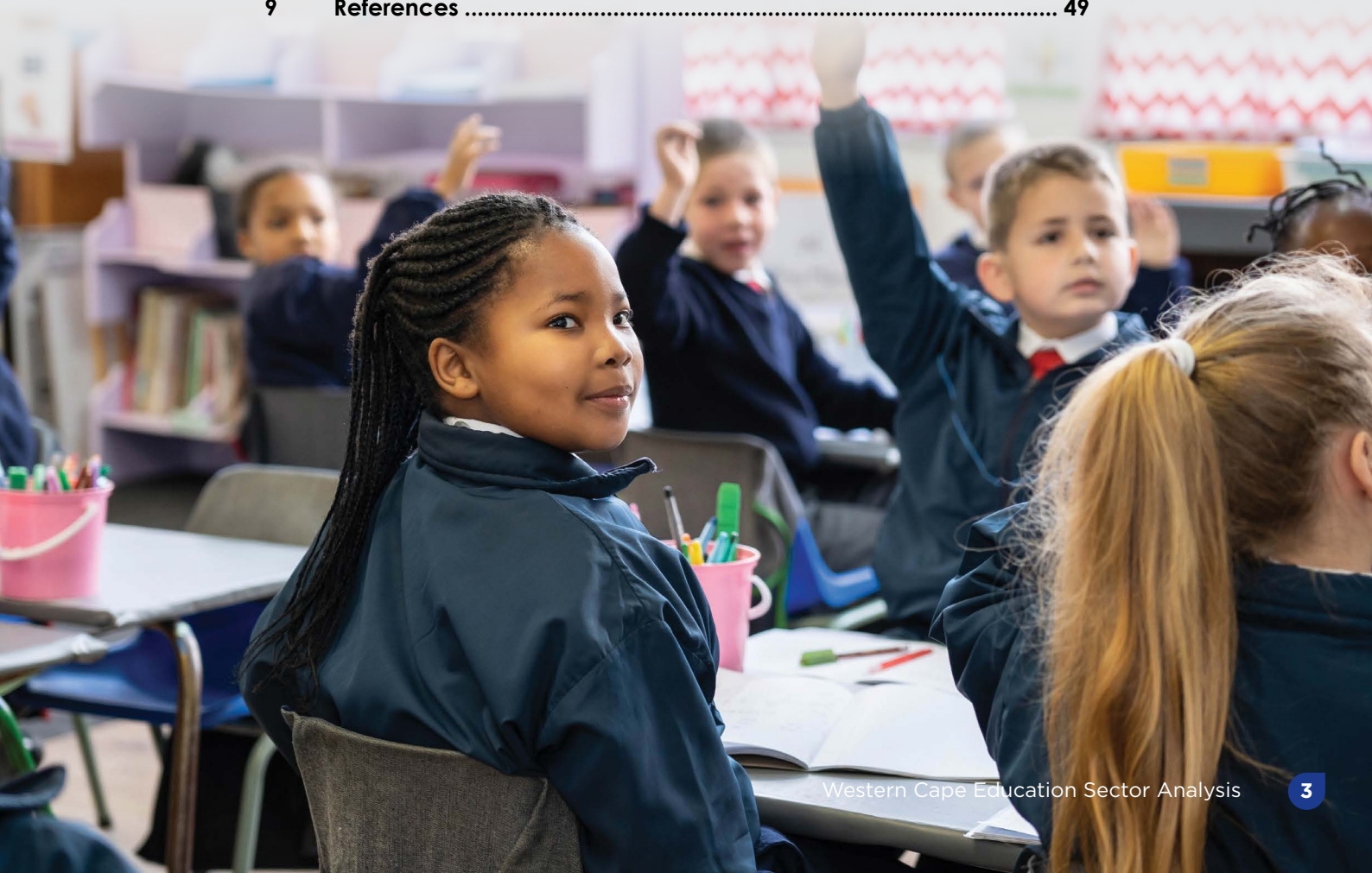
Third-party content: The World Bank does not necessarily own each component of the content contained within the work. The World Bank therefore does not warrant that the use of any third-party owned individual component or part contained in the work will not infringe on the rights of those third parties. The risk of claims resulting from such infringement rests solely with you. If you wish to re-use a component of the work, it is your responsibility to determine whether permission is needed for that re-use and to obtain permission from the copyright owner. Examples of components can include, but are not limited to, tables, figures, or images.

All queries on rights and licenses should be addressed to World Bank Publications, The World Bank Group, 1818 H Street NW, Washington, DC 20433, USA; e-mail: pubrights@worldbank.org.

Design and typesetting: Carla-Lee Lawrence
Front cover image: R.M. Nunes 1321344940 Getty Images

TABLE OF CONTENTS

	Acknowledgements	6
1	Summary	7
2	Introduction	10
3	Context of the Western Cape	10
4	Access to education is almost universal in primary education, but many learners start to leave the school system after Grade 9 in the Western Cape	13
5	Like the rest of South Africa, there is a learning crisis in the Western Cape	19
6	Spending on education is significant though there's room for better targeting of resources	25
7	How can the Western Cape Government support improvements in learning while also expanding access to education?	30
8	Bringing it all together	45
9	References	49



LIST OF

FIGURES

Figure 1	Progress in International Literacy Study (PIRLS) Grade 4 Reading Achievement, 2021	7
Figure 2	Summary of Priorities and Actions	9
Figure 3	The Western Cape Education Districts	11
Figure 4	Learners by Quintile and Province in Public Ordinary Schools in 2022.....	14
Figure 5	Education Access Profile, 2021	16
Figure 6	Repetition Rates by Grade and Phase, 2019.....	17
Figure 7	Projected Enrolment in Public Ordinary Schools in the Western Cape	18
Figure 8	Mathematics Scores of Grade 9 Learners (TIMSS 2019).....	19
Figure 9	Mathematics and Science Achievement at International Benchmarks by Fee Status, 2019	20
Figure 10	Mathematics Systemic Test Scores in Grades 3, 6, and 9, 2022.....	21
Figure 11	Inequality in Grade 3 Language Pass Rates by Quintile, 2019-2022.....	23
Figure 12	Comparing Systemic Test Scores with School-Based Assessment (SBA) Scores, 2022	24
Figure 13	WCED Budget Breakdown for 2020/21 to 2024/25.....	26
Figure 14	Recurrent Expenditure per Learner by Quintile and Fee Status for Primary and Secondary Grades for Public Ordinary Schools in 2021/22	27
Figure 15	Continuous Professional Development among Grade 9 Teachers in the Western Cape, 2019	36
Figure 16	Summary of Priorities and Actions	45
Figure 17	Actions that Support Improvements to the Efficiency and Effectiveness of Current Spending	47
Figure 18	Actions that Support the Expansion of the Education System and Implementation of Innovative Education Reforms	48

LIST OF

TABLES

Table 1	Learners, Educators, and School Counts in the Western Cape, 2022.....	13
Table 2	Education Financing Mandates for National and Provincial Government on Key Inputs.....	29

LIST OF ABBREVIATIONS

CAPS	Curriculum Assessment Policy Statements	MIG	Municipal Infrastructure Grant
CEMIS	Central Education Management Information System	MP	Mpumalanga
CPD	Continuous Professional Development	MPAT	Management Performance Assessment Test
CTLI	Cape Teaching and Learning Institute	NC	Northern Cape
DBE	Department of Basic Education	NIECD	National Integrated ECD
DHS	Demographic and Health Survey	NPO	Non-Profit Organisation
DOH	Department of Health	NSC	National Senior Certificate
DSD	Department of Social Development	NSNP	National School Nutrition Programme
EC	Eastern Cape	NW	North West
ECD	Early Childhood Development	OECD	Organisation for Economic Cooperation and Development
EGRS	Early Grade Reading Study	PIRLS	Progress in International Reading Literacy Study
EIG	Education Infrastructure Grant	PPP	Public Private Partnership
ELOM	Early Learning Outcome Measures	PYEI	Presidential Youth Employment Initiative
EPG	Education Partnership Group	SAECMEQ	Southern and Eastern Africa Consortium for Monitoring Education Quality
ESA	Education Sector Analysis	SBA	School Based Assessment
FET	Further Education and Training	SGB	School Governing Body
FS	Free State	SMT	School Management Teams
GDP	Gross Domestic Product	SNE	Special Needs Education
GP	Gauteng	SOP	School Operating Partner
HEI	Higher Education Institution	TIMSS	Trends in International Mathematics and Science Study
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome	TVET	Technical Vocational Education and Training
ITE	Initial Teacher Education	WC	Western Cape
KZN	KwaZulu-Natal	WCED	Western Cape Education Department
LCR	Learner to Class Ratio	WCDOH	Western Cape Department of Health and Wellness
LER	Learner to Educator Ratio	WCDSO	Western Cape Department of Social Development
LP	Limpopo		
LSF	Light Steel Frame		
MICS	Multiple Indicator Cluster Survey		

ACKNOWLEDGEMENTS

This Education Sector Analysis was jointly prepared by the World Bank and the Western Cape Education Department (WCED).

The World Bank team leading this study comprised of Elizabeth Ninan Dulvy (Programme Leader for Human Development, Southern Africa), Harry Patrinos (Senior Advisor, Education), Jee-Peng Tan (Consultant), Gunilla Pettersson Gelande (Consultant), Newman Burdett (Consultant), Mamy Rakotomalala (Consultant), Alasdair Fraser (Consultant), Jesal Kika-Mistry (Consultant) and Martin Moreno (Consultant). The World Bank team's research partner for this study was the Research on Socioeconomic Policy (RESEP) at the University of Stellenbosch.

The Western Cape Education Department contributions were coordinated by Salie Abrahams (Deputy Director-General: Education Planning) and Ian de Vega (Chief Director: Business Intelligence Management), with technical contributions by the WCED's Broad Management and Leadership team under the management of Deputy Director-Generals Haroon Mahomed (Curriculum and Assessment Management), Salie Abrahams (Education Planning), Alan Meyer (Institution Development and Co-ordination), and Leon Ely (Corporate Services and Chief Financial Officer).

The team is also grateful for inputs and guidance received from the Western Cape Government, particularly the Office of the Minister of Education in the Western Cape, officials from the Provincial Treasury David Savage, Shirley Robinson, and Julinda Gantana as well as Hildegard Fast in the Office of the Premier in the Western Cape.

This Education Sector Analysis was conducted with guidance and support from the Member of the Executive Council for Education in the Western Cape, Minister David Maynier; the Head of Department for the WCED, Brent Walters; the World Bank's Country Director for South Africa, Satu Kahkonen; the World Bank's Regional Director for Human Development, Daniel Dulitzky; The World Bank's Manager for Operations for South Africa, Asmeen Khan; and the World Bank's Practice Manager for Education for South Africa, Meskerem Mulatu. The team also benefited from inputs and suggestions from Jaime Saavedra, former Global Director for Education, World Bank and other education stakeholders in the Western Cape province.

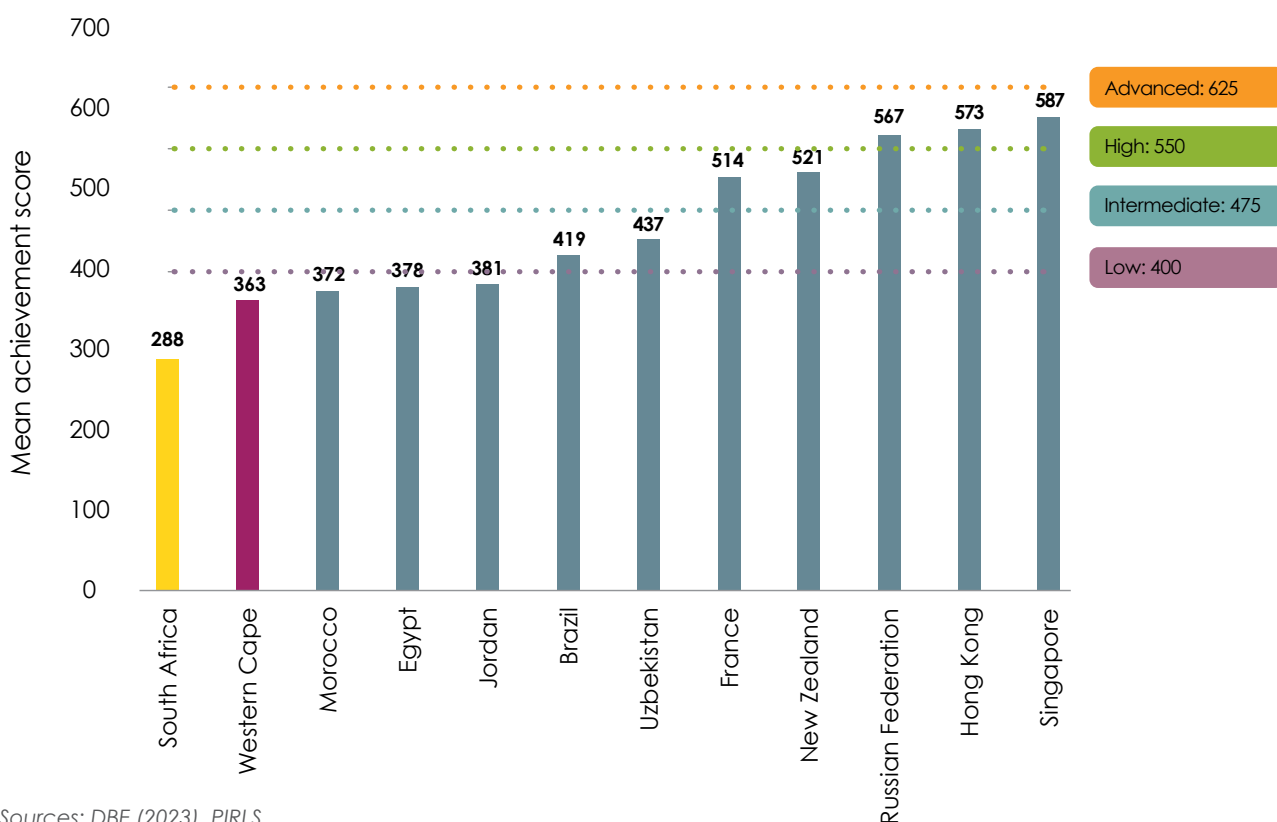
The team appreciates the insightful feedback received from peer reviewers Halsey Rogers (Lead Economist, World Bank), Louise Mvono (Country Manager for the Republic of Congo, World Bank), Pedro Cerdan-Infantes (Programme Leader for Human Development), Luis Crouch (Senior Economist Emeritus, Research Triangle Institute), and Martin Gustafsson (Researcher and Advisor to the Department of Basic Education, South Africa).

1. Summary

The Western Cape has higher learning levels than other provinces in South Africa, according to international assessments. This is due to a combination of factors which include: 1) the province makes a concerted effort to provide school subsidies and other support to learners from disadvantaged households above and beyond what is required by national policy, 2) the province spends a significant amount on transport for learners to get to school and for students with special needs compared to other provinces, 3) the Western Cape is the only province in South Africa that consistently administers learning assessments on an annual basis to track learning progress, and 4) the province also implements its own targeted and comprehensive programme to respond to learning losses as a result of COVID-19-related school closures.

Despite these achievements, like the rest of South Africa, there is a learning crisis in the Western Cape. In 2016, 55 percent of Grade 4 learners in the Western Cape were found to be functionally illiterate based on an international assessment that measures learning achievement (Progress in International Reading Literacy Study, 2016). Reading levels further dipped in 2021 due to COVID-19-related school closures. The figure below shows that while, on average, the Western Cape is doing better than South Africa on reading achievement (score of 363 for the Western Cape as opposed to 288 for South Africa), it still falls below the PIRLS 'low international benchmark' score of 400. Without adequate foundational skills, learners in the Western Cape will not be prepared to respond to the needs of the labour market as the province pursues growth in the financial, tourism and other knowledge-led sectors, and competes in international markets.

Figure 1: Progress in International Literacy Study (PIRLS) Grade 4 Reading Achievement, 2021



Sources: DBE (2023), PIRLS.

In addition to low learning levels, there is pressure on the education system in the Western Cape to continue to expand to accommodate the growth in the school age population (which is a combination of population growth and migration into the province). This growth will be mostly in secondary education requiring around 2,900 additional classrooms and 3,200 teachers between now and 2030.

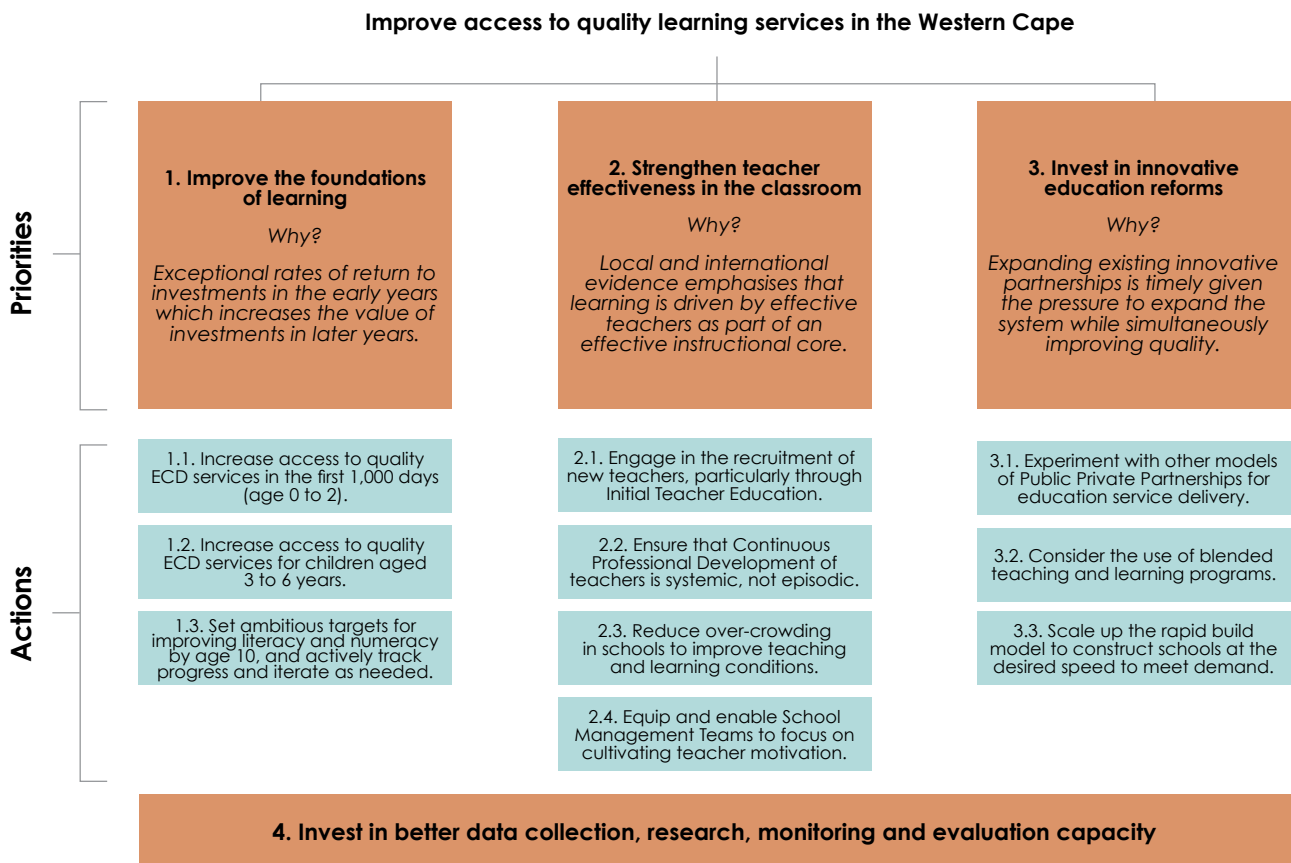
What can the Western Cape do to address this dual challenge of improving the quality of its learning in schools whilst at the same time, increasing access to schooling to accommodate the projected growth in enrolment? This report offers four distinct, and interlinked solutions to the issue:

First, strengthen the foundations of learning through access to better quality Early Childhood Development (ECD) services and ensure that all children can read for meaning by age 10 (or Grade 4). Improving access to quality ECD services will require a multifaceted effort, including training caregivers in play-based learning, unblocking costly barriers to opening and running quality ECD centres in the most disadvantaged communities, and supporting non-centre-based ECD services. Examples from places such as the state of Mississippi in the United States and the municipality of Sobral in Brazil have shown massive improvements in learning levels of students by making investments in pre-kindergarten programmes targeting low-income areas and focusing on ensuring that all learners can read and write in the first few years of primary education. In both cases, there were a few elements of the respective interventions that stood out: 1) there were clear standards and goals set in terms of learning levels that needed to be achieved (in the case of Mississippi, it was achieving basic reading proficiency by the end of Grade 3, else the learner could not progress to Grade 4); 2) using data to monitor progress towards achievement of the stated goals and sharing this data with policymakers, teachers, school management and parents; 3) emphasising teaching in the classroom by focusing on the science of teaching literacy. Teachers were supported through coaching or other forms of training, and inputs (books) were tightly linked to match lesson plans and assessments with a focus on personalised learning for each learner; and 4) tight management of the reading programmes with some degree of centralism and prescriptiveness as to pedagogy and other inputs, but after having iterated and adapted to context (adapted from Crouch, 2020). There are also several lessons from the multitude of reading and mathematics programmes that have been piloted in South Africa that the Western Cape can build on.

Second, teachers play a critical role in supporting learning. A relatively young teaching workforce provides an opportunity to transform teacher effectiveness. Priorities include increased emphasis on early grades; focusing continuous professional development on how to teach to supplement what to teach (i.e., curriculum and assessment); and building teachers' capabilities to address a typically diverse range of learner abilities within individual classes.

Third, implementing and testing innovations in education service delivery that would improve both learning and access. There is already a lot of global and local knowledge on what works to improve learning such as structured pedagogy programmes to support early grade reading and mathematics. Collaboration and independent schools serving the poorest communities in the Western Cape are already benefiting learners from disadvantaged backgrounds. The government could scale up different kinds of public private partnership models in education that are rigorously evaluated. In addition, the Western Cape already has several innovations related to rapid school construction that reduces the time and often the cost of building, and incorporating digital learning in the classroom, which could be evaluated and scaled up if successful. This report recommends a phased approach to implementing these initiatives (see *Figure 2*).

Figure 2: Summary of Priorities and Actions



Fourth, a cross-cutting area to focus on would be close monitoring of all initiatives to ensure implementation is on track and that data is used to assess progress regularly and course correct as needed. In this regard, the capacity of the WCED to collect, assimilate, analyse and evaluate its programmes could be strengthened and partnerships with research institutions further nurtured.



2. Introduction

This Education Sector Analysis (ESA) report was undertaken by the World Bank, in collaboration with the Western Cape Education Department (WCED), on request from the Western Cape Provincial Government through the National Treasury. The report seeks to provide a comprehensive picture of the education sector in the Western Cape, thereby enabling an informed prioritisation of policy actions and reforms to improve access, quality, and equity in the education system. The analysis provides the basis to identify areas where resources can make the biggest impact in the Government's effort to build a more equitable, resilient, and effective education system. The main audiences for the report are the Western Cape Government, the broader Government of South Africa, and education stakeholders.

3. Context of the Western Cape

The Western Cape is among the best performing of South Africa's nine provinces on key macroeconomic indicators. In the third quarter of 2022, the Western Cape had the third largest contribution to South Africa's GDP (14 percent), following Gauteng (33 percent) and KwaZulu-Natal (16 percent). In 2022, the Western Cape economy experienced a 2.6 percent real annual GDP growth rate, the second highest of the provinces after Gauteng (2.8 percent), and above the national annual growth rate of 1.9 percent. Eastern Cape (2.1 percent) and KwaZulu-Natal (1.1 percent) were the provinces with the next highest growth rates in 2022. However, over the past decade, real per capita GDP growth in the Western Cape and in South Africa has been disappointing.

In 2015, the Western Cape and Gauteng had the lowest poverty headcount ratios¹ in South Africa (37 and 33 percent respectively), while the national poverty headcount was 55.5 percent. The poorest province was Eastern Cape (73 percent), followed by Limpopo (72 percent). The Western Cape is the province with the highest share of households with access to piped water in their dwellings (78 percent), while the national share is about 60 percent.² The Western Cape does, however, have one of the highest shares of informal dwellings of all provinces – about 17 percent of the population in the Western Cape live in informal dwellings, compared to the average across South Africa of about 12 percent. The estimated child poverty levels in the province increased relatively rapidly after 2018 (Hall 2023), indicating the vulnerability of a large share of children. Income inequality increased in the Western Cape between 2015 (when the Gini coefficient was 0.6) and 2021, to just below the national Gini coefficient (0.63), among the highest in the world.

The population of the Western Cape in 2022 was 7.4 million, up from 5.8 million in 2011 (StatsSA 2023 based on the 2022 Census), approaching 12 percent of the total population of South Africa. With an annual average growth rate of 1.8 percent, the province's population is projected to exceed 10 million by 2040. Migration for the purpose of employment is mainly towards the City of Cape Town with several migrants setting up informal settlements. The Western Cape has an age-dependency ratio of 45 percent, meaning that for every 100 people of working age (15 to 64 years), there are 45 people younger than 15 or older than 64. In common with South Africa as a whole, this dependency ratio is low by global standards (World Bank, 2023), which is to the Province's advantage since there are sufficient working age adults to support dependents such as children and the elderly. About two-thirds of the population in the Western Cape is concentrated in the City of Cape Town (the four metro districts in *Figure 3*).

1 This is the share of the population whose consumption is below the national upper poverty line; that is, the share of the population that cannot meet its basic needs.

2 StatsSA 2023

Figure 3: The Western Cape Education Districts



Sources: WCED, World Bank.



The unemployment rate³ for the Western Cape has been lower than the national average over the past five years, but it remains a challenge. The province saw a higher unemployment rate post COVID-19 but there are signs of recovery since 2022. In the final quarter of 2023, the Western Cape had the lowest unemployment rate (20 percent) of all provinces, lower than Gauteng (34 percent) and far below the national rate (32 percent). Nationally, unemployment is experienced by the African/Black population at a much higher rate (36 percent) compared to the Coloured population (22 percent), the Indian/Asian population (12 percent) and the White population (8 percent).

Safety and security in the province are a concern with reported drug-related crime far worse in the Western Cape than any other province. The number of recorded incidents of drug-related crime in the Western Cape (60,235) was more than double the number in Gauteng (29,578), and over triple the number in KwaZulu-Natal (19,965) in 2021/22. Community-reported crime is also high in the Western Cape with only Gauteng reporting higher levels than the Western Cape in 2021/22.

The Western Cape's Growth for Jobs Strategy 2035 (2023) calls for faster economic growth to address issues of unemployment, poverty and crime. Among the host of challenges identified in the Strategy, school leavers/graduates lacking basic competencies, including literacy and numeracy skills, was raised as a key issue. In addition, the Strategy states that businesses in the formal economy are being held back by a critical shortage of skilled workers and the informal economy is constrained by a lack of growth-oriented entrepreneurs. A priority focus area in the Strategy is improving pathways for learners, entrepreneurs and aspirant job seekers through improved school pathways, improved post-school and tertiary pathways, improved work-place productivity pathways, bringing opportunities closer to communities and enhancing entrepreneurship success.

The mechanism by which education accelerates economic growth is by strengthening learning and skills acquisition. International evidence shows that what matters for economic growth is less the years of education completed, but rather the knowledge and skills that learners acquire while in school. Years of schooling in itself does not predict economic growth, but learners' test score performances do (World Bank 2018). Education is a basic human right, and its benefits hinge on the skills that learners acquire in school. Employees require cognitive, socioemotional, and technical skills to be productive and innovative; parents require literacy and numeracy skills to, for example, read to their children or budget for their futures; citizens of a country require literacy and numeracy as well as higher-order reasoning skills to evaluate politician's promises; and community members require a sense of agency that comes from mastery of foundational skills.

These capabilities do not automatically flow from simply attending school. Skills beget skills – having a solid foundation in learning is a prerequisite to acquiring higher level and socio-emotional skills that are needed to improve labour productivity and spur economic growth.

3 The official unemployment rate is defined as persons aged 15 to 64 years who were not employed during the reference week but were available for work and had actively looked for work in the past four weeks (ending with the reference week); or had not actively looked for work in the past four weeks but had a job or business to start at a definite date in the future.

4. Access to education is almost universal in primary education, but many learners start to leave the school system after Grade 9 in the Western Cape

The basic education system comprises 12 years of schooling in South Africa and attendance is compulsory from Grade 1 until Grade 9. For the purposes of this report, we define primary education from Grades 1 to 7, lower secondary education from Grades 8 to 9 and upper secondary education from Grades 10 to 12. The Government offers one year of pre-school (Grade R) as part of the school system and is in the process of making this level of education compulsory as well (this will be formalised if the Basic Education Laws Amendment Bill is passed)⁴. The WCED recorded 1,275,060 learners in 1,827 schools in 2022. Of these, 1.6 percent of learners were in special needs education (SNE) schools, and the remainder were in 'ordinary' schools. System-wide, there were 46,508 school-based educators⁵ in the Western Cape in 2022 (see Table 1). There is one national examination, the National Senior Certificate (NSC), known as "matric", which is a high-stakes examination at the end of Grade 12.

Table 1: Learners, Educators, and School Counts in the Western Cape, 2022

	Learners			Educators			Schools		
	Number in the WC	Share in WC (%)	Share of Total in South Africa (%)	Number in WC	Share in WC (%)	Share of Total in South Africa (%)	Number in WC	Share in WC (%)	Share of Total in South Africa (%)
Ordinary Schools	1,254,284	98.4%	9.3%	44,901	96.5%	9.9%	1,755	96.1%	7.1%
Independent (Private) Ordinary	68,327	5.4%	9.3%	5,745	12.4%	12.7%	304	16.6%	13.3%
Public Ordinary	1,185,957	93.0%	9.3%	39,156	84.2%	9.6%	1,451	79.4%	6.4%
SNE Schools	20,776	1.6%	14.7%	1,607	3.5%	12.5%	72	3.9%	14.5%
Totals	1,275,060			46,508			1,827		

Sources: WCED 2022 data provided to team, DBE 2022 School Realities for ordinary school learners in other provinces, the 2022/23 WCED Annual Report for the SNE school enrolment figure, and DBE School Realities Quarter 2 for other provinces' SNE school enrolment.

4 Some Grade RR is also provided in the school system.

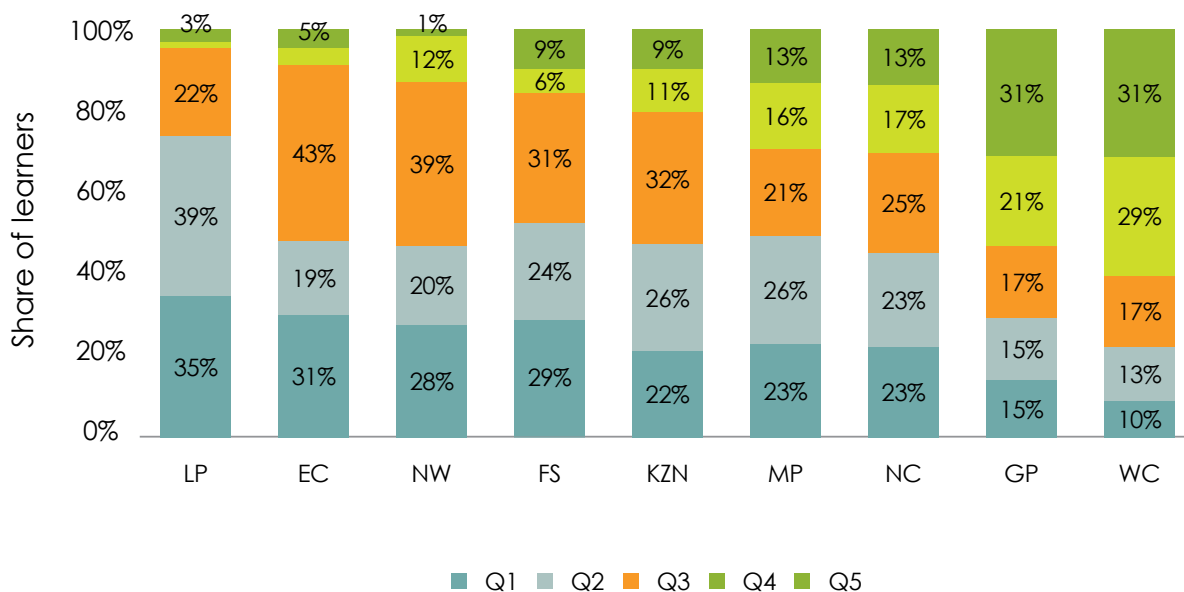
5 'Educators' refers to teachers, heads of departments, deputy principals and principals. There are additional educators based outside of schools who are not included in this count.

Most learners in the Western Cape attend public schools, with only five percent of learners attending private schools (known as independent schools in South Africa). This is close to the national share of learners in independent schools, though Gauteng province is an outlier with 14 percent of learners attending independent schools (DBE School Realities 2022). However, the number of independent schools in the Western Cape has almost tripled between 2009 and 2022, with the WCED subsidising some no-fee and lower-fee independent schools. The WCED is experimenting with a model known as 'collaboration schools', which is a set of public schools operating in partnership with an experienced non-profit school support organisation, or School Operating Partner (SOP). At the time of writing this report, there were 13 collaboration schools in the Western Cape.

The Government of South Africa has a funding policy where learners in schools considered to be serving socioeconomically disadvantaged communities do not pay school fees. Schools across South Africa are categorised into five poverty quintiles largely for the purpose of allocating public resources. Quintile 1 to 3 public schools (also known as 'no-fee schools') do not charge fees and tend to serve historically poorer local areas, whereas 70 percent of Quintile 4 to 5 public schools in 2022 charge fees to parents who are considered wealthier (also known as 'fee-charging schools'), while the remaining Quintile 4 and 5 public schools have chosen 'no-fee' status. In 2023, Provincial Governments made core transfers of R1,602 (Grades 1 to 12) per learner per year to no-fee schools, while fee-charging Quintile 4 schools received half that amount per learner, and fee-charging Quintile 5 schools received 17 percent of that amount per learner.

In the Western Cape, 60 percent of learners are attending Quintile 4 to 5 schools, which is a much larger proportion of learners who are considered 'wealthier' compared to other provinces in South Africa such as KwaZulu-Natal with only 20 percent of learners and Limpopo with 4 percent of learners in Quintiles 4 to 5 (see Figure 4).

Figure 4: Learners by Quintile and Province in Public Ordinary Schools in 2022



Source: 2022 WCED data and 2022 DBE EMIS data for other provinces.



The Western Cape province has made additional efforts, beyond national policy, to support learners who tend to be from socioeconomically disadvantaged households and are attending Quintile 4 and 5 schools. It does this in three ways. First, 245 Quintile 4 and 5 schools elected to become “no-fee” schools.⁶ All 236,800 learners in these schools do not have to pay fees and the WCED transfers resources to schools at the same rate per learner as for Quintiles 1 to 3 schools. Second, under national regulations, school fee reductions or exemptions are supported by public schools wherever fees exceed a learner’s household income threshold and for children who are considered ‘vulnerable’. However, the best public schools have a high demand for places and limited capacity to cross-subsidise partially or fully exempt learners. To address this, the WCED provides financial support for fee reductions or exemptions to about 94,000 learners attending fee-charging public Quintiles 4 and 5 schools as of 2022. Thirdly, 102 low-fee and no-fee independent schools received subsidies from the government to support over 22,000 learners. Altogether, additional funding to schools over and above the quintile system assisted the equivalent of 30 percent of public school learners in 2022. In addition, the province is subsidising costs of other policies to improve access which tend to be focused on disadvantaged learners, including subsidies to cover the costs of transportation for about 65,780 learners in 2023.

The Western Cape spends more on learners with special needs than the average for the country. In 2024/25, the Western Cape is expected to spend 6 percent of its education budget to support learners with special needs whereas the average for other provinces is 4 percent of the respective education budgets.

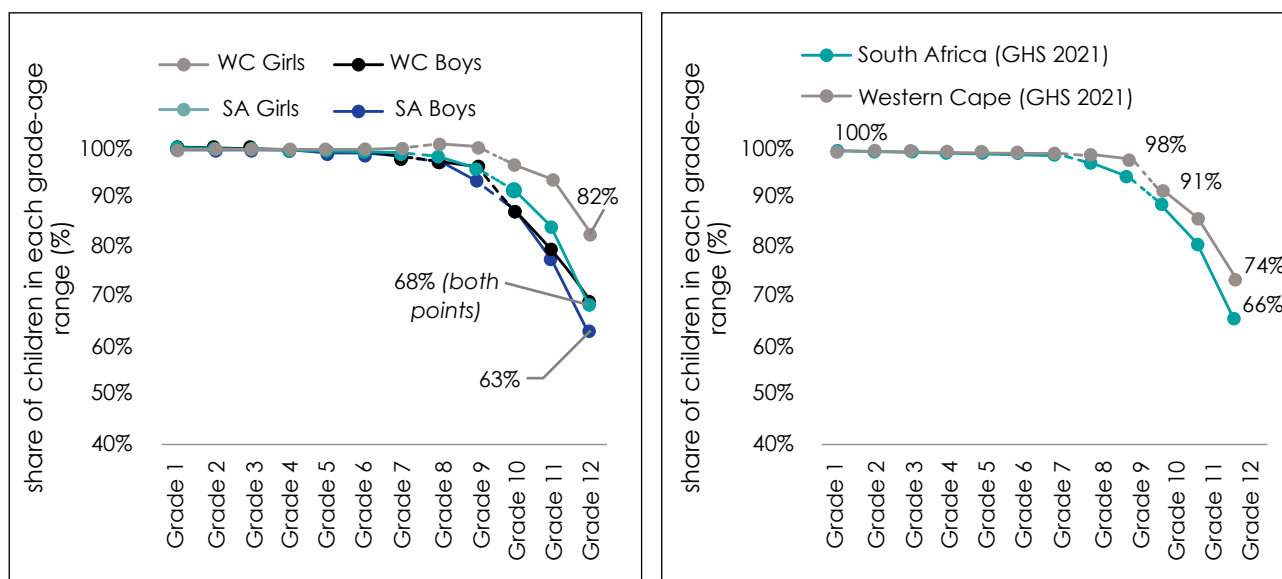
Access to primary education in the Western Cape is nearly universal, with an out-of-school rate of only 2 percent in 2022. Successive household surveys indicate that almost every child attends at least some formal primary schooling in the Western Cape. While some children do leave school in primary grades, a substantial share of learners start to leave school in Grade 9 and retention starts to decline

⁶ Figure refers to 2022. This core transfer is for the purchase of items such as energy, water and sewerage and small repairs, as well as a portion of the teaching and learning materials provided in the system. Small-enrolment schools receive additional core transfers to reflect fixed costs. Other allocations made with reference to the quintile system include school meals; as for other policies, the province expanded this policy to cover some Quintile 4 to 5 learners, funded from procurement efficiencies and additional provincial funding.

substantially in Grades 10 and 11 (see Figure 5). Figure 5 below shows that the probability of reaching Grade 12 or equivalent education is higher in the Western Cape than in other provinces and higher for girls than boys⁷.

Despite many learners leaving the basic education system after grade 9, South Africa's upper secondary completion rate (63 percent in 2021) is similar to other upper middle-income countries (65 percent) (UNESCO 2024). However, South Africa does not have as many options for further education and training for those who leave secondary education before completing compared to other upper middle income countries - only 1 percent of 16 to 18 year olds in the Western Cape were enrolled in Technical Vocational Education and Training (TVET) (GHS average for 2019 to 2022), and learners in other upper middle-income countries are better prepared to enter the labour market even without completing upper secondary since they have higher learning levels compared to South Africa on average.

Figure 5: Education Access Profile, 2021



Source: GHS 2021.

Note: Transition phases are indicated by dotted lines.

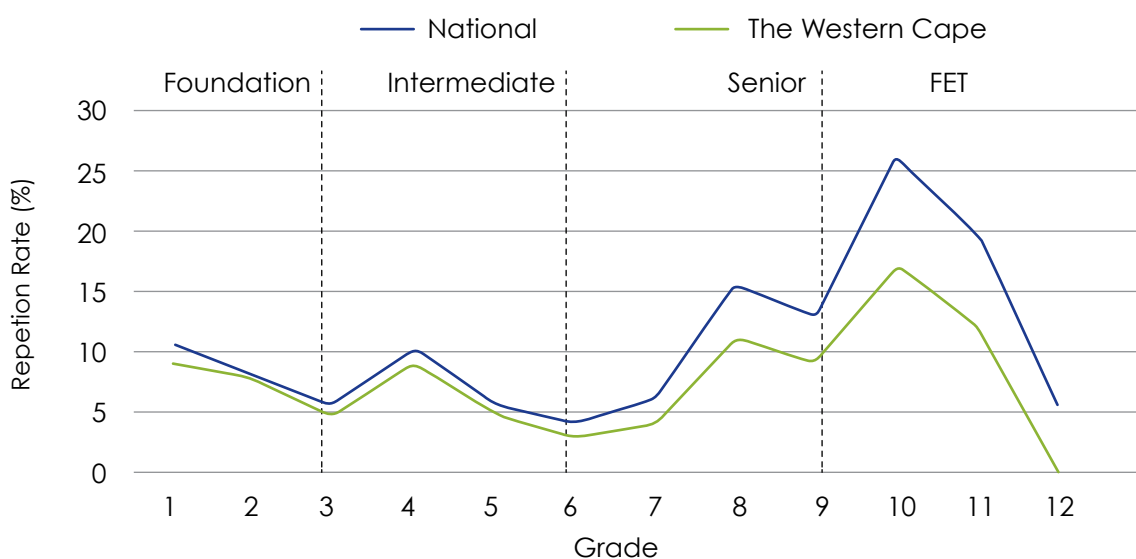
Due to data limitations, the reasons why learners leave the basic education system in the Western Cape are not definitive but are indicatively linked to low learning levels. The most-reported reasons for dropping out for 7 to 18 year-olds over four General Household Surveys (in 2018, 2019, 2021 and 2022) were: 1) the learner completed education to the level desired and/or no longer wanted to study, 2) the learner felt education is useless or not interesting, and 3) the learner had insufficient money for fees. The two most common reasons are consistent with the large number of learners who are not meeting expectations of learning at respective grade levels, as described in the next section. These reasons are also in line with national trends, but a gender-disaggregated comparison is not possible for the Western Cape given limited observations. However, national level data indicates that girls who leave the basic education system ages 7 to 18 are more likely than boys to cite family commitments including pregnancy, and lack of money as reasons for not attending. Girls are less likely to cite lack of interest and inability to perform in school than boys.

⁷ The profile depicted in Figure 5 uses a lagged approach (for example, the share of the population completing at least Grade 12 or equivalent is calculated from the average share achieving this status among 20 to 24-year olds) which may reflect the migration of secondary school completers to the Western Cape from other provinces. Youths have a slightly higher tendency in the Western Cape to leave school at age 19 or above (GHS 2018 to 2022) and some administrative and household data indicates that other provinces retain a greater share of learners completing Grade 12 from Grade 9. The 2022 Census has the Western Cape as the fourth-best province on this measure (StatsSA 2024).

For most of the primary grades, there is near gender parity in the Western Cape, but by Grade 8, more girls than boys were enrolled in 2022 and this disparity becomes more pronounced in favour of girls as learners progress through secondary education. Girls were much more likely to complete the higher grades, accounted for 57 percent of the province's NSC candidates in 2022 and comprised a 61 percent share of national public tertiary student learners in 2021.

The Western Cape does better than the rest of South Africa on repetition rates. The share of repeaters in each class peaked at Grades 1, 4, 8, 10, and 11 in the Western Cape (see Figure 6) in 2019, which reflects the transitions between phases and the national progression guidelines, which allow a learner to repeat once per phase. Boys are particularly likely to repeat at Grades 4 and 10 with both genders likely to repeat at Grade 8. Over-age children – children who are older than the intended age for the grade they are enrolled in, which is an indication of possible prior repetition – account for a far greater share of enrolment in Quintile 1 to 3 schools.

Figure 6: Repetition Rates by Grade and Phase, 2019



Sources: WCED, DBE, University of Stellenbosch.
 Note: FET: further education and training.

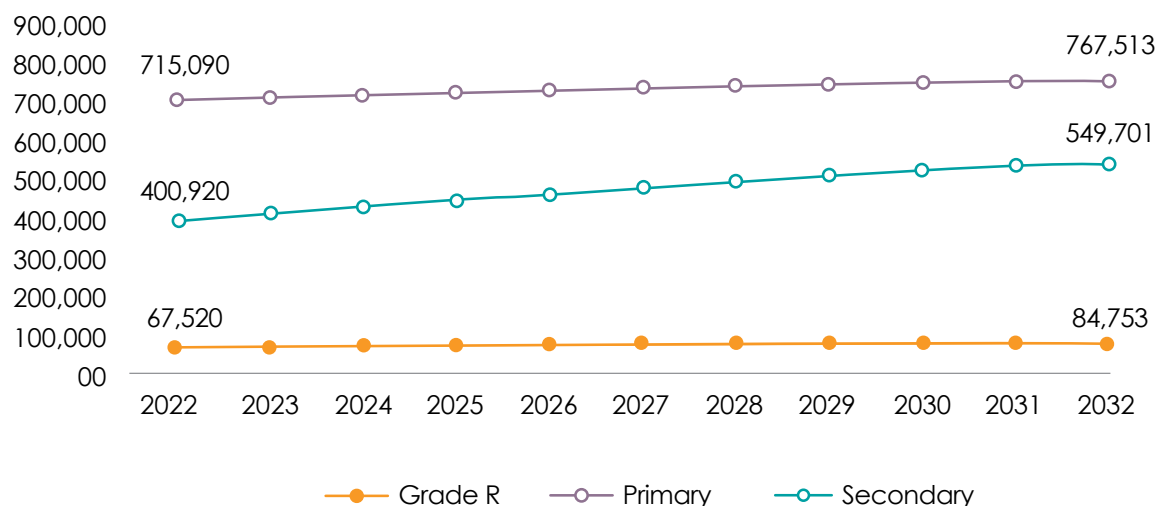
The Western Cape appears to have sufficient educators compared to many systems. The Learner to Educator Ratio⁸ (LER) in public schools was 31 for primary schools and 30 for secondary schools in 2022, with modest differences by region and school. About 36,000 (3 percent) of the Western Cape learners were in public schools where LER was at least 40, which is a low share and demonstrates good management by the WCED since it is deploying sufficient teachers to ensure LER is below 40 in as many schools as possible. Amid a tight fiscal environment, the WCED has acted to reduce LER. The share of learners in schools with an LER above 35 decreased from 34 percent in 2020 to 29 percent in 2022, with no-fee schools benefiting the most. Despite these achievements, there are still about 36,000 learners in the Western Cape that do not have sufficient educators and efforts need to be made to improve learning conditions by assigning more teachers to support them. For comparison, India has an LER of 33, Chile 18, Brazil 20, and Kenya has 31 for primary education. For secondary level, the LER is about 33 for Kenya, Chile 18, and India 29.

8 Referred to as the pupil: teacher ratio in some other countries.

Class size (the ratio of learners to classrooms or LCR) in no-fee schools tends to be much larger than class sizes in fee-charging schools in the Western Cape, and class sizes are particularly large in secondary schools. One-third of secondary school learners in no-fee public schools and 13 percent of learners in fee-charging public secondary schools are in class sizes exceeding 45. Class sizes are not as large on average in primary schools. LCR is being addressed through the Rapid School Build programme (more details on this later in the report) and may have improved since 2022.

The number of learners entering the education system in the Western Cape is growing rapidly and in the next ten years, an estimated 201,000 new learners are expected to enter the system in Grades 1 to 12. (See Figure 7) Most of the growth in enrolment will be in secondary education (about 74 percent of the estimated additional learners in Grades 1 to 12 in the system in 2032).

Figure 7: Projected Enrolment in Public Ordinary Schools in the Western Cape



Source: Author's estimates based on CEMIS data.

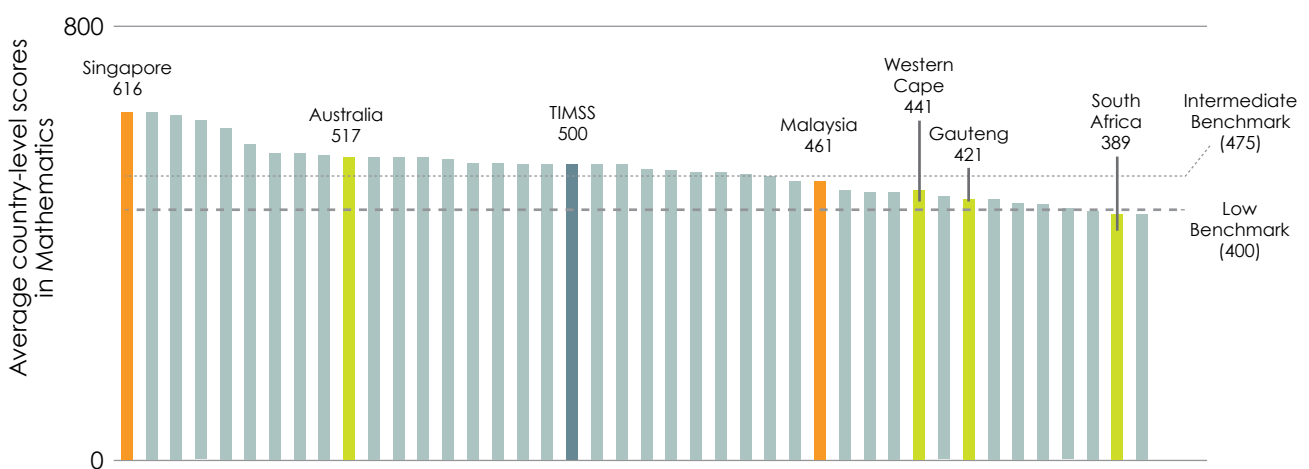
The challenge for the Western Cape is not only to expand the network of schools to accommodate new learners, but also to hire more educators to replace anticipated retirements, departures from the educator workforce, as well as additional educators for the additional learners.⁹ While many countries face similar challenges currently, the Western Cape faces additional needs to expand education provision in light of four pressures: population growth (estimated at 0.7 percent per year for 5 to 17 year olds), migration, increasing retention and existing classroom availability constraints. Additional classrooms (around 700 per year for seven years starting from 2024) will be needed to accommodate the additional learners in the education system. Moreover, an additional 900 classes would also be needed for public schools where the LCR exceeded 40 in 2022. Compulsory Grade R, if enacted, could also require more classrooms - there were over 100 public schools in the Western Cape that had Grade 1 enrolment without Grade R in 2022, though Grade R could also be expanded by continuing to subsidise fees for children to attend private ECD centres.

⁹ See below for details on the age profile of the current educator workforce in the Western Cape, rate of resignations from the educator workforce, and simulations of the implications of these demographic factors and enrollment growth for the projected number of additional educators needed annually in the province in the coming years.

5. Like the rest of South Africa, there is a learning crisis in the Western Cape

The Western Cape is a positive outlier on learning levels both within the country and region. This is reflected in *Figure 8* below which shows performance in mathematics of Grade 9 learners in an international learning assessment – Trends in International Mathematics and Science Study (TIMSS)¹⁰ from 2019. Aside from South Africa, only two other African countries participated in TIMSS 2019, which were Egypt and Morocco. On average, South Africa performed better than Morocco, but the Western Cape did better than Egypt, Lebanon, Jordan, Oman, Kuwait and Saudi Arabia too. Countries including Iran, Qatar and Chile ranked higher than the Western Cape.

Figure 8: Mathematics Scores of Grade 9 Learners (TIMSS 2019)



Source: Reddy et al. 2020.

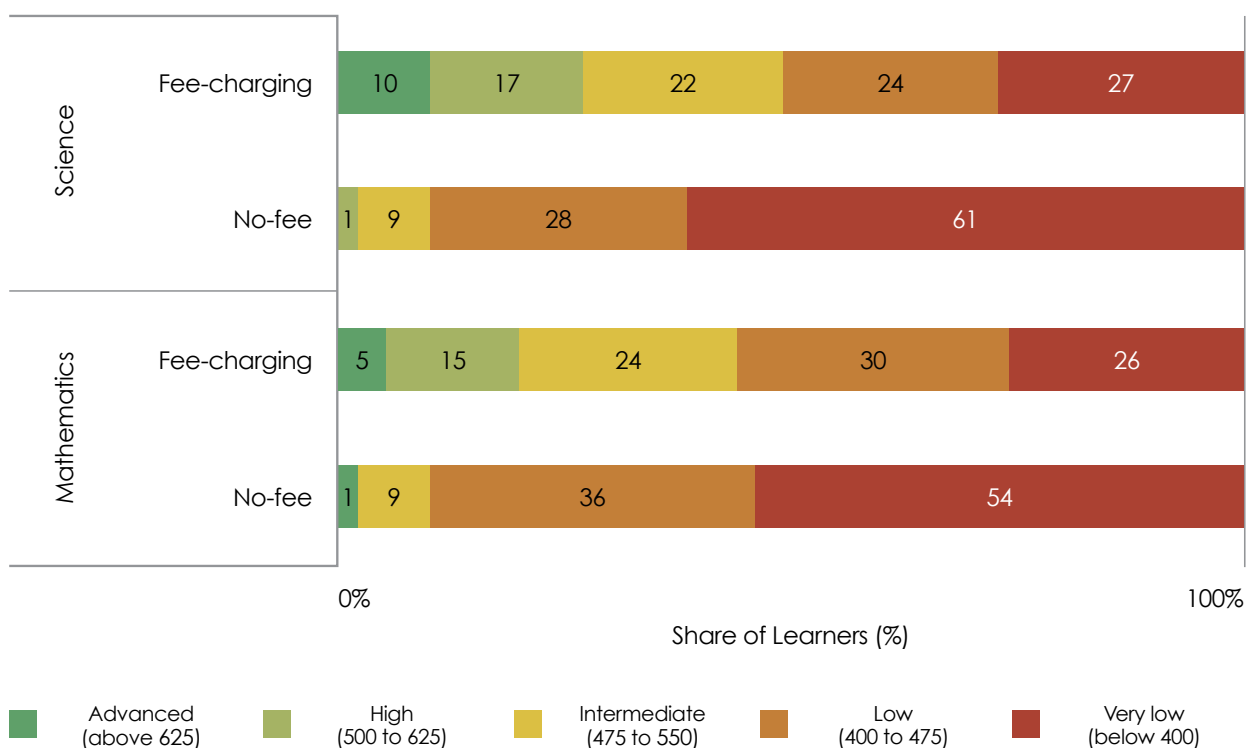
Despite performing better than the rest of the country, levels of functional literacy remain worryingly low and performance in mathematics and science remain a challenge. The average TIMSS score for the Western Cape (441) in mathematics is above the low benchmark (400) but lower than the intermediate benchmark (475) and much lower than the median score of 500. There are large differences in outcomes between the highest and lowest performing schools in the Western Cape. The high proportion of Quintile 5 schools in the Western Cape have a strong legacy of academic achievement, and it is these schools that are driving the average learning performance of the province up and making it a positive provincial outlier. Learners in Quintile 5 schools achieved a mathematics score average of 502 and a science score of 518. That was higher than the average for New Zealand (482 and 499 respectively) and France (483 and 489 respectively). Quintile 1 to 4 schools perform significantly worse in both mathematics and science (all below 401 in mathematics and 386 in science), with Quintile 2 schools performing worst (with a mathematics score averaging 386 and science score averaging 362).

¹⁰ Most other countries participating in TIMSS tested Grade 8s but South Africa tested Grade 9s on the same assessment.

In addition to TIMSS, South Africa participates in another international assessment – the Progress in International Reading Literacy Study (PIRLS) – a reading assessment for Grade 4 learners;¹¹ and a regional learning assessment – the Southern and Eastern Africa Consortium for Monitoring Education Quality (SEACMEQ) – the latter was last administered in 2013.

PIRLS 2016 reported that 55 percent of the Western Cape learners in Grade 4 were functionally illiterate and data provided by the WCED for PIRLS 2021 shows that the Western Cape's overall score dropped by 14 points to 363 with the weakest learners hardest hit. Similarly, whilst the 2019 TIMSS data showed that most learners acquire basic mathematical and scientific knowledge (64 percent and 60 percent respectively), there remains a stark inequality in learning, with most learners from no-fee schools (generally serving socioeconomically disadvantaged learners) failing to acquire basic mathematical (54 percent failing to reach the low benchmark) or scientific (61 percent failing to reach the low benchmark) knowledge.

Figure 9: Mathematics and Science Achievement at International Benchmarks by Fee Status, 2019



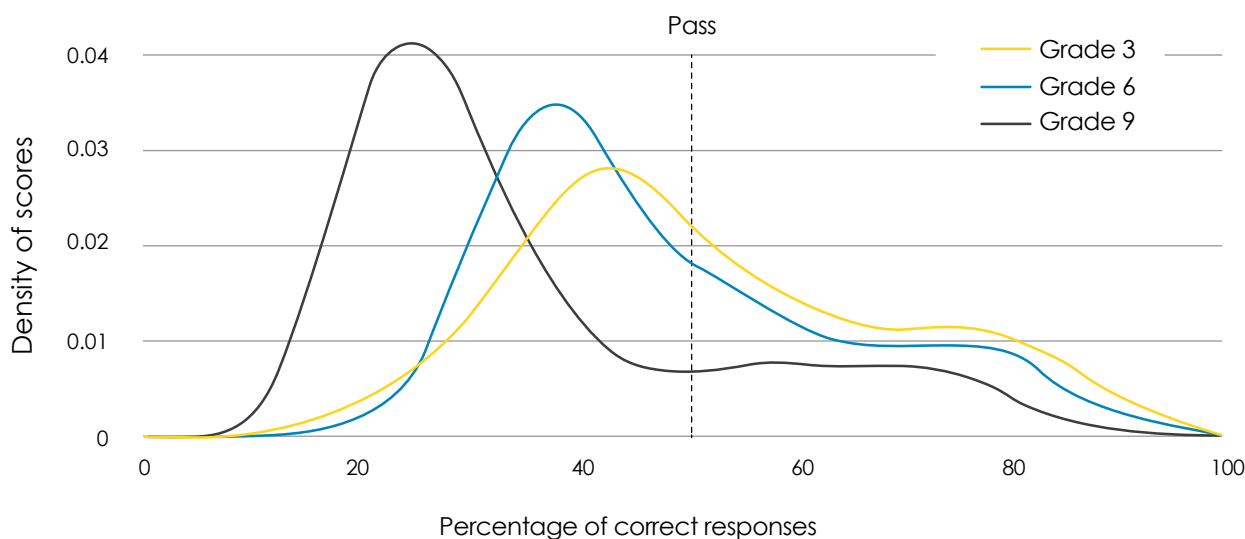
Source: TIMSS 2019 in Reddy et al. 2022.

In addition to participating in international and regional assessments, the Western Cape is the only province in the country to regularly conduct a national standardised learning assessment in numeracy and literacy. This *Systemic Test* is designed to be used for the sole purpose of providing feedback on learning outcomes to guide improvement of teaching practices. The tests are standardised across all schools and held annually at the end of Grades 3, 6 and 9. The results are reported at multiple levels including school, district, and provincial levels. The Western Cape is careful to ensure that the *Systemic Test* be used diagnostically and formatively (i.e., to improve learning) primarily.

¹¹ The latest PIRLS assessment was conducted in 2021. Grades 5 and 6 have been assessed in some survey years in South Africa.

The Systemic Test results highlight poor alignment between the expected curriculum levels and the cohort they are intended for. Figure 10 shows the distribution of scores in the Systemic Tests. The vertical line in reflects the 50 percent pass-mark, the minimum achievement a learner is expected to achieve if they are meeting the curriculum standards. At all three grades, most learners are not meeting the curriculum requirements. The data from the 2022 Systemic Tests shows that at each of Grades 3, 6 and 9 there is a large percentage of learners not reaching the curriculum expectations (peaks of the graphs are to the left of the pass mark and as learners move to higher grades, more of them do not reach the pass mark).

Figure 10: Mathematics Systemic Test Scores in Grades 3, 6, and 9, 2022



Source: WCED Systemic Tests, 2022

The Systemic Tests shows there are wide gaps in learning between learners in the same classroom which makes teaching in public schools in the Western Cape highly challenging. In nearly 90 percent of public primary schools, the average test scores between the top and bottom third of learners in Grade 3 in the same schools differed by 52 percentage points for mathematics and 54 percentage points for language. The tests at Grades 6 and 9 show similarly wide gaps in learning.¹² The results suggest that for practically all of the Western Cape’s teachers in public schools their work entails multi-grade teaching by default given the huge classroom skill heterogeneity. Remedial learning programmes could help in addressing this heterogeneity within schools/classrooms and the Western Cape’s ‘Back on Track’ programme provides some learning in this regard.

¹² In Grade 6, a difference of 1.5 standard deviation in the average test score between the top and bottom terciles translates into a gap of 44.4 percentage points in mathematics, and 46.1 percentage points in language. In Grade 9 the corresponding gaps are 38.2 percentage points in mathematics and 40.8 percentage points in language.

Box 1: The Western Cape's 'Back on Track' Programme- lessons learned

The 'Back on Track' programme is a contextually adapted learning programme, consisting of a mix of evidence-based strategies to recover learning losses, to help learners get back to their pre-pandemic learning trajectories.

The 'Back on Track' programme in the Western Cape is based on the structured pedagogy framework as defined by the UNICEF 2020 ESAFRO (Education et Santé sans Frontières or Education and Health without Borders) report. The programme is based on six main pillars, aimed at addressing learning gaps and providing targeted support to both learners and teachers. The programme places a strong emphasis on the Foundation Phase, with 310,000 learners receiving extra teaching time in Literacy (2 hours per week) and Numeracy (1 hour per week), along with essential Reading and Mathematics resources to aid their learning.

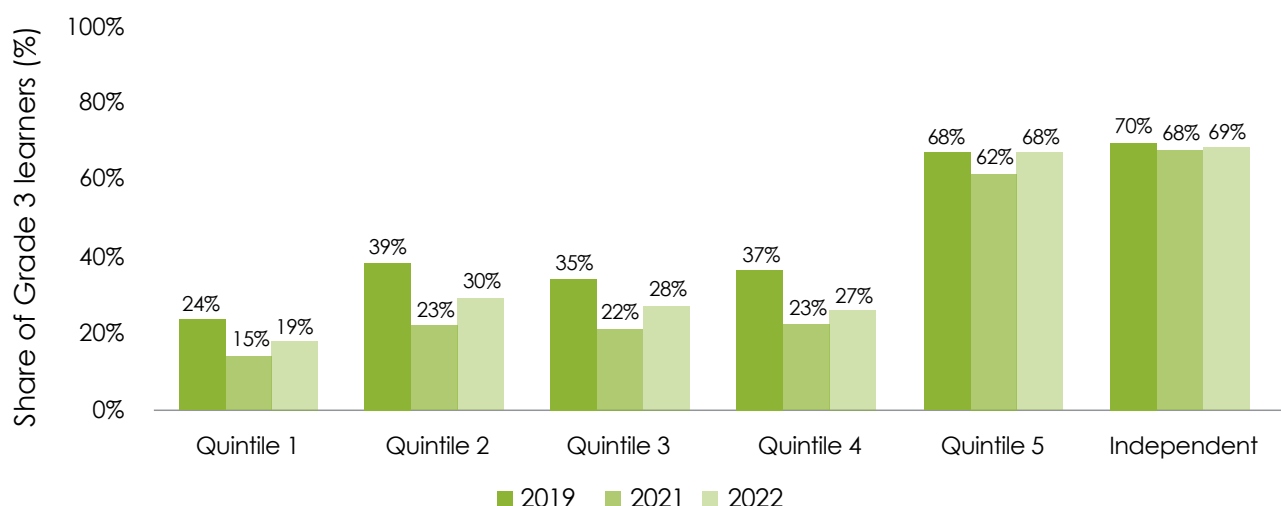
The programme provides support to teachers in the Foundation Phase through additional training and professional development activities in Literacy and Numeracy, and offers interventions for 14,000 learners in Grades 4, 7, 8, and 10 across 333 schools. Learners receive extra tutoring in Mathematics and Languages to address specific content gaps from previous grades. The teacher support component is comprehensive, with 2,200 teachers across Grades 4, 7, 8 and 10 receiving focused, face-to-face, 8-hour professional development sessions every 10 days. These sessions, led by Subject Advisers and Senior Curriculum Planners, prepare teachers to deliver the annual teaching plans for Languages and Mathematics.

To reinforce learning gains, the programme includes holiday camps, providing additional support in Mathematics and Languages, as well as exposure to life skills, creative arts, and physical education, during the school holidays. Ensuring equal access and participation, all learners in the programme receive additional resources, meals, and transportation to Saturday tutoring sessions.

With a projected budget of R1.2 billion over three years, the ambitious 'Back on Track' programme reflects the Western Cape government's commitment to addressing learning losses caused by the COVID-19 pandemic, providing quality education for every learner, in every classroom, in every school in the province.

Based on available data, there are three main factors that affect learning in the Western Cape. First, there are disparities in learning by socio-economic groups, by race and gender. Learning levels are higher for learners in Quintile 5 schools (where 68 percent of Grade 3s passed their language assessment), while learners in Quintile 1 performed the worst (only 24 percent passed). Learners in Quintiles 2 to 4 performed at about the same level with less than 40 percent passing the Grade 3 language assessment (see *Figure 11*). Learners in Quintile 1 to 4 schools were affected by COVID-19 school closures with learning levels dropping dramatically in 2021 with some signs of recovery in 2022, but still not back at the learning levels of 2019. Quintile 5 schools were hardly affected by COVID-19 related school closures. Results from the Systemic Tests in 2022 also found large disparities between White and Indian/Asian learners who score substantially higher on average compared to Black and Coloured learners. However, because of the high share of Black and Coloured learners in the Western Cape, most learners performing in the top 20 percent of all scores in Mathematics in Grade 9 2022 Systemic Tests were Black or Coloured learners. There were also gender disparities with girls in the Black population group doing better in Mathematics at Grades 6 and 9 than boys in the Black population group. Among Coloured, Indian/Asian and White learners, boys do better or almost the same as girls at Mathematics. In contrast, girls do substantially better on language at Grades 6 and 9 within all population groups.

Figure 11: Inequality in Grade 3 Language Pass Rates by Quintile, 2019-2022



Source: WCED Systemic Tests, 2022.

Second, the TIMSS results show that the language spoken by the learner at home had a big effect on their performance in mathematics. Learners who ‘frequently’ spoke the language of the test at home achieved a mathematics score that was 62 points higher than learners who ‘never’ spoke the language of the test at home (459 versus 397). The difference in scores was even higher for science (466 who ‘frequently’ spoke the language of the test at home versus 370 for those who ‘never’ spoke it at home).

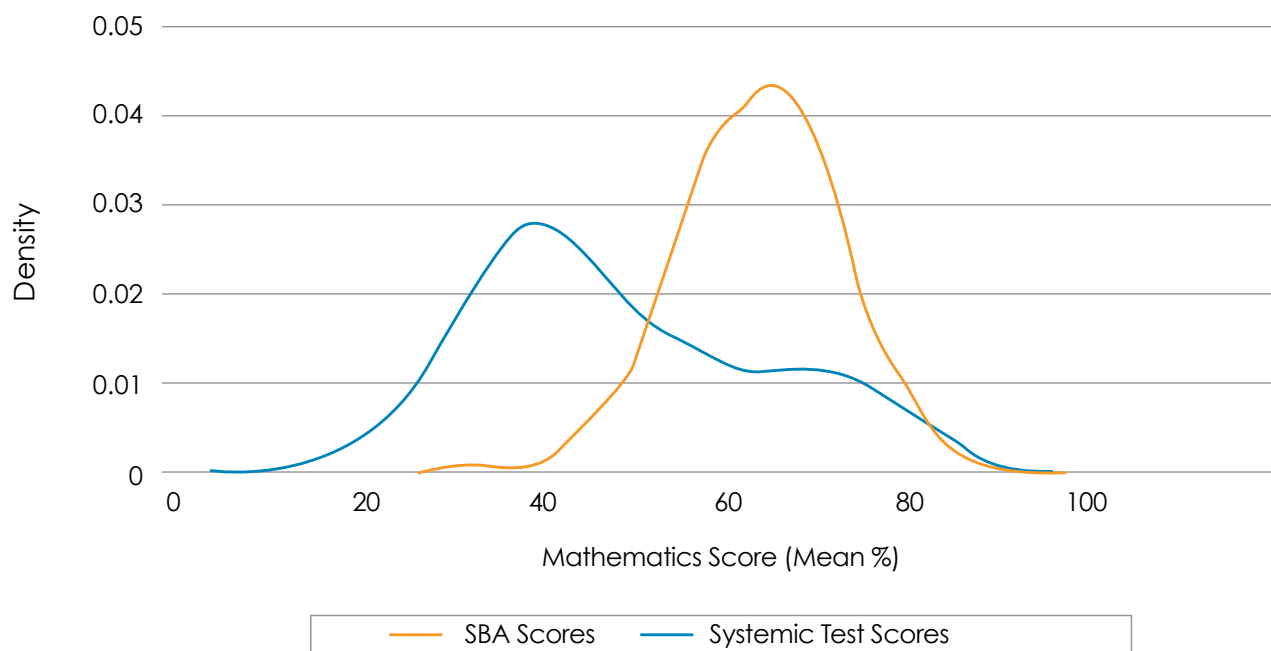
Third, the TIMSS results show that going to a school that is unsafe or where there is exposure to violence has a significant impact on learning outcomes. One out of three learners in the Western Cape attends a school that is deemed ‘less than safe and orderly’. Learners in safe schools achieve significantly higher academic marks than those in unsafe schools (521 points compared to 401 respectively on the TIMSS scale). Bullying is also a significant factor in the Western Cape, with almost half of Grade 9 learners reporting being bullied and again, this has a significant link to learning, with learners who were *not* bullied achieving a score 63 points higher than those who were regularly bullied (TIMSS in Reddy *et al.* 2022).

Potentially the richest and most frequent data on learning come from the School Based Assessments (SBAs), however, SBAs do not correlate with learning as measured by the province, particularly in schools with lower average Systemic Test scores. (See Figure 12). SBAs are assessments that are used by educators to assess their learners and were originally intended to be part of a more formative approach for continuous assessment of learners to improve learning outcomes. It has evolved to be effectively a school-based system of summative assessment. In the best-use case, SBA can have a clear formative function (i.e. should be used to directly improve learning) but the standards of the tests are largely set to identify those learners who need to repeat a grade. SBA has effectively become a tool to review progression of learners from one grade to the next with little focus on ensuring this is accompanied with good learning. This is not to say that the SBA is meaningless as an assessment; in an individual classroom or school the scores might give useful formative and learner tracking data, but SBA assessments add significant burden to educators’ workloads and so need to provide sufficiently positive benefits to justify its implementation.

Educators have substantial scope to apply their own interpretation of the standards when setting and marking SBAs. This can be starkly seen in Figure 12, showing the lack of relationship between Systemic Tests and SBA results. A variety of sources, including demographics, Systemic Test results, and international survey results illustrate that the Western Cape is composed of numerous distinct sub-groups within the grade cohorts with differing abilities. This should be reflected in the spread of SBA marks. According to the Systemic Test data below, the most accurate indication of learning

levels within the Western Cape, most learners are failing to reach the required standard. However, the SBA data indicates that educators think most learners are reaching the correct standard. The data from the international surveys also indicates that the SBA data is reporting wildly optimistic levels of learners' abilities. The fact that the SBA results almost perfectly match an ideal normal distribution suggest that this regression to the ideal curve is due to the random collation of differing marks rather than the underlying population. The marks of the SBA, at a collated level, are therefore meaningless. A learner at any point under the SBA curve could have as good a likelihood of being anywhere on the true ability curve.

Figure 12: Comparing Systemic Test Scores with School-Based Assessment (SBA) Scores, 2022



Source: Authors' calculations based on WCED SBA scores for Grade 3 for term 4 in 2022: Systemic Test Scores, Grade 3, 2022.

Without accurate data, schools need to actively identify issues and adopt strategies on the fly, placing additional burden on educators and delaying learning. Similarly, it means that district and provincial departments cannot automatically identify schools having an intake of learners with additional needs. The national regulations around SBA require alignment with the curriculum and moderation of SBA results to ensure consistency, but the mechanisms appear to be ineffective in many cases. Ideally, the individual level learning data would be associated with background data, especially data that includes information on the key factors that have a significant impact on learning. Better data would allow for better targeting of resources and better piloting of approaches to quickly identify what works and why. This would strengthen the shift from a reactive, centralised approach of broad initiatives to a more targeted, agile, and predictive management of learning. This is particularly important in the Western Cape with its high diversity of needs, wide variation, constantly changing population and challenges caused by events such as COVID-19.

6. Spending on education is significant though there's room for better targeting of resources

The WCED's share of the provincial budget is significant but risks are emerging as the province struggles to contend with the tight fiscal envelope amid pressing current and future demands for education in the province. The 2024/25 Provincial Government budget for the WCED totals R30.85 billion (see *Figure 13*). The WCED's share of the provincial budget is steady at 37 percent despite the shift of financing for the Presidential Youth Employment Initiative (PYEI), which funds teaching assistant stipends from provinces to the national unemployment insurance fund. This share is the second lowest among the nine provinces in their initial 2024/25 budgets. The Western Cape spent comparatively more on health and the local government and infrastructure sector, which includes critical infrastructure.

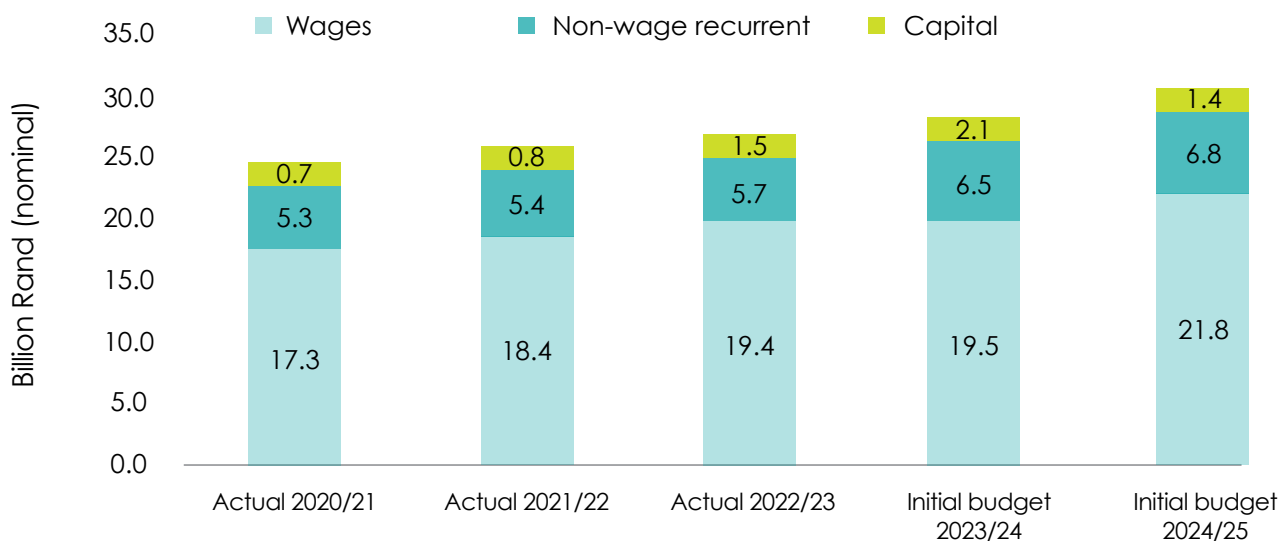
Recent WCED non-wage recurrent budget and capital budget allocations have fallen in real terms, whereas the overall compensation of employees' allocation has increased. There were large reductions to infrastructure spending during the 2023/24 budget year, largely to accommodate centrally mandated wage increases. The initial 2024/25 budget¹³ indicated a 34 percent nominal reduction in the capital/development budget compared to the initial 2023/24 budget to R1.4 billion, despite pressures to expand the number of classrooms and schools to accommodate additional learners and to address the current congestion in some no-fee schools (see *Figure 13*). The non-wage recurrent budget which includes transfers to schools of around R3.5 billion, as well as purchases of school meals, teaching and learning materials and learner transport, is projected to decrease in real terms during 2024/25 (it increased in nominal terms by 4 percent, which is below anticipated inflation).

In contrast, the allocation for compensation of employees increased by 12 percent between the initial budget for 2023/24 and the initial budget for 2024/25. This was driven by a nationally mandated salary increase which was relatively modest (it consisted of translation of a cash allowance into a pensionable salary plus an increase of 3.3 per cent totalling 7.5 percent) but went beyond the initially budgeted allocation. This was combined with hiring of new teachers to address increased enrolments. Altogether, there is a modest overall increase in the budget allocation per learner, but with reduced real purchasing power for the department on non-wage items. The budget allocation for early childhood development (prior to Grade R)¹⁴ has increased by 8.4 percent in nominal terms in the initial 2024/25 budget compared to the initial 2023/24 budget. Independent school subsidies remain a very small part of the WCED budget, with a steady share at 0.5 percent.

13 Excluding Programme 7 (Examination and Education Related Services) for the reason given above for the entire paragraph. More disaggregated data is not available publicly at this point. Initial budget means the budget presented in the Estimates of Provincial Revenue and Expenditure to the legislature.

14 Subprogrammes 5.3, 5.5 and 6.4.

Figure 13: WCED Budget Breakdown for 2020/21 to 2024/25



Source: Western Cape Estimates of Provincial Revenues and Expenditure 2024.

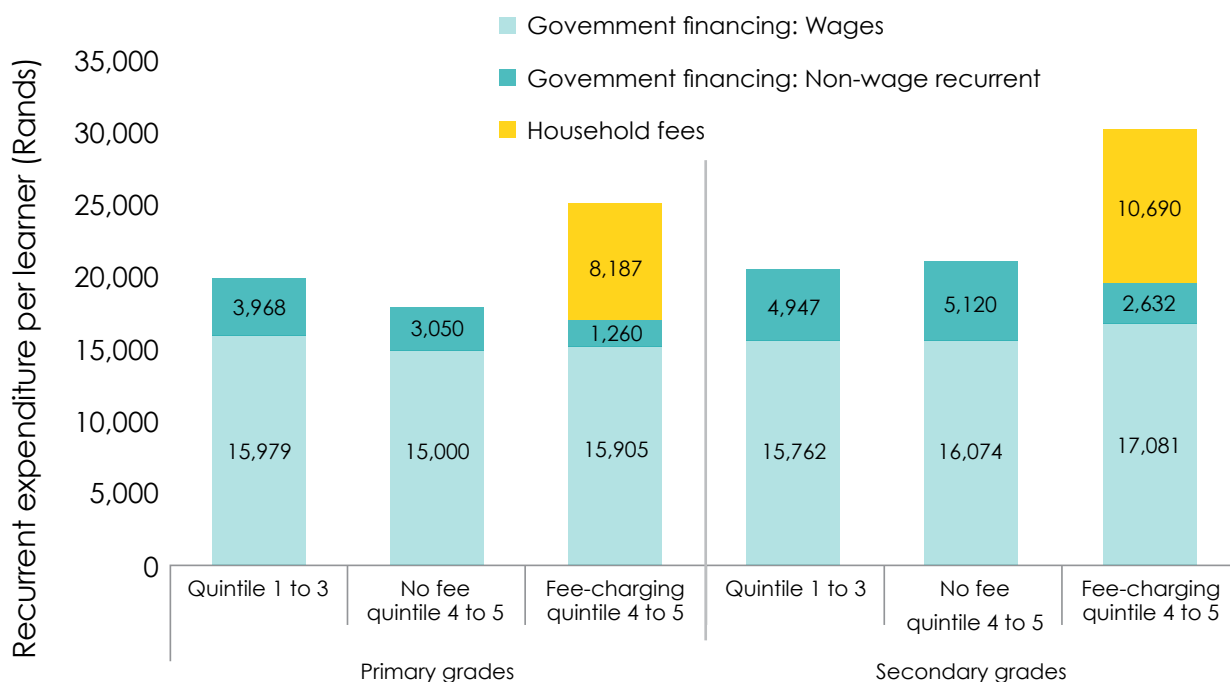
Note: Programme 7 (Examination and Education Related Services) has been removed to exclude the effect of cessation of the PYEI. Development refers to capital asset payments, wages refers to compensation of employees, and non-wage recurrent to other allocations. Programme 7 is excluded.

In primary education, the Western Cape prioritises public funding to no-fee paying schools, particularly Quintile 1 schools. Total spending per learner in Quintile 1 primary schools (which tend to be rural and have lower average enrolment) was R23,160 compared to per learner public spending of R17,134 in Quintile 5 schools. Charging school fees (shown as household fees in Figure 14) results in higher overall financing per student in fee-charging primary schools.

The progressive public spending per learner that is observed in primary education remains the case in secondary education, but structural factors around teacher hiring push wage costs per learner higher for fee-paying schools. Total public spending per learner in secondary school in Quintiles 1 to 3 was R20,709. This amount is slightly lower for fee-charging secondary schools at R19,713 in 2021/22. In addition to public spending, parents contribute R10,690 per learner in fee-charging secondary schools, bringing spending per learner to a substantial R30,403.

The WCED's efforts to equitably finance schools by providing more of its recurrent non-wage spending to no-fee secondary schools, are offset by nationally determined teacher allocation policies, resulting in a higher per learner wage amount in fee-charging Quintile 4 and 5 schools in secondary education. The WCED's strategy to provide more funding to learners in no-fee schools is implemented mainly through the core non-wage transfer to public schools (known as the Norms and Standards grant) mandated by national policy in addition to other policies, described earlier, including learner transport and school meals. Other non-wage grants allocated by the province heavily emphasise no-fee schools. Spending on learners is driven by wages, and because educators are hired by individual public schools, fee-charging schools can recruit the most qualified and experienced teachers given they can top up wages with the resources generated through school fees. In fact, Carel and Motala and Spaul (Spaul (ed.), 2019) document a related pattern for other provinces in South Africa, with higher overall public per learner spending in Quintiles 4 and 5 schools. The provincial department has limited autonomy to prioritise educator allocations towards no-fee schools under national rules, and educator salaries are determined by formal qualifications and experience.

Figure 14: Recurrent Expenditure per Learner by Quintile and Fee Status for Primary and Secondary Grades for Public Ordinary Schools in 2021/22



Sources: 2021/22 actual spending based on WCED accounting data and reported 2021 school fees. Note: The graph excludes donations, the SNE program, and the PYEI. It includes an estimated apportionment of administrative, in-kind, and district-level costs in combination with EMIS-tagged costs and National School Nutrition Programme (NSNP) 2023 count-based estimates. Note that the method of payment for the Collaboration Schools affected non-wage recurrent spending in No-fee quintile 4 to 5.

The WCED has limited autonomy to allocate resources for more effective spending given wages account for most of the spending. Wages accounted for 67 percent of the WCED spending in the 2023/24 initial budget and rose to 72 percent in the initial budget for 2024/25, close to the ten-year average of 73 percent. The biggest factor is centrally-set educator compensation, which is high even in a context of generous public sector spending on education and good national revenue to GDP performance. Educators get paid, including benefits, an average of almost five times the GDP per capita for South Africa in 2022/23 which is a substantially higher ratio than any OECD country (OECD, 2019).

Despite an unforgiving fiscal environment, the WCED is succeeding on multiple fronts: measuring learning, coping with expanding demand, and several scaled measures where non-wage spending per learner is higher for more disadvantaged learners. However, given that educators account for the biggest portion of the budget and educators are relatively well-paid, the WCED needs to ensure that teachers are recruited and trained effectively and are supported and supervised to deliver high quality instruction in the classroom.

Box 2: Education Financing Mandates for National and Provincial Government on Key Inputs

Education is a concurrent function, with shared responsibility between national and provincial government for all levels except higher education i.e., basic education and early childhood development. National government has overall political and legislative responsibility for education while provincial governments are responsible for managing schools directly and determining provincial expenditure on education from the equitable share of national revenue allocated to provinces.

Provincial expenditure on education should reflect how much discretionary spending is available from the provincial equitable share of national revenue. However, in some instances, provinces either have limited or some flexibility in terms of how they allocate their education budgets due to mandates from the national government. From the discretionary funds available after fulfilling national mandates, provinces have the autonomy to make decision about how these funds are prioritised for the sector. The table below highlights the financing mandates for national and provincial education departments on key inputs.

Table 2: Education Financing Mandates for National and Provincial Government on Key Inputs

	National Government	Provincial Government
Norms and standards for ordinary schools (learning and teaching support materials, IT-related materials, local purchases, municipal services, maintenance)	<ul style="list-style-type: none"> - Determines school quintiles based on the national poverty distribution and funding allocations to schools based on quintiles. - Determines that Quintile 1-3 schools are no-fee paying schools.¹⁵ 	Funds allocated to schools from the provincial equitable share.
Teacher allocation/salaries	Teacher salaries are set centrally and are negotiated between national government and teacher unions.	<ul style="list-style-type: none"> - Number and allocation of teacher posts are determined by provincial government and are calculated using the national Post-Provisioning Model. - Teacher salaries are paid from the provincial equitable share.
Infrastructure	<ul style="list-style-type: none"> - Education Infrastructure Grant (conditional grant) to provinces to supplement provincial funding for the provision of infrastructure in line with minimum norms and standards for public schools. - School Infrastructure Backlogs Grant (conditional grant) implemented by national DBE to eradicate inappropriate education structures and backlogs in basic services 	<ul style="list-style-type: none"> - Provide and maintain infrastructure facilities for schools. - Funded from provincial equitable share and EIG.
Meals	- National School Nutrition Programme (conditional grant) to provide nutritious meals to targeted schools.	<ul style="list-style-type: none"> - Manage and implement the programme. - Funded from the NSNP conditional grant.
Workbooks	<ul style="list-style-type: none"> - DBE covers the costs of national workbooks for Grades R to 9. - Centrally printed/procured and distributed. 	
Early Childhood Development	<ul style="list-style-type: none"> - Minimum per child value of the ECD subsidy is determined nationally. - ECD conditional grant to increase the number of children accessing subsidised ECD, ensuring that providers meet basic health and safety requirements for registration, and piloting the construction of new low-cost ECD centres. 	<ul style="list-style-type: none"> - Responsible for allocating funds to ECD programmes. - Funded through provincial equitable share and ECD conditional grant.

¹⁵ If funds are available after taking into consideration the possible funding implications on other poverty related programmes involving no-fee schools, the provincial education department may voluntarily offer Quintile 4 and Quintile 5 schools no-fee status.



7. How can the Western Cape Government support improvements in learning while also expanding access to education?

The WCED has a progressive funding model which supports fees for learners from disadvantaged families and learners who have special needs. Based on national funding policy, only 40 percent of learners in the Western Cape are eligible to go to school without paying fees, but the province has made exceptions at the school and individual learner level, and in 2022, 68 percent of learners attended school at no fee or a provincially supported reduced fee. The province also spends a greater proportion of its education budget on special needs education compared to other provinces. It was also one of few provinces that provided free meals for about 80,000 learners in Quintile 4 and 5 schools in 2021.

The Western Cape is also the only province to regularly monitor learning performance through the annual Systemic Test, but this data could be more effectively used to target resources to learners who need additional support. The results of the Systemic Test could be used more effectively for policy and planning purposes if more variables related to a learner's socio-economic status were included in data collected through the Test, or if the Test data could be linked to socio-economic status variables for each learner captured through the Central Education Management Information System (CEMIS). This level of analysis is important in the context of the Western Cape given the wide differences in learning levels between learners in the same classroom.

The Government of the Western Cape is under pressure to improve learning outcomes across levels of education and at the same time expand primary and secondary education to accommodate a growing number of new learners entering the education system because of population growth and migration into the province. In addition, the province is committed to improving access to quality early learning services for children, particularly 3- to 6-year-olds. But the public budget for education is not growing fast enough to accommodate the increase in enrolment of an estimated 201,200 new learners by 2032 which will necessitate increases in budget to build additional classrooms, hire additional educators, pay a range of enrolment-linked subsidies as well as operations and maintenance costs for new schools.

While additional funds may be needed to accommodate the growing number of learners entering the education system, the funds that are allocated to the sector need to be utilised more efficiently and effectively. Overall, South Africa spends a significant amount of its government budget on education services (21 percent of public expenditure and a little over 6 percent of GDP), but education outcomes in terms of learning are weak and the efficiency of spending, related to repetition and drop-out rates from school, could be improved. The education sector in South Africa has encouraged a diverse array of interventions at the local level, sometimes recycling largely the same inputs – without collaborative leadership to intensely discuss and agree on the priority problems it wants to address and learn from past lessons and experiences from other countries. This is evident in the multiple ECD and parenting programmes that are contracted out to service providers with weak monitoring systems and little accountability for improved outcomes. In early grade reading for example, there are about 24 different programmes being implemented across the country but very little movement towards consolidation of lessons learned and which ones need to be phased out and those which should be scaled up. The leadership of the WCED appear committed to taking this challenge on and working with relevant stakeholders to ensure that existing funds are appropriately utilised through better coordination, monitoring and evaluation of results and iterative feedback loops to continue to improve implementation of programmes.

In this report, we recommend that the WCED pursue the following four priority areas to improve access to quality education services.

- (i) First, since learning is cumulative, the WCED should **improve the foundations of learning by strengthening ECD service provision, particularly for poor households, and learning in the early grades of primary education.** Foundational literacy and numeracy are prerequisites for subsequent learning, and development of higher-order skills which are required for an individual to reach their full potential in professional, civic, and social life. Existing evidence shows that investments in child development during the early years provide an exceptional rate of return as well as higher returns than investments in human capital at later stages.
- (ii) Second, improve teaching and learning by **strengthening educator effectiveness in the classroom, where the 'instructional core' – comprising an educator, learners in the class and the curriculum – determine the quality and impact of a teachers' instructional practices.** The focus should be on four avenues to strengthen the instructional core: (a) recruitment of new educators; (b) support for educators already in the system; (c) conditions for teaching and learning; and (d) performance management for learning outcomes, all of which are described in more detail below.
- (iii) Third, **now is the time to invest in innovative education reform, particularly Public Private Partnerships (PPPs)** to address the learning challenge, recover from the COVID-19 related learning losses, and realise the high returns to education. PPPs are not new to the province, with the government supporting school choice, encouraging innovation through the provincial investment promotion body Wesgro, subsidising some independent schools, and investing in collaboration schools. An expansion of the innovative partnership experience is timely given the pressure to expand the education system while improving learning outcomes simultaneously.
- (iv) Fourth, **the WCED needs to invest to improve its data collection, monitoring, research and evaluation capacity.** While the Western Cape province has some of the best datasets for education compared to the rest of South Africa, some key data gaps remain and the existing data could be better utilised to align relevant stakeholders toward a common goal and to track performance of various policy reforms.

These four priority areas are not exhaustive, but if implemented well, have the potential to transform the education landscape in the province and achieve the desired outcomes of increasing access to quality education services. An important part of the reform process will be strong leadership, coordination, focus on data, research, monitoring, evaluation, and iteration.

Priority 1: Improve the foundations of learning by strengthening ECD service provision, particularly for poor households, and improve literacy and numeracy levels in the early grades of primary.

The importance of quality ECD services in preparing children to learn when they enter school and throughout life, cannot be overestimated. During the critical period from conception to the start of school, children need secure relationships with parents/primary caregivers, they need adequate and appropriate nutrition, access to healthcare, and opportunities to play and learn. Nutrition and stimulation are especially important during the first 1,000 days, while from age three, opportunities to socialise with other children and for organised learning become increasingly important to ensure that children are ready to learn once they start school. Access to quality ECD services is linked to improved emotional readiness for school and equips children with the emergent language, numeracy, and cognitive and non-cognitive skills that enable learning during the foundational phase of school.

Despite this overall understanding of the importance of ECD services, many children start primary school without the required skills. According to 2021 *Thrive by Five Index*, 34 percent of children aged 4-5 years attending early learning programmes in the Western Cape were falling behind expected levels of learning already before starting Grade R. In addition, 41 percent had not achieved the expected level of emotional readiness for school. This will place these children on a lower learning trajectory compared to their peers who start school with the skills required to learn during the early grades of primary.

In the Western Cape, as with the rest of South Africa, malnutrition is a huge concern particularly for young children. Children who are stunted (a measure of chronic undernutrition), on average, have substantially lower cognitive and executive functioning and lower emergent numeracy and mathematics skills than those who are not stunted. Eighteen percent of children under five are currently stunted in the Western Cape, with children living in rural areas (26 percent) and urban informal areas (21 percent) more likely to be stunted than those in urban formal areas. Among younger children (6 to 23 months), only 40 percent are fed a minimum acceptable diet needed for healthy growth and development.

Improving access to adequate nutrition and quality early learning services is essential to improve child development outcomes in the Western Cape and there are three main avenues to support delivery of these services in the province. The first is, *parenting support programmes* delivered through home visits by community health workers (CHWs), social workers or other facilitators; parent workshops/group sessions in the community; health facilities; community health programmes; and virtual parenting support (through SMS and mobile apps). The second is, *non-centre-based early learning and nutrition services*, which include playgroups, toy libraries, book sharing, and ECD reading clubs. The third, and most common, are *centre-based early learning and nutrition services* for pre-Grade R that are delivered through ECD centres, and for Grade R which are provided mainly through primary schools but also some ECD centres.

Data on access to centre-based services is more readily available than data on parenting support programmes or non-centre-based early learning and nutrition services. In the Western Cape, 85 percent of children aged 6 are enrolled in Grade R (either in a primary school or ECD centre). Among children aged 0 to 5 years old, 42 percent are enrolled in ECD centres, which are all privately run. Of the remaining children in the 0 to 5 age group, about 10 percent are attending Grade R in primary schools; around 6.5 percent benefit from some type of parenting support programme with elements of early learning; and about 1.4 percent benefit from non-centre-based services. Of pressing concern, is the finding that an estimated 40 percent of children in this age group have no access to services that support early learning, and who tend to be those who would benefit the most from access to these services.

The quality of services in ECD centres varies. There are challenges around inadequate practitioner qualifications and training, certain infrastructure lacking or being in poor condition, not enough and varied play materials, and low practitioner salaries contributing to high staff turnover. Effective quality assurance and improvement systems are necessary to address these challenges, with efforts underway at both national and provincial levels to enhance data collection and support quality improvements in ECD centres. For non-centre-based early learning services and parenting support programmes with early learning elements, data to assess their quality is partial at best, or completely lacking.

A comprehensive system to monitor and support the quality of early learning services does not yet exist. There is a lack of comprehensive, regular data on early learning outcomes and service access and quality, which hinders effective planning, programming and quality assurance and support. There is no database of NPOs providing early learning services in the province that includes key data such as beneficiary numbers, geographic scope, contents and child outcomes. Data to capture key characteristics of ECD centres, including different aspects of quality is not regularly collected. For children in Grade R and children of pre-Grade R age who are not enrolled in ECD centres, there is no measurement of early learning levels except some small-scale studies. For children aged 4 to 5 years who attend ECD centres, early learning levels were measured for the first time in 2021 by the Thrive by Five Index, and data will be collected again in 2024 and every three years thereafter.

In terms of coordination of ECD services across these three platforms, the National Integrated ECD (NIECD) policy identifies about 15 different Departments that have specific responsibilities to deliver these services. The DBE is the new lead for ECD in South Africa and takes on a host of functions including policy development, planning, and regulation and development of norms and standards for early learning. Responsibilities for other departments are murkier and are currently being defined more specifically. Clarifying the roles of the three core Departments responsible for ECD, i.e. the DBE, Department of Health (DOH) and Department of Social Development (DSD), both nationally and provincially, should be a priority including strengthening inter-departmental collaboration at service delivery points (health facilities, ECD centres, and in homes).

There are several opportunities to strengthen collaboration with the provincial departments of health and social development to increase access to early learning services. WCDOH is responsible for parenting support programmes in home and community settings but currently there is no systematic coordination of such programmes provided by the three departments. There is also a need to review the existing programmes to identify which components (health, nutrition, early learning, child protection) need strengthening or to be integrated, to have a more holistic approach to child development. Training of community health workers to demonstrate effective early stimulation techniques during home visits and as part of community health programmes presents another opportunity. As part of such an effort, the WCED could develop and provide early learning materials. Although ECD centres have an important role to play in the recognition and referral of children at risk to the provincial Department of Social Development, this link could be strengthened. There would also be scope to set up a joint education-health system to train ECD practitioners on early identification and referral of children with special needs to relevant therapists. The Department of Social Development is responsible for childcare in the province, but the education sector could help raise the quality of these services by providing training and materials.

Action 1.1: Increase access to quality early learning and nutrition services in the first 1,000 days (age 0 to 2). WCDOH is leading the charge in service delivery for the first 1,000 days through parenting programmes, community health workers, health facilities and community health programmes and support to childminders. WCDOH together with WCDS and the WCED, will need to evaluate the parenting support programmes and non-centre-based programmes they currently support through multiple NPOs to determine which ones to scale up funding for, while targeting an expansion to children in vulnerable communities. As part of this effort, it would be essential to review existing programmes to ensure they are aligned with the National Curriculum Framework for Children from Birth to Four.

Action 1.2: Increase access to quality ECD services for children who are ages 3 to 6 years. The WCED's comparative advantage lies in addressing the gap in ECD services for children from age three until they start school. The department also needs to boldly pursue improvements to the quality-of-service provision by regularly monitoring outcomes, supporting caregivers to engage more in play-based learning as well as designing and implementing a high-quality provincial Quality Assurance and Support System for Early Learning. Access can be improved by engaging with local municipalities to: (i) lower the costs associated with registration and to ensure all inspectors/officials apply municipal bylaws the same way; (ii) provide financial support for programmes to meet infrastructural norms and standards through the ECD conditional grant, the Municipal Infrastructure Grant (MIG) and corporates; and (iii) support informal settlements outside land use schemes that cannot obtain land use clearance, to consider alternatives such as mobile ECD centres. Another way to raise access would be to expand the coverage of the ECD subsidy to all children attending ECD centres in designated socio-economically disadvantaged wards, and in other wards to children who pass the income means test. However, these initiatives are costly and may take time to implement. In the short term, access can be improved by supporting and expanding non-centre-based services such as playgroups, toy libraries, book clubs and others. Quality improvements in centre-based ECD provision can be made by: (i) engaging with national DBE to revise the National Curriculum Framework for ECD service provision to strengthen the practitioner guidance on the implementation of learning through play; (ii) developing a short training focused on play-based learning with some targeted literacy and numeracy training, to be rolled out to practitioners in informal settlements and low-income formal areas; and (iii) continuing to measure child development outcomes using tools such as ELOM or the child focused section of Multiple Indicator Cluster Survey (MICS).

Action 1.3: Set ambitious targets for improving literacy and numeracy by age 10, and actively track progress and iterate as needed. The state of Mississippi in the United States, the state of Ceará in Brazil, are examples of places where the state made investments in pre-kindergarten programmes targeting low-income areas and focused on ensuring all learners can read and write in the first few years of primary education. Mississippi enforces the 'Third Grade Gate', which involved retaining learners who have yet to reach the required levels of literacy for a further year until they do and are ready to successfully continue their learning journey. The focus is not simply 'grade repetition' but 'purposeful retention' as retained learners must legally receive a minimum of ninety minutes per school day in intensive reading interventions with progress monitoring, among other support. Learners who are high risk for falling behind, such as those facing key challenges at home and in their communities, are also identified early and provided with necessary support to achieve optimal outcomes.

The WCED could consider a model like the Mississippi model with a focus on learners achieving basic literacy and numeracy skills before leaving Grade 3. Rapid assessments, such as those used conducted by DataDrive 2030,¹⁶ would be one potential model to consider. Schools identified as having issues with low-baseline intakes (i.e. significant numbers of learners who are already lagging where they should be in their learning) could potentially be given additional resources and training to deliver and use rapid assessments.

Box 3: Early Grade Reading Study (EGRS), Funda Wandu, and the Need to Scale Up

The Western Cape can build on the significant momentum of interventions that prioritise early grade reading outcomes in South Africa and globally to improve literacy outcomes at scale. These programmes often use structured pedagogical approaches and have been rigorously evaluated. In South Africa, lessons from key interventions, including those with the largest impacts, are not regularised into routine practice by the government, for example, the Early Grade Reading Studies (EGRS) or Funda Wandu. These interventions remain as pilots or experiments at a medium scale which are in part funded by external parties. This is not the case in other geographies that have succeeded in improving foundational learning outcomes.

South Africa - EGRS

The first EGRS focused on improving reading outcomes in learners' Home Language in the North West province. The study used a structured pedagogical approach and suggests that teacher training combined with on-site coaching is a cost-effective way to improve literacy outcomes in children's Home Language. Several iterations of the EGRS are being tested across the country.

South Africa - Funda Wandu

Funda Wandu is a reading programme founded on the idea "all South African children can read for meaning by the end of Grade 3". Evidence from Eastern Cape and Limpopo suggest it is very effective in boosting literacy levels and that these increases come from across the ability and quintile range. Providing additional teaching support through unemployed youth programmes can allow it to be cost effective¹⁷. A pilot in the Western Cape suggests it is suitable for running at scale¹⁸.

Priority 2: Strengthening teacher effectiveness at the instructional core

The Western Cape's aging teacher workforce and projected enrolment growth create a significant opportunity for strengthening educator effectiveness. As indicated above, teachers are relatively well-paid in South Africa, including in the Western Cape, and the wage bill dominates public spending on education in the province. It is thus critical to ensure that all teachers, supported by their managers and instructional leaders, are effective in their work in the classroom. The sizable turnover expected in the educator workforce in the coming years offers a unique opportunity to do so. In 2021, an estimated 42 percent of all educators on the government payroll (and 73 percent of senior educators)¹⁹ were 50 years old or older, (Böhmer and Gustafsson 2023); moreover, during 2012 to 2021, teachers younger than age 50 had been resigning from public schools at a significant rate of about 6 percent per year. While the retirement wave may have peaked in the Western Cape, the province will need to replace those expected to retire or resign from the service, at a projected rate of about 3200 new staff annually between 2025 and 2030, either through freshly recruited young teachers or current educators promoted to senior positions.²⁰ The educator workforce in public schools – which were around 36,000 educators paid by the WCED in 2021 (of whom around 6,300 were senior educators) – will thus become younger and hence less experienced. This prospect

16 <https://datadrive2030.co.za/>

17 <https://fundawande.org/img/cms/news/Limpopo%20Second%20Midline%20Report%202023%20V03.pdf>

18 https://fundawande.org/img/cms/news/WC%20Baseline%20Report_2022_V05.pdf

19 Senior educators refer mainly to heads of department, deputy principals, and principals.

20 Based on estimates supplied the Teacher Demographic Dividend (TDD) project in the RESEP team at Stellenbosch University, Cape Town, South Africa. Data on the number of educators in 2021 are from the TDD's workshop presentation on "Educator Demand Projections (2021-2030) for Western Cape Province," August 3, 2023, posted at <https://tdd.sun.ac.za/research/#>.

invites new efforts to develop school leaders and reshape educators' instructional practice toward greater effectiveness in the classroom, notably by enhancing interactions at the instructional core – among teachers, their learners and the curriculum. The effort involves training and support of teachers in the pipeline as well as those already working, through interventions that benefit educators directly as well as those that filter through their managers, instructional leaders, mentors and coaches.

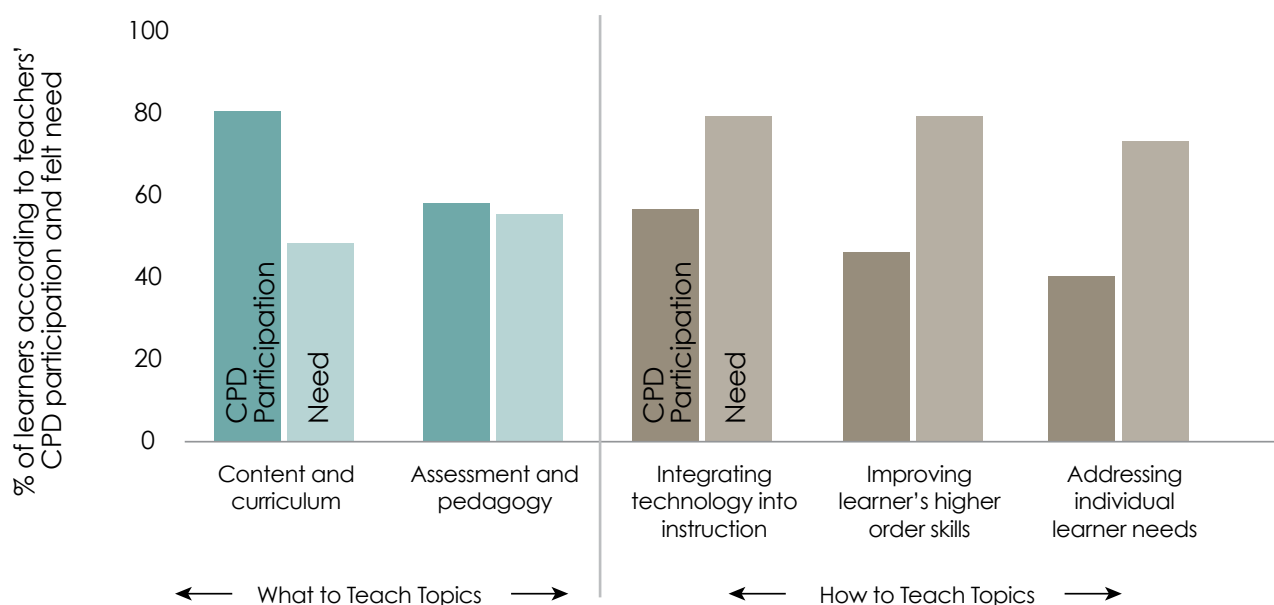
Improving the pipeline of new teachers is a major task for the WCED in the coming years. Governance reform to enhance the WCED's role and flexibility in three areas – Initial Teacher Education (ITE); teacher recruitment; and onboarding of new hires – is essential to improve the quality of the pipeline at a time of unique, generational opportunity to replenish the teacher workforce. The teacher pipeline is weak at present because of a vicious, supply-driven cycle of poor quality. First, trainee teachers have a tenuous grasp of core subjects such as mathematics and languages, and too few ITE programmes address these gaps while equipping the trainees for their future work as teachers (Taylor 2019; Roberts and Moloi 2022). Second, responsibility for teacher recruitment resides largely with the School Governing Body (SGB) of each school, which leaves the process vulnerable to variable standards and other local influences (Levy *et al.* 2018). Third, current arrangements for onboarding new teachers remain nascent (Taylor 2021). As the WCED has no formal authority over the quality, content, and public financing of ITE programmes (which operate under the mandate of the Department of Higher Education and Training), it has only two downstream levers to improve the teacher pipeline: strengthening its support to the SGBs for teacher recruitment and improving the new teacher onboarding programmes through the Department's Cape Teaching and Leadership Institute. A breakthrough in boosting the quality of new teachers is likely to require enlarging the WCED's authority over and role in ITE, possibly along the lines suggested below.

For the Western Cape's teachers, wide gaps in learners' prior learning makes teaching in public schools highly challenging. In nearly 90 percent of public primary schools in the Western Cape, average scores in the top and bottom terciles of learners in the same schools differ by at least 1.5 standard deviations in both mathematics and reading – a difference of at least 52.3 percentage points for mathematics and 54.3 percentage points for language. The tests at Grades 6 and 9 show similarly wide gaps in learning.²¹ The results suggest that for practically all the Western Cape's teachers in public schools their work is made more challenging by teaching learners of vastly different levels of learning ability.

The Western Cape's teachers want more help with responding to the diversity of learner needs. The 2019 TIMSS sampled a sufficiently large sample of schools in the Western Cape with Grade 9 learners and contains information on their teacher's responses to questions about participation in and felt need for Continuous Professional Development (CPD). The Western Cape's teachers participate at a healthy rate in CPD, ranging from 40 to 80 percent across topics (see *Figure 15*). The teachers consistently expressed much higher rates of felt need for CPD on "how to teach" topics than their participation in such CPD, while the pattern is reversed for CPD on "what to teach" topics. The shortfall in participation vis-à-vis felt need is widest at 35 percentage points for CPD on addressing individual learner needs.

21 In Grade 6, a difference of 1.5 standard deviation in the average test score between the top and bottom terciles translates into a gap of 44.4 percentage points in mathematics, and 46.1 percentage points in language. In Grade 9 the corresponding gaps are 38.2 percentage points in mathematics and 40.8 percentage points in language.

Figure 15: Continuous Professional Development among Grade 9 Teachers in the Western Cape, 2019



Source: TIMSS 2019 background data.

Conditions in schools and classrooms matter for learning because they affect the dynamics of the instructional core and the effectiveness of teachers' work. Insufficient material resources, for example, (e.g., textbooks, guides and other pedagogical tools) make it harder for teachers to teach what the curriculum expects to be taught and reduces learners' engagement with their lessons during and after class. Crowded classrooms, which reflect insufficiency in staffing or poor scheduling, also make the work of teachers more difficult. The Western Cape has invested to secure basic material conditions for teaching and learning in most schools in the province, but there is still room to improve these conditions, especially to reduce overcrowding in classrooms. Other, non-material-conditions, for example psychological factors like violence and bullying, can also impact learners' ability to learn. Some of these issues cannot be controlled by school managers, although there is evidence that they have a better grip on controlling learner behaviour and bullying within schools.

The WCED has an impressive record of performance management since 1994, one that has helped to establish the Western Cape as South Africa's leader in basic education. The 2012/13 national management performance assessment test (MPAT) rated the WCED as the best managed Provincial Education Department by far, being fully compliant (or better, compliant and smart) with 79 percent of the key performance indicators in the assessment, compared with 65 percent in Gauteng, the next highest rated province (Cameron and Levy 2018).²² Its high marks are consistent with the seriousness with which the province takes performance management. In the country's first 15 years of democracy, the WCED focused on the systems-building initiatives promoted by the national Department of Basic Education (e.g., adherence to nationally defined staffing norms). Other measures subsequently added include individual performance management, whole school evaluations, and the 'integrated quality management system'. Since 2009, the WCED's approach has also embraced performance monitoring, combined with a shift to a more pragmatic "managerialism," including creation of a sophisticated data system to monitor key aspects of learning and school operations (e.g., budget planning, preparation, and execution; school and district improvements plans, etc.); reforms to strengthen district-level administration and support to schools; and measures to influence principal selection and improve the quality of the bureaucracy by hiring more officers with prior experience in education. The WCED's hierarchical management system has developed and matured over the years, enabling the Western Cape to lead the nation in learning outcomes. The 'Back on Track' initiative launched in 2022 to recover COVID-19-related learning losses is the latest example of the WCED's agility, strategic sense, and creativity in problem-solving.

²² The rest of this paragraph summarises key perspectives from Cameron and Levy (2018).

Despite this strong top-down performance management system, international learning assessments indicate that the Western Cape performs below what is expected for an economy at its level of GDP per capita. Results from international large-scale assessments such as TIMSS 2019 are particularly concerning since spending per capita on education in the Western Cape has been relatively high. To address this challenge, the potential for expanding and improving the school evaluation system could be explored. Efforts to strengthen school-level management are especially important considering an accumulation of evidence from South Africa (e.g., Wills 2019) and other countries (e.g., World Bank 2018) on the critical role of school managers for student learning. Good principals keep a sharp focus on the school's primary mission of helping students learn, ensure that resources allocated to the school are available and used effectively (e.g., teacher attendance and teaching assignments), and foster teachers' internal motivation to do their work well at the instructional core. As elaborated below, remodelling school leadership to foster dynamic professional learning communities in schools emerges as a promising avenue to elevate the Western Cape's performance management system to a new level of maturity and effectiveness.

The report proposes actions across four main areas to improve the instructional core in primary and secondary school: (a) recruitment of new educators; (b) support for educators already in the system; (c) conditions for teaching and learning; and (d) performance management for learning outcomes. Below the authors highlight one key action under each area.

Action 2.1: The WCED needs to be more engaged in the recruitment of new educators, particularly through Initial Teacher Education.

Under current arrangements, the WCED is a passive end user of the outputs of ITE programmes which come under the purview of the Higher Education Institutions (HEIs) where they are hosted and operate under the oversight of the Department of Higher Education and Training. The WCED plays a limited role in shaping the content and funding of such programmes. The WCED needs the authority to play a more active role in considering and acting on approaches tried elsewhere that have improved the quality of ITE. Bruns *et al.* (2023) note that in Ecuador in 2012 and Chile in 2016, new laws gave the government the mandate to close low-quality teacher training institutions. Ecuador closed 23 such institutions in 2012 and set up a new National University for Teacher Education modelled after Singapore's National Institute of Education. Chile also closed numerous privately owned teacher training providers, and eliminated all low-cost, online-only, and night school programmes for teacher preparation. In addition, the new Chilean law also mandated that students admitted into teacher training programmes must score in the top 50 percent of the distribution on Chile's national college entrance examination. Nielson *et al.* (2022) confirm that this selection threshold had effectively selected candidates who subsequently became higher-performing teachers, scoring above average on the country's system for teacher evaluation.

Action 2.2: Ensure that Continuous Professional Development (CPD) of teachers in the Western Cape is systemic, not episodic.

Darling-Hammond *et al.* (2017) reviewed 35 methodologically rigorous studies of CPD that had improved teaching practices and learner outcomes, and some of these are relevant for the Western Cape and can be used to strengthen the province's educator workforce. Below are the three main rubrics that the Cape Teaching and Learning Institute (CTLI), which offers CPD training, should focus on:

- (i) **The content of effective CPD.** An explicit focus on helping teachers to implement the intended curriculum in their classrooms is essential.²³ The content of training should incorporate: learner-responsive and discipline-specific teaching strategies; modelling of effective teaching to show teachers what best practices look like; and greater use of active learning activities than of lectures, to let teachers experience the pedagogy they are being taught and are expected to implement in their own classrooms
- (ii) **The method of effective CPD.** Effective CPD emphasises coaching and expert support to teachers, ideally one-on-one, to customise the sharing of instructional expertise and evidence-based practices of direct relevance to each teacher. It also relies on systematic

²³ Because of the high diversity in prior learning among learners in the Western Cape's schools, implementing the intended curriculum likely requires appropriate scaffolding to help lagging learners (e.g., through teaching at the right level).

arrangements to foster continuous professional growth, notably by encouraging teachers to reflect on and revise their own instructional practices based on feedback from their coaches and others.

- (iii) **The organisation of effective CPD.** The training should be sustained over time to give teachers time to learn and practice new instructional practices through iterative, hands-on processes. It should also foster networking to facilitate professional exchange and collaboration among teachers and shifts in instructional culture toward a greater focus on improving learning for all.

Action 2.3: Reducing overcrowding in schools will improve teaching and learning conditions.

The Western Cape has invested to secure basic material conditions for teaching and learning in most of the schools in the province; there is still room to improve these conditions, especially to reduce crowding in the classroom. In a system only three decades old since the abolishment of apartheid, the plentiful provision of national workbooks and wide availability of textbooks is noteworthy. Gustafsson (2019) credits availability of the workbooks as one of the policy successes in South Africa during 2007-2017 with a positive impact on learning outcomes.²⁴ Today, the availability and access to learning materials continues to warrant attention, to ensure that all learners have access to these basic materials, and also additional ones such as graded reading materials in the earlier grades, and technology-enabled educational resources in the upper grades. Regarding staffing, a useful indicator is the learner educator ratio. The average LER in the Western Cape's public schools, including staff paid by SGBs, tracks the national average closely at around 30:1 since 2013; without the SGB-paid educators, the ratio in 2021 would have been closer to 40:1, compared with the corresponding figure of 34:1 for Gauteng Province (which was the same as the national average)²⁵. Overcrowded classrooms deserve priority attention, which is under the WCED's direct control and if prioritised can be resolved, for example, through more systematic monitoring and implementation of norm-based staffing decisions. Doing so is especially important given the pattern of wage spending per learner documented earlier that shows higher spending in fee-charging secondary schools, a pattern driven in large part by the national allocation and school-led hiring.

Action 2.4: Capacity building to equip and enable school managers and School Management Teams (SMTs) to focus on cultivating teacher motivation.

The WCED's strong top-down performance management system has delivered good results in the past, but its focus on "accounting-based" rather than "account-based" accountability (Honig and Pritchett 2019) may be insufficient to boost the Western Cape's learning outcomes to internationally competitive levels. A new approach to allow for greater school autonomy and ownership may now be appropriate; its underlying idea is that holding a school accountable for its results in student learning would be ineffective, if not burdensome, if the school lacks the autonomy to take actions that are right for the school. Although such a cultural shift must inevitably travel along context-sensitive pathways (see Box 4 for global examples), a key ingredient is a remodelling of school leadership and management, one that promotes trust, transparency and collective efficacy in schools (Ehren and Baxter 2023) and fosters teacher ownership of and motivation for their work (Honig 2022). Dynamic professional learning communities in schools are essential, and their emergence and growth depend on effective principals and their management teams supported by higher-level managers beyond the school. With capacity building and mentoring to gain the new management skills needed, such leaders can play powerful roles in facilitating the process of engaging with teachers on instructional matters, building a conducive school climate, encouraging and enabling ongoing collaboration and professional learning, and managing personnel and other resources strategically to improve student learning. As a result, the school would increasingly operate as a community where teachers use data to guide their teaching practice, collaborate with each other and offer mutual support to improve instruction and meet learners' needs. The Western Cape can move in the desired direction, starting with perhaps modest activities, consolidating and adapting them considering experience and lessons from elsewhere, always persevering toward the goal of creating a new, more satisfying culture of teaching and learning in schools throughout the education system.

24 Gustafsson (2019) reviews nine notable policy areas during the decade and highlights three of the most important for learning outcomes: introduction of the CAPS curriculum guides, provision of national workbooks; and standardised testing aimed at providing a more objective picture of how well schools were performing.

25 School Realities Survey, 2021

Box 4: Global Examples of Cultivating Teacher Motivation

In Kenya, scripted lessons for early grade teaching are designed to give teachers flexibility to adapt the lessons, a feature that empowers teachers rather than treat them as mere implementers, thus reinforcing their intrinsic motivation as teachers. In Brazil where classroom observation is rare, Ceará state was nonetheless able to incorporate it into a nine-month-long coaching programme for secondary school teachers whose positive impact on students' academic outcomes in state and national tests was confirmed through rigorous impact evaluation. In Shanghai, China, the system of school-based continuous professional learning is now sufficiently mature that it is part of the daily routine of teachers. Teaching time for teachers is limited to 12 hours a week (with a trade-off to manage unit costs by allowing larger class sizes), thus giving teachers time for various collaborative activities: preparing and commenting on lesson plans and observing each other teaching in class; providing mentoring to new or struggling teachers; sharing of best practices; and learning by observing classes taught by master teachers. In Singapore's education system, professional learning communities are also now ubiquitous in schools, the result of the government's systematic "top-down support for bottom up innovation" effort to encourage teachers at each school to collaborate, reflect, inquire and innovate their practices to improve pedagogical practices.

Priority 3: Invest in innovative education reforms, particularly Public Private Partnerships (PPPs).

The demand for education is high, evidenced by a growing enrolment and the number of new schools; but the average cost of schooling is not enough to guarantee acceptable levels of learning.

In a context of rising enrolment and tight budgets and learning negatively affected by the COVID-19 pandemic, implementing cost-effective strategies to expand the education system while improving learning outcomes is more important than ever for the Western Cape. Also, average school fees at high-performing public and independent schools are unaffordable for most parents. For these reasons, alternatives are needed that will lower costs, offer differentiated instruction, and scale up teacher supply, while at the same time using new models of instruction.

PPP alternatives can be leveraged to address the increasing demand for education while fostering education quality through outcomes-based accountability, especially to target the disadvantaged.

Independent schools are among the learning top-performers in the Western Cape, although 60 percent of these schools cater to learners in areas classified as Quintile 1 and 2. Before COVID-19, school learning in South Africa was on its way to reach the TIMSS international average by 2051, while the Western Cape would do so by 2035. Within the province, independent schools are set to reach the international mean even faster, by 2027. Therefore, if public schools improved at the same pace as independent schools, then the Western Cape would surpass the global mean by 2027. This would be feasible by leveraging PPPs, which have shown to be a cost-effective alternative (Muralidharan and Sundararaman 2015).

The potential for increasing partnerships between the WCED and non-state suppliers of education services in the Western Cape is significant.

Independent schools have increased from 116 to 302 schools over the last 13 years²⁶ and there is an opportunity to partner with private providers of education services to address key enrolment and achievement challenges. On average, globally, 19 and 27 percent of enrolments at the primary and secondary level are private. This is higher in lower-middle income countries, where enrolment in private primary and secondary schools amounts to 27 and 40 percent; and lower in upper middle-income countries at 12 and 17 percent.

Among upper middle-income countries there is a range; for example, private secondary enrolments are 25 percent in Argentina, 15 percent in China, 10 percent in Georgia, and 7 percent in Turkey. The scope of growth of different partnership models in the Western Cape, similar to Gauteng, is significant. The total enrolment in independent schools in both provinces is below the global and upper-middle income country average. In the Western Cape, 5 and 6 percent of primary and secondary enrolments are in independent schools, whereas the enrolment in non-state schools in Gauteng increases to 14 and 13 percent, respectively.

26 Department of Basic Education: Annual Report 2022/23

The Western Cape is already experimenting with one PPP education service delivery model, under Collaboration Schools, where a public school is run by the WCED in partnership with a private, not-for-profit School Operating Partner (SOP). The Collaboration School model differs from the charter schools model found in the United States, as it supports poorly performing existing schools, known as transition schools with a turnaround model, and new schools; while charter schools typically support new schools. Collaboration schools are more similar to the Academies in England which are conversions of previously state schools, but the Academies have significantly more autonomy than do Collaboration Schools.

Box 5: Charter Schools in the United States

The charter school, widely implemented in the United States, is a publicly funded school that is typically governed by an independent organisation under a legislative contract with the government. The charter exempts them from certain regulations and assigns them the responsibility over several tasks, including management, training, supervision, monitoring, and maintenance, among others. In return for higher flexibility and autonomy, charter schools agree to meet specific accountability standards and follow state policies.

This model has displayed positive results in terms of student access, progression, and achievement while having the potential of being cost-effective. For instance, students in charter schools increase their educational achievement in reading and mathematics in comparison to their peers enrolled in the traditional public schools they would have attended otherwise. The charter programmes that achieve the most significant impacts are those that target disadvantaged locations and students.

Nonetheless, performance varies by the type of charter school, operator, authoriser, and organisational and instructional conditions under which they operate. In this regard, the “no-excuses” model is often cited as innovative and successful. This model targets disadvantaged and minority students and is characterised by frequent teacher feedback, data-driven instruction, high-dosage tutoring, increased instructional time, and high expectations. “No-excuses” charter schools exhibit higher achievement in mathematics and reading. They have shown to be particularly successful when they have intensive tutoring. A critical condition for charter schools to succeed implies the establishment of an outcomes-based accountability system, wherein poor performing schools are closed. Similar models exist in other countries, including Academies in England, Concession Schools in Colombia, Partnership Schools in Liberia.

The collaboration schools programme began with five schools in 2016 and expanded to 13 primary and secondary schools and seven operating partners in 2019, with a target of covering up to 15 percent of all public schools in the province (WCED 2020). Apart from certain exceptions, collaboration schools are subject to the policies and provisions governing ordinary public schools. The funding model borrowed policy elements from India and the United Kingdom and there is heavy community involvement in these schools. Participating schools are paired with a SOP, which has 50 percent representation on the School Governing Body (SGB) and assists with management and governance, introduces a range of innovations to improve teaching and learning, and manages donor funding. The SGB has the authority to hire, dismiss and set the conditions of employment for any teachers that are hired through the SGB. The WCED transfers money to transition and new schools under the collaboration schools' model to pay staff and run the school.

Evaluations of the collaboration schools model point to the need to strengthen a few aspects of the model going forward. Overall performance of collaboration schools has been impressive, with seven out of nine schools participating in the programme in 2019 (with more than one year of data) fundamentally moving towards improving the quality of education and outperforming comparable no-fee public schools in the Systemics Tests for literacy and mathematics. Teacher coaching and mentoring are hallmarks of successful collaboration schools anchored in structured pedagogy²⁷ methods.

²⁷ Structured pedagogy is a package of well-organised interventions that work together to change instructional practice. Some interventions that are part of a structured pedagogy package include resources and materials for learners and teachers, teacher training and support including support for preparing lesson plans, and ongoing pedagogical support for learners in the classroom.

However, an evaluation conducted by the Education Partnership Group (EPG) found that SOPs in collaboration schools have limited flexibility to make decisions related to hiring and firing of teachers, establishing curriculum delivery methods and others primarily due to conflicts within the SGB (between the SOP and others). Moving forward there is a need to clarify the roles, duties, and expectations of SGBs and between the WCED and SOPs.

Action 3.1: Experiment with other models of PPPs for education service delivery in the Western Cape.

Since there is a continuing need to expand access through new school buildings as well as a commitment to improve learning outcomes, several alternatives could be considered within the specific context of the Western Cape.

For instance, existing collaboration schools in the province are functioning well, but the model can be improved. The current model will benefit from a legislative framework that provides a clear mission, establishment and closure processes, roles and responsibilities, and oversight mechanisms, including school reporting and evaluation. This framework must also clarify the facilities and resources that government will provide to schools and operators. It is also important to strengthen the existing accountability mechanisms and evaluate collaboration schools rigorously. This will create the necessary conditions where current school operators can focus on whole-school development with high levels of autonomy and accountability. Autonomy and independent governance could be further strengthened by adopting a targeted school subsidy. In the meantime, the oversight authority will have the necessary tools to assess the performance of school operators based on student learning outcomes and to incentivise providers from other provinces. This information will allow the oversight authority to decide which school providers should be preserved, replaced and/or engaged.

For poorly performing schools, consider private management through a contract. Turnaround and other underperforming schools should be addressed directly by handing them over to non-state providers to be managed in a new model (in line with the charter school model) or disadvantaged learners in over-subscribed schools/ under-served areas can be transferred to independent schools that have excess capacity.

The Western Cape, and South Africa, already have school choice in that, there are no schooling zones. However, it remains costly for the disadvantaged due to fees, transportation, and distance. Therefore, direct funding to schools of choice for parents with children in failing schools is recommended.

Leverage the potential of independent schools as complementary to the public education system. Independent schools have been shown to outperform public schools despite 60 percent of them serving the two lowest quintiles, and the WCED already provides subsidies for some of them. Independent schools could be leveraged by fully subsidising the no-fee sector with proven results – up to the amount that ordinary public schools receive, but with enhanced government oversight accountability. It is also recommended to clarify funding subsidies to enable maximum per learner subsidies and independent financial discretion. In this regard, targeted per capita funding sufficient to sustain improved performance should be considered. Another possible alternative entails the outsourcing of school management to private not-for-profit operators, using school facilities owned by the state or owned by an independent operator. Also, the government could provide state support of infrastructure costs and/or lease government facilities to independent schools.

Action 3.2 Blended teaching and learning programmes could be part of the solution to improving access to quality education.

While the concept of hybrid learning has been around for many years, it is only recently that we have the technology and content to make this work with promising results. Recent studies have shown a positive role of hybrid teaching programmes in improving educational outcomes in underserved regions where local teachers may not fully master the subject matter they are expected to teach or may not have sufficient teaching skills to deliver effective lectures. This model also offers new opportunities for para-skilled people to enter the profession while learning to become the new cohort of teachers. Moreover, bringing in technology may also contribute to the growing demand for open schools. Technology could be used to provide individualised content to improve the learning outcomes of low-performing learners and children who are out of school.

South Africa has good examples of blended learning programmes that could be scaled up. Apex High School is a no-fee public high school in a disadvantaged community supported by the collaboration school model and started implementing a blended learning classroom in 2022 to solve learning gaps and restricted access to quality teachers. In that classroom, technology is the main source of teaching and learning, while teachers and facilitators provide high-dosage tutoring based on scripted lessons. This blended learning model has a unit cost of R15,439, which pays for the necessary staff and running costs. SPARK schools have been using blended learning since its inception with school fees less than half of a mid-fee priced independent school: R28,386 in 2023 – only slightly higher than the fees charged by public schools. Fees are kept low by using a blended learning model which allows to contain infrastructure and salary costs. In its first year of operation, 91 percent of SPARK learners achieved 1.5 years of growth in reading, and more than half of learners ended the year above international grade-level standards in mathematics.



Action 3.3: Scale up the rapid build model to construct schools at the desired speed to meet demand.

Box 6: The Rapid School Build Programme

The Rapid School Build program in the Western Cape increases the supply of schools in the province and prioritises improving access for poorer communities to quality education and skills development opportunities. This priority intervention aims to expand access to quality education in a cost-effective and equitable way, improve student engagement at the secondary school level, and contribute to greater alignment between skills that students obtain and those demanded by labour markets or that are needed in the economy.

Initial new school build projects delivered under the programme have achieved unprecedented delivery times, recording design and construction times for medium-sized high schools of less than 100 days, and improving productivity by delivering 3 times the number of new permanent classrooms constructed annually in the province.

The Rapid School Build program uses an expanded contracting strategy and broader set of delivery mechanisms to fast track the delivery of the new schools. The new schools will be built in areas of the province with the highest levels of deprivation, largest class sizes and where there is an undersupply of low and no fee schools. The programme is based on three pillars, aimed at sourcing, developing and implementing sustainable solutions that meet wide-ranging infrastructure needs, but that super-charges the speed to market of education service solutions.

Partnerships with local municipalities and the private sector is a key feature of the programme as is the delivery model shift with the use of different construction systems to provide the various school facilities and implementation modalities that are calculating to cost about 11% less on a rate per square metre basis. Other innovations include engaging communities and local stakeholders proactively in the school design process

Given the forecasts of new school places needed by 2030 particularly at secondary schools, and the lack of access to education services that are relevant, responsive to local needs, the Rapid School Build approach to school building in poor communities holds significant potential for de-risking youth disengagement and school dropout, and for improving the dignity and mental wellbeing of vulnerable communities.

To supplement the rapid build initiative, a delegation of construction supervision and management to local communities or not-for-profit operators should be considered. This will further widen the implementation base which is currently limited to the Department of Transport and Public Works as well as five recently appointed Management Consultants (MCs). This implementation strategy has been successfully used across the world with benefits in terms of community ownership and speed of completion.

To increase the quantity of education supply in tandem with education quality, different forms of PPPs can be leveraged, as described in action 3.1. The Western Cape could build on the documented success of charter schools and its own positive experience with collaboration schools. This could be done by outsourcing school management to private not-for-profit operators using the newly built school facilities, as well as the buildings of underperforming public schools adopting a turnaround model. The selected private operators should be recognised by the education quality they provide and given autonomy to operate while being held accountable for learning results. An additional option to attract successful private non-for-profit providers entails providing government support for infrastructure costs and leasing government facilities to independent schools.

Priority 4: The WCED needs to invest in better data collection, research and monitoring and evaluation capacity.

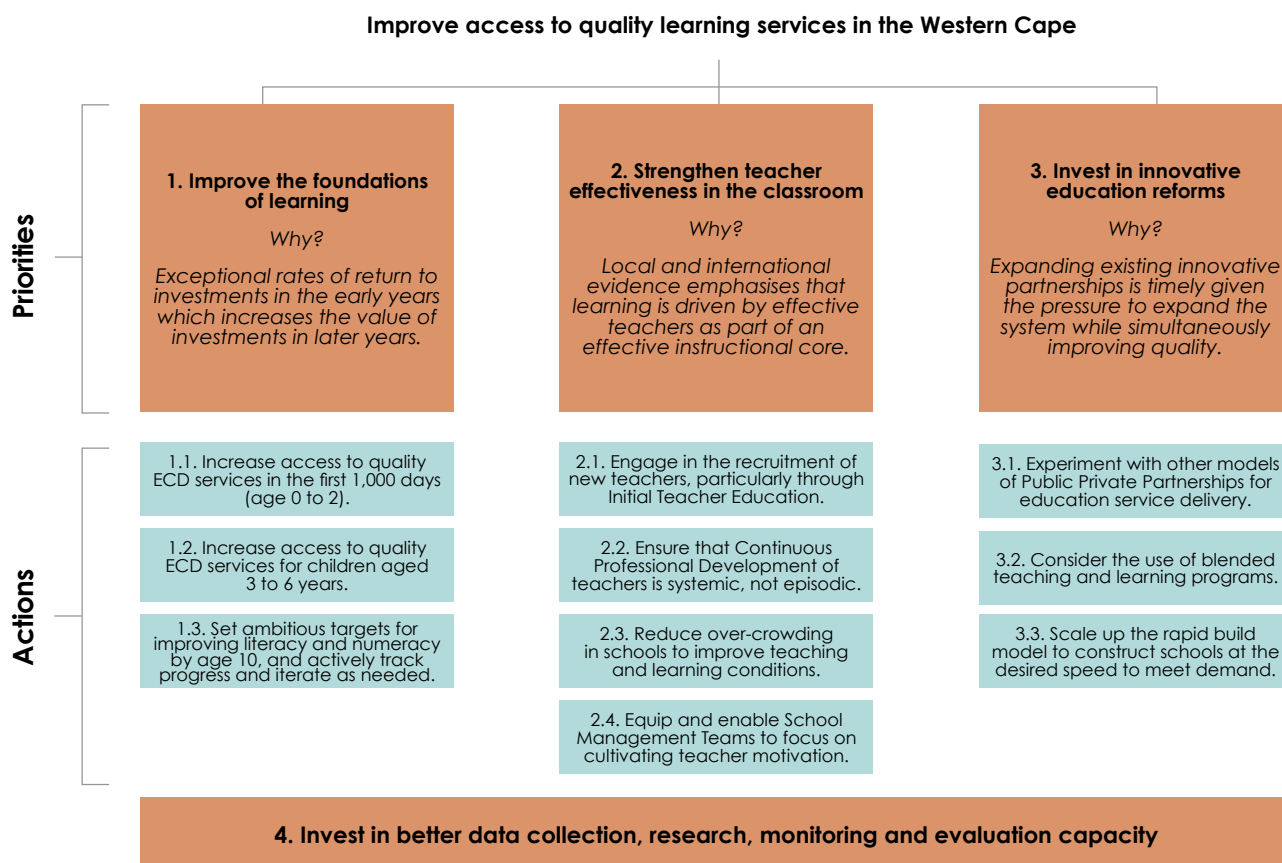
While the Western Cape province has some of the best data sets for education compared to the rest of South Africa, this data could be better utilised to align relevant stakeholders toward a common goal and to track performance of various policy reforms. To start with, political leadership in the province could communicate an ambitious goal to be achieved to the education community and broader population. The goal should be simple and easy to communicate as was the case in Mississippi (described above) or in Sobral, Brazil where the commitment was for every child to be able to read and write by the end of second grade. In addition, adequate data (formative and summative assessment data, teacher performance in the classrooms, implementation of various interventions, etc.) should be collected and analysed in a timely manner to support monitoring of achievements and failures. Regular data collection and analysis will help in prioritising, adapting and iterating various policy reforms/interventions to achieve the established goal. Lastly, anonymised data from the Central Education Management Information System (CEMIS), Systemic Tests and others should be made publicly available so that it can be linked with other relevant data by researchers in the province to analyse progress in the education system so that interested stakeholders are part of the reform process.



8. Bringing it all together

This report recommends four priority areas of intervention and several associated actions to improve access to quality learning services in the Western Cape (see figure below). These priorities were developed based on existing evidence related to the relatively high levels of spending on learners from disadvantaged households in the province, without commensurate results on learning, particularly for the poor. In addition, there is pressure on the education system to expand access to quality ECD services for children, particularly 3- to 6-year-olds, alongside accommodating the estimated increase in enrolment in primary and secondary education in the next 10 years.

Figure 16: Summary of Priorities and Actions



Actions that support improvements to the efficiency and effectiveness of current spending should be the immediate focus of the WCED. The global ‘Smart Buys’ report (World Bank 2023) suggests that structured pedagogy²⁸ focused on improving foundational learning yields the biggest impact in terms of learning if implemented well. Actions described above related to improving foundational learning which may not necessitate a big increase in budget, but rather a reallocation of budget between interventions.

²⁸ Structured pedagogy is a package of well-organised interventions that work together to change instructional practice. Some interventions that are part of a structured pedagogy package include resources and materials for students and teachers, teacher training and support including support for preparing lesson plans, and ongoing pedagogical support for learners in the classroom.

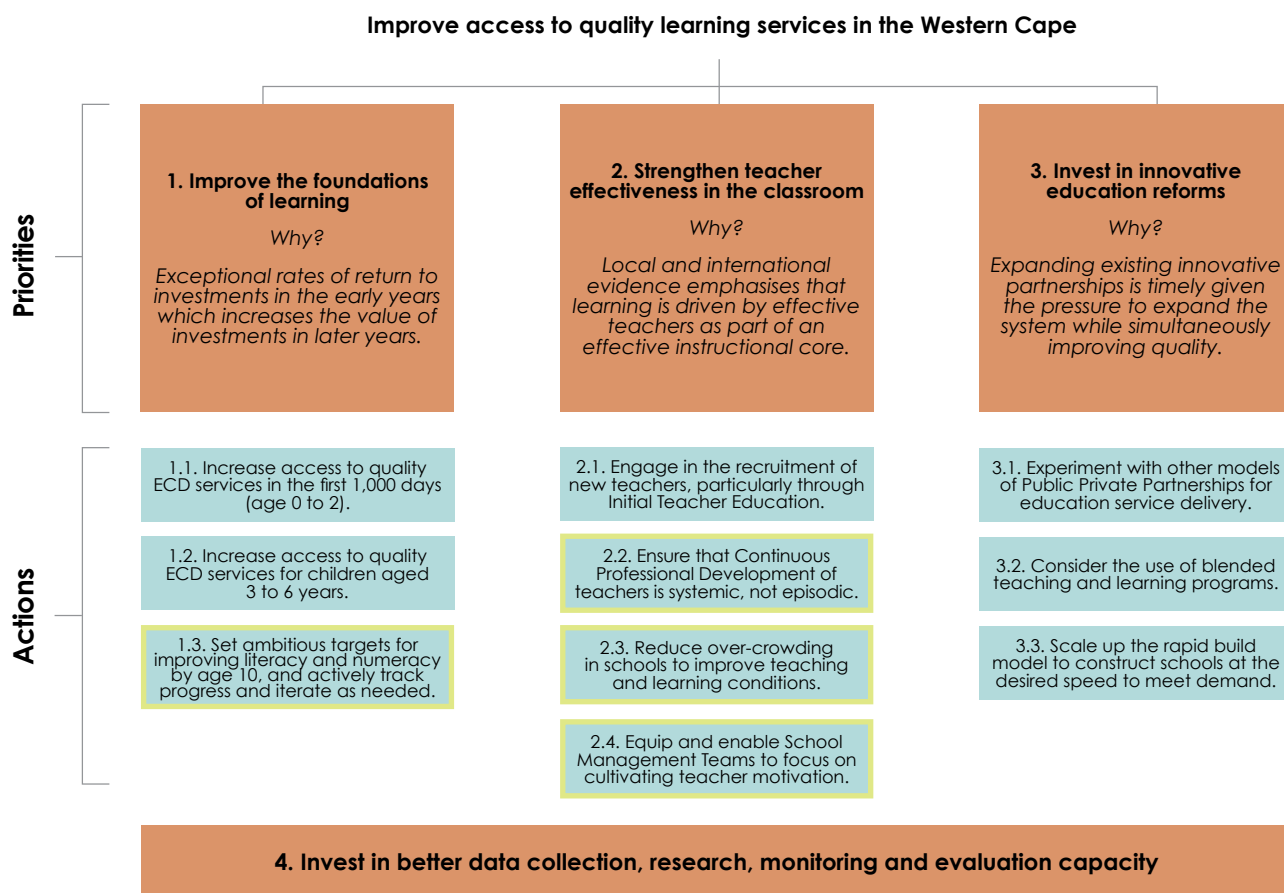
Action is recommended in five key areas which are interlinked, and which must therefore be pursued simultaneously to achieve the best results. The actions include:

- (i) **Set ambitious goals for literacy and numeracy.** Such goals can specify targets for children to be literate and numerate by, for example, age 10, and actively track progress, as exemplified by Mississippi in the United States. The National Department of Basic Education has developed benchmarks for reading levels in all local languages from Grades 1-4. These could be implemented in the Western Cape and used to track progress of learners;
- (ii) **Collect and make better use of data on learning.** Better data collection, research, monitoring and evaluation of early grade reading and numeracy programmes is needed, and based on results which are available, iterating and scaling up those which work and potentially stopping implementation of other interventions which do not show results. Structured pedagogy will also require that adequate data is available on the performance of each child in the classroom through regular monitoring (i.e., through better and more standardised use of the SBA) and evaluation (i.e., through the Systemic Test with all variables of interest included for deeper analysis to identify schools and educators who outperform their circumstances);
- (iii) **Reduce overcrowding in schools to improve teaching and learning conditions.** This entails regular monitoring of schools to ensure that all schools have learner to educator ratios which are around 30. Where learner classroom ratios in *existing* schools are high, the WCED could use its Rapid Build model to construct additional classrooms. This action will require the most budget to implement given the high cost associated with hiring additional teachers;
- (iv) **Renew teachers' continuous professional development to enhance their effectiveness in the classroom.** A priority is to model for teachers the use of various instructional tools and resources to support learners with a high diversity of needs. In-classroom support for teachers is already happening through the Funda Wande programme and the PYEI supported teaching assistants. The next step would be to take these to scale in the province and use existing resources more effectively (i.e. focus on in-classroom support rather than training outside the classroom);
- (v) **Strengthen leadership development for school management teams to increase the focus on cultivating teacher motivation.** While some funds would be needed to support capacity building and mentoring of school leaders, this is an important step in facilitating the process of engaging with teachers on instructional matters in the classroom as well as to create a more dynamic learning environment in the school.

Related interventions which are ongoing and important that complement structured pedagogy interventions to improve literacy and numeracy of learners are: (a) the availability of sufficient and quality teaching and learning materials for teachers and learners. This should not only include graded reading materials²⁹ for learners, but also include supplementary reading books distributed in schools and homes to encourage families to support their children to read; and (b) remedial learning for learners who are falling behind through interventions facilitated through programmes such as the 'Back on Track' programme (bootcamps, weekend classes) and through extra support provided by teaching assistants. Improving foundational learning levels will positively impact on learning at the higher levels in basic education. It could also lead to fewer learners repeating grades and dropping out of school.

²⁹ Graded reading materials are designed and organised according to different levels of difficulty and cater to learners at various stages of proficiency, helping them improve their reading skills in a structured and progressive manner. The DBE has graded readers for each of the local languages.

Figure 17: Actions that Support Improvements to the Efficiency and Effectiveness of Current Spending



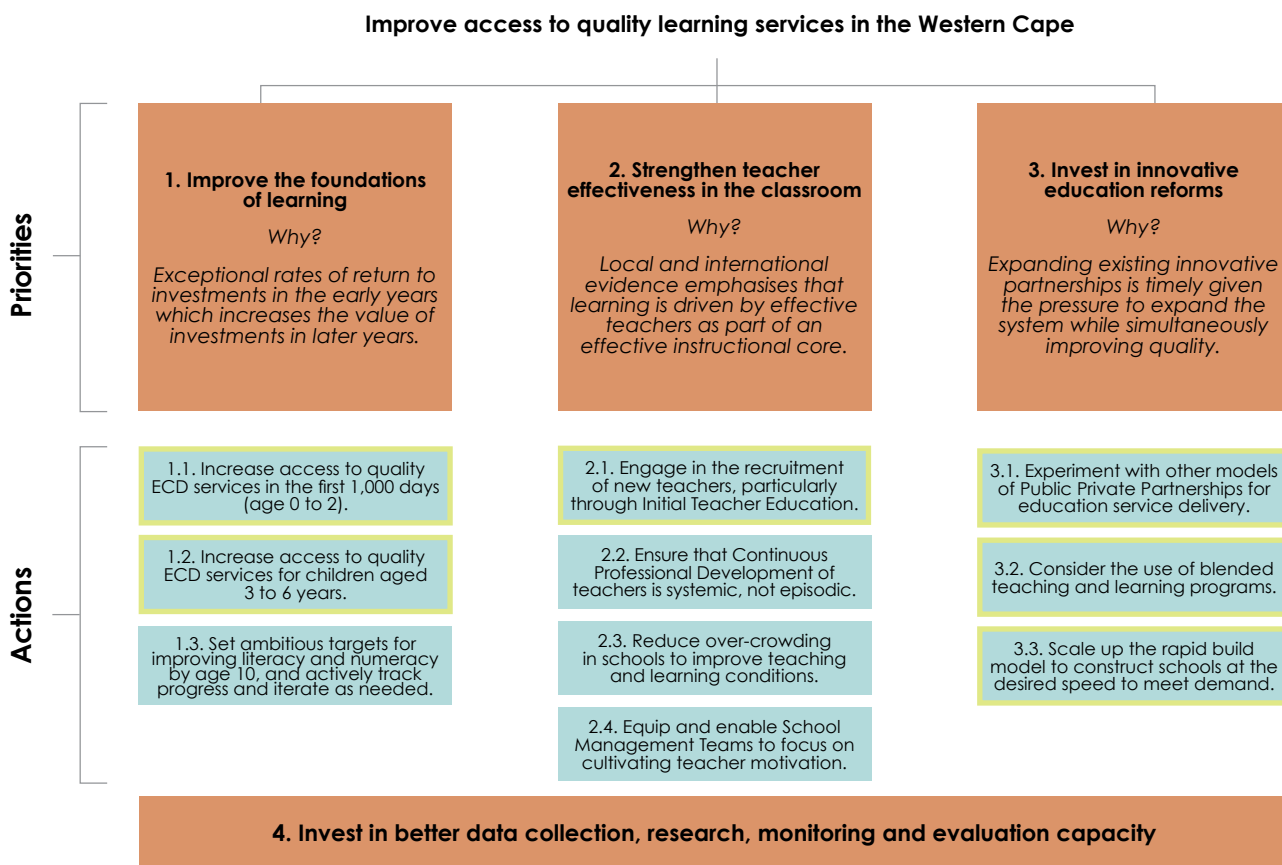
Once the WCED has implemented these interventions at a provincial scale and can show it is setting ambitious targets for improvement, has directed existing resources to these interventions, and established an effective monitoring and evaluation system, there will be sufficient confidence built in the system to expand its offering to more learners and test out new innovations.

Actions that support the expansion of the education system and implementation of innovative education reforms, which will require additional budget, could be pursued after the WCED has been successful in the above actions. These actions, in order of priority, include:

- (i) Increase access to quality ECD services for children aged 3- to 6-year-olds. Expanding access to children in Grade R and RR will become mandatory after the passing of the Basic Education Laws Amendment Bill (BELA Bill). The WCED would benefit from getting ahead on planning for the expansion of quality ECD programmes for this age group.
- (ii) Related to the expansion of the education system, the WCED will also need to accommodate thousands of additional learners entering the system especially at secondary level. Scaling up the rapid build programme is potentially the most cost-effective way to expand the network of schools quickly.
- (iii) New schools will require additional teachers and strengthening initial teacher education programmes should be pursued in collaboration with the Department of Higher Education and Training.
- (iv) The WCED could also consider experimenting with other models of PPPs to improve education service delivery. This may take a bit more time to implement given there are some legal issues that need to be addressed to move ahead on PPPs in education service delivery.
- (v) Consider the use of blended teaching and learning programmes, which will also require some up-front work in terms of ensuring effective connectivity to schools, access to affordable data, security for equipment bought in schools and training of teachers so they are comfortable with the use of blended learning programmes.

- (vi) Scale up quality ECD services for first 1,000 days, which should be led by the WCDOH in collaboration with the WCED and WC Department of Social Development.

Figure 18: Actions that Support the Expansion of the Education System and Implementation of Innovative Education Reforms





REFERENCES

References for Section on Context

- Casale, D. and Desmond, C. 2016. "Recovery from Stunting and Cognitive Outcomes in Young Children: Evidence from the South African Birth to Twenty Cohort Study". *J. Development Orig. Health Dis.* 7(2):163-71
- Commissioner for Children of the Western Cape. Annual Report of the Western Cape Commissioner for Children 2022-2023. 2023. <https://www.westerncape.gov.za/childrens-commissioner/> (March 1, 2024).
- Innovation Edge. 2019. The South African Early Learning Years Index. Preliminary Findings from 2019 Data Collection & Proposed Next Steps. Cape Town. Innovation Edge
- Giese S., Dawes, A., Tredoux, C., Mattes, F., Bridgman, G., van der Berg, S., Schenk, J., and Kotzé, J. 2022. Thrive by Five Index Report. Cape Town. Department of Basic Education, Innovation Edge, USAID and ECD Measure.
- National Treasury. 2023. 'National Treasury EPRE Tables in Excel 2023'. <https://www.treasury.gov.za/documents/provincial%20budget/2023/4.%20EPRE%20tables%20in%20Excel%20Format/Default.aspx> (August 17, 2023).
- Reddy, V., Juan, A., Harvey, J., Winnaar, L., Hannan, S., Isdale, K., and Arends, F. 2022. Western Cape Province TIMSS 2019 Grade 9 Results. TIMSS South Africa, Human Sciences Research Council, Western Cape Government, National Department for Basic Education, IEA, Department for Science and Innovation. https://www.timss-sa.org/wp-content/uploads/2022/07/Western-Cape-TIMSS-Gr9-final-report_web_20.06.2022.pdf (August 15, 2023).
- Roux, K., van Staden, S., & Tshele, M. 2023. Progress in International Reading Literacy Study 2021: South Africa Preliminary Highlights Report. DBE: Pretoria.
- Spaull, N. 2019. Equity: A Price Too High to Pay? in Nic Spaull and Jonathan D. Jansen (eds.). 2019. *South African Schooling: The Enigma of Inequality. A Study of the Present Situation and Future Possibilities*, Springer Nature Switzerland AG 2019, <https://doi.org/10.1007/978-3-030-18811-5>.
- Statistics South Africa. 2023. Census, 2022. Statistical Release P0301.4.
- Statistics South Africa. 2011. Census, 2011. Statistical Release P0301.4.
- UNICEF, UNESCO, and World Bank. 2023. '2023 Cost-Effective Approaches to Improve Global Learning - What Does Recent Evidence Tell Us Are "Smart Buys" for Improving Learning in Low- and Middle-Income Countries?' World Bank. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099420106132331608/IDU0977f73d7022b1047770980c0c5a14598eef8> (September 26, 2023).
- Western Cape Government. 2023. Measuring Results Using Key outcome Indicators. Provincial Data Office. https://www.westerncape.gov.za/sites/www.westerncape.gov.za/files/measuring_results_using_key_outcome_indicators_2023.pdf (February 26, 2024).
- Wills, G. 2019. School Leadership and Management: Identifying Linkages with Learning and Structural Inequalities, in Nic Spaull and Jonathan D. Jansen (eds.). 2019. *South African Schooling: The Enigma of Inequality. A Study of the Present Situation and Future Possibilities* Springer Nature Switzerland AG 2019, <https://doi.org/10.1007/978-3-030-18811-5>
- Western Cape Government. 2023. Growth for Jobs Strategy 2035. https://www.westerncape.gov.za/sites/www.westerncape.gov.za/files/final_growth_for_jobs_strategy_2023_cabinet_approved.pdf

References for Section on Grade R, Primary, and Secondary Education in the Western Cape

- Armstrong, P.W., Brown, C., and Chapman, C.J. 2021. 'School-to-School Collaboration in England: A Configurative Review of the Empirical Evidence'. *Review of Education* 9(1): 319–51. <https://onlinelibrary.wiley.com/doi/abs/10.1002/rev3.3248> (November 17, 2023).
- Bashir, S., Lockheed, M., Ninan, E., and Tan, J-P. 2018. Facing Forward: Schooling for Learning <https://openknowledge.worldbank.org/handle/10986/29377> (April 7, 2022).
- Bertoni, E., Elacqua, G., Marotta, L., Martínez, M., Santos, H., and Soares, S. 2020. 'Is School Funding Unequal in Latin America? A Cross-Country Analysis'. <https://publications.iadb.org/en/school-funding-unequal-latin-america-cross-country-analysis> (June 12, 2023).
- Cilliers, J., Taylor, S., Fleisch, B., and Mohohlwane, N. 2023. 'Reading Skills Transfer Best from Home Language to a Second Language: Policy Lessons from Two Field in Africa. Washington, DC: World Bank.
- Experiments in South Africa'. Centre For Global Development | Ideas to Action. <https://www.cgdev.org/publication/reading-skills-transfer-best-home-language-second-language-policy-lessons-two-field> (November 17, 2023).
- Department of Higher Education and Training. 2022. Statistics on Post-School Education and training in South Africa: 2021 <https://www.dhet.gov.za/DHET%20Statistics%20Publication/Statistics%20on%20Post-School%20Education%20and%20Training%20in%20South%20Africa%202021.pdf>

- GLOW for Girls' Education Challenge. 2021. Project Baseline Report: Teach and Educate Adolescent Girls with Community Help (TEACH). <https://girlseducationchallenge.org/media/pzhfaeqq/teach-Ing-baseline-evaluation.pdf> (July 19, 2023).
- Kaffenburger, M., Sobol, D., and Spindelman, D. The Role of Low Learning in Driving Dropout: A Longitudinal Mixed Methods Study in Four Countries. RISE Working Paper 21/070 <https://riseprogramme.org/publications/role-low-learning-driving-dropout-longitudinal-mixed-methods-study-four-countries.html> (November 10, 2023)
- OECD. 2009. Analysis of the Quantitative Data Based on Categories Used Nationally. In *Students with Disabilities, Learning Difficulties and Disadvantages in the Baltic States, Southeastern Europe and Malta*, OECD, 43–81. https://www.oecd-ilibrary.org/education/students-with-disabilities-learning-difficulties-and-disadvantages-in-the-baltic-states-south-eastern-europe-and-malta/analysis-of-the-quantitative-data-based-on-categories-used-nationally_9789264076860-4-en (August 13, 2023).
- Schleicher, A. 2019. PISA 2018: Insights and Interpretations. https://www.oecd.org/pisa/PISA%202018%20Insights%20and%20Interpretations%20FINAL%20PDF.pdf?_ga=2.171180643.232764973.1699960230-1605216814.1699361048 (November 16, 2023).
- OECD. 2021a. Education at a Glance. 2021: OECD Indicators. OECD. https://www.oecd-ilibrary.org/education/education-at-a-glance-2021_b35a14e5-en (August 14, 2023).
- OECD. 2021b. Upper Secondary Out-of-School Rate (2005 and 2019): SDG Indicator 4.1.4, in per Cent. Paris: Organisation for Economic Co-operation and Development. https://www.oecd-ilibrary.org/education/upper-secondary-out-of-school-rate-2005-and-2019_ed1e8b8a-en (August 13, 2023).
- UNICEF, UNESCO, and World Bank. 2023. '2023 Cost-Effective Approaches to Improve Global Learning - What Does Recent Evidence Tell Us Are "Smart Buys" for Improving Learning in Low- and Middle-Income Countries?' World Bank. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099420106132331608/IDU0977f73d7022b1047770980c0c5a14598eef8> (June 26, 2023).
- Reddy, V., Juan, A., Harvey, J., Winnaar, L., Hannan, S., Isdale, K., and Arends, F. 2022. Western Cape Province TIMSS 2019 Grade 9 Results. TIMSS South Africa, Human Sciences Research Council, Western Cape Government, National Department for Basic Education, IEA, Department for Science and Innovation. https://www.timss-sa.org/wp-content/uploads/2022/07/Western-Cape-TIMSS-Gr9-final-report_web_20.06.2022.pdf (August 15, 2023).
- Statistics SA. 2024. Census 2022. A profile of education enrolment, attainment and progression in South Africa. Report-03-01-81 <https://www.statssa.gov.za/publications/Report-03-01-81/Report-03-01-812022.pdf>
- Van der Berg, S., Girdwood, E., Shepher, D., van Wyk, C., Kruger, J., Viljoen, J., Ezeobi, P., and Ntaka, P. 2013. The Impact of the Introduction of Grade R on Learning Outcomes. <https://resep.sun.ac.za/wp-content/uploads/2019/10/Grade-R-Evaluation-1-3-25-Final-Unpublished-Report-13-06-17.pdf> (August 15, 2023).
- Van der Berg, S., and Shepher, D. 2017. 'Is School Based Assessment in Matric Achieving Its Potential? - Research on Socio-Economic Policy (RESEP)'. Stellenbosch Policy Brief No. 02/201: 2017. <https://resep.sun.ac.za/is-school-based-assessment-in-matric-achieving-its-potential/sample-post/> (August 15, 2023).
- Van Wyk, C., Gondwe, A., and De Villiers, P. 2017. Learner Flow through Patterns in the Western Cape Using CEMIS Datasets from 2007 to 2014: A Longitudinal Cohort Analysis.
- Van Wyk, C. 2021. 'Learner Flow through Patterns in the Western Cape Using CEMIS Datasets from 2007 to 2019: A Longitudinal Cohort Analysis'. Working Papers. <https://ideas.repec.org//p/sza/wpaper/wpapers361.html> (August 14, 2023).
- Western Cape Education Department. 2023a. 'Western Cape #ClassOf2022 Beat the Odds!' Western Cape Government. <https://www.westerncape.gov.za/news/western-cape-classof2022-beat-odds> (August 15, 2023).
- Western Cape Education Department. 2023. 'Western Cape Education Department Annual Report'. <https://wcedonline.westerncape.gov.za/documents/annual-report23/WCEDAnnualReport22-23.pdf>
- UNESCO. 2024. UIS bulk data download: February 24. (May 10, 2023).

References for Section on Learning Outcomes in the Western Cape

- CAPS. 2021. National Policy Pertaining to the Programme and Promotion Requirements of the National Curriculum Statement Grades R-12 and Abridged Section 4. Amendments 2021
- Centre on the Developing Child at Harvard University, 2011. <https://developingchild.harvard.edu/resources/what-is-executive-function-and-how-does-it-relate-to-child-development/>
- DataDrive2030. No date. DataDrive2030 home page. <https://datadrive2030.co.za/>
- DataDrive2030. 2022. Policy Brief: Improving the quality of teaching and learning in South African early learning programmes, at scale. <https://datadrive2030.co.za/about/>
- David Maynier (MEC). 2023. Western Cape Education Prov Budget Vote 2023/23. <https://www.gov.za/news/speeches/mec-david-maynier-western-cape-education-prov-budget-vote-202324-29-mar-2023>.
- Department of Basic Education (DBE). 2020. Action Plan to 2024 Towards the Realisation of Schooling 2030. Taking forward South Africa's National Development Plan 2030, Pretoria, South Africa: Department of Basic Education.

- Giese S., Dawes, A., Tredoux, C., Mattes, F., Bridgman, G., van der Berg, S. Schenk, J., and J. Kotzé. 2022. Thrive by Five Index Report. Cape Town. Department of Basic Education, Innovation Edge, USAID and ECD Measure.
- Hwa, Y.-Y., Kaffenberger, M., and Silberstein, J. 2020. Aligning Levels of Instruction with Goals and the Needs of Students (ALIGNs): Varied Approaches, Common Principles. RISE. <https://riseprogramme.org/publications/aligning-levels-instruction-goals-and-needs-students-aligns-varied-approaches-common>.
- Jakubowski, M. 2021. Poland: Polish Education Reforms and Evidence from International Assessments. In: Crato, N. (eds) Improving a Country's Education. Springer, Cham. https://doi.org/10.1007/978-3-030-59031-4_7
- Lam D., Ardington C., and Leibbrandt M. 2011. Schooling as a Lottery: Racial Differences in School Advancement in Urban South Africa. *J Dev Econ*. 2011 Jul 1;95(2):121-136.
- Mumma and Winters. 2023. <https://wheelockpolicycenter.org/high-quality-education/ms-read-by-grade-three/>
- Ng P.T. 2008. Educational reform in Singapore: From quantity to quality, *Educational Research for Policy and Practice* 7(1) DOI:10.1007/s10671-007-9042-x (12 September 2023)
- OECD. 2021. Education in Brazil: An International Perspective. <https://doi.org/10.1787/60a667f7-en>
- OECD. 2013. Synergies for Better Learning: An International Perspective on Evaluation and Assessment. Paris: Organisation for Economic Co-operation and Development.
- Reddy, V., Juan, A., Winnaar, L., Arends, F., Harvey, J., Hannan, S., and Zulu, N. 2020. TIMSS 2019: Highlights of Western Cape Province Grade 9 Results in Mathematics and Science: Building Achievement and Bridging Achievement Gaps. HSRC: Pretoria. https://wcedonline.westerncape.gov.za/documents/TIMSS/TIMSS201_Western%20Cape_HighlightsofResultsReport.pdf
- van Dyk, H. and White, C.J. 2019. Theory and practice of the quintile ranking of schools in South Africa: a financial management perspective. *South African Journal of Education*, Volume 9, Supplement 1
- van der Berg, S. and Shepherd, D. 2007. Signalling performance: analysis of continuous assessment and matriculation examination marks in South African schooling. Report for Umalusi.
- Western Cape Department of Health and Wellness and the DG Murray Trust. 2022. Studning Baseline Survey on Under-5-Year Old Children. <https://dgmt.co.za/wp-content/uploads/2023/06/WC-Stunting-Baseline-Survey-Report.pdf>

References for Section on Early Learning Services in the Western Cape

- Alderman, H., Behrman, J.R., Glewwe, P., Fernald, L., and Walker, S. Evidence of Impact of Interventions on Growth and Development during Early and Middle Childhood. In: Bundy DAP, Silva ND, Horton S, Jamison DT, Patton GC, editors. *Child and Adolescent Health and Development*. 3rd edition. Washington, DC: The International Bank for Reconstruction and Development / The World Bank.
- Anako, G. and Kollamparambil, U. 2021 "Teenage Motherhood and Child Outcomes: Evidence from South Africa". *South African Journal of Childhood Education* 11(1).
- Artz, L., Burton, P., Ward, C.L., Leoschut, L., Phyfer, J., Kassanje, R., and Le Mottee, C. 2016. Optimus Study South Africa: Technical Report. Sexual Victimization of Children in South Africa. Final report of the Optimus Foundation Study. Zurich: UBS Optimus Foundation.
- Atmore, E., van Niekerk, L. J., and Ashley-Cooper, M. 2012. Challenges facing the early childhood development sector in South Africa. *South African Journal of Childhood Education*, 2(1), 120–139.
- Biersteker, L., Dawes, A., Hendricks, L., and Tredoux, C. 2016. "Centre-Based Early Childhood Care and Education Programme Quality: A South African Study". *Early Childhood Research Quarterly* 36: 334-344; Venter, L. 2022. "A Systems Perspective on Early childhood Development Education in South Africa". *Int J Child Care Educ Policy* 16(1): 7.
- Biersteker, L. 2008. Scaling up Early Childhood Development (0-4 years) in South Africa.
- Black M.M., Gove A., Merseth K.A. 2017. Platforms to Reach Children in Early Childhood. In: Bundy DAP, Silva Nd, Horton S, *et al.*, editors. *Child and Adolescent Health and Development*. 3rd edition. Washington, DC: The International Bank for Reconstruction and Development / The World Bank.
- Bornstein, M.H., Kotler, J.A., and Lansford, J.E. 2022. "The Future of Parenting Programs: An Introduction." *Parenting* 22(3): 189-200.
- Bove, C., Jensen, B., Wyśłowska, O., Iannone, R. L., Mantovani, S., and Karwowska-Struczyk, M. 2018. How does innovative continuous professional development (CPD) operate in the ECEC sector? Insights from a cross-analysis of cases in Denmark, Italy and Poland. *European Journal of Education*, 53(1), 34–45. <https://doi.org/10.1111/ejed.12262>
- BRIDGE, Ilifa Labantwana, National ECD Alliance, Nelson Mandela Foundation, SmartStart, and South African Congress for Early Childhood Development. (2020). The Plight of the ECD Workforce: An Urgent Call for Relief in the Wake of COVID-19. <https://www.bridge.org.za/wp-content/uploads/2020/04/Final-report-The-plight-of-the-ECD-workforce-1.pdf>
- Britto, P., Yoshikawa, H., and Boller, K. 2011. "Quality of Early Childhood Development Programmes and Policies in Global Contexts: Rationale for Investment, Conceptual Framework and Implications for Equity". *Social Policy Report* 25(2): 1-31.

- Britto P.R., Lye, S.J., Proulx, K., Yousafzai, A.K., Matthews, S.G., Vaivada, T., Perez-Escamilla, R., Rao, N., Ip, P., Fernald, L.C.H., MacMillan, H., Hanson, M., Wachs, T.D., Yao, H., Yoshikawa, H., Cerezo, A., Leckman, J.F., and Bhutta Z.A. Early Childhood Development Interventions Review Group, for the Lancet Early Childhood Development Series Steering Committee. 2017. "Nurturing Care: Promoting Early Childhood Development". *Lancet* 7:389(10064):91-102
- Brodie, K. 2013. *Observation, assessment and planning in the early years: Bringing it all together*. 1. publ. Open Univ. Press.
- Bundy, D.A.P., de Silva, N., Horton, S., Patton, G.C., Schultz, L., and Jamison, D.T. 2017. "Child and Adolescent Health and Development: Realising Neglected Potential." in Bundy, D. A. P., N. de Silva, S. Horton, D. T. Jamison, and G. C. Patton, editors. *Child and Adolescent Health and Development. Disease Control Priorities* (3rd edition). Washington, DC: World Bank
- Callaway-Cole, L. and Kimble, A. 2021. Maintaining Professional Standards in Early Childhood Teacher Preparation: Evaluating Adaptations to Fieldwork-Based Experiences During COVID-19. *Early Childhood Education Journal*, 49(5), 841–853. <https://doi.org/10.1007/s10643-021-01227-9>
- Carter, J., Biersteker, L., and Streak, J. 2008. *Costing Centre-Based Early Childhood Development Programmes for Children under Age Five: Case Studies from the Western Cape*. Human Sciences Research Council, Centre for Poverty, Employment and Growth; OECD, 2022.
- Casale, D. and Desmond, C. 2016. "Recovery from Stunting and Cognitive Outcomes in Young Children: Evidence from the South African Birth to Twenty Cohort Study". *J. Development Orig. Health Dis.* 7(2):163-71
- CECD. 2022. *Registration, Regulatory and Financial Barriers - City of Cape Town Municipality*. Cape Town: Centre for Early Childhood Development.
- Centre on the Developing Child at Harvard University, 2011.
- Chen, M. and Chan, K.L. 2016. "Effects of Parenting Programs on Child Maltreatment Prevention: A Meta-Analysis". *Trauma, Violence & Abuse* 17(1): 88-104.
- Cleary S., Orangi, S., Garman, E., Tabani, H., Schneider, M., and Lund, C. 2020. "Economic Burden of Maternal Depression among Women with a Low Income in Cape Town, South Africa". *BJPsych Open* 6(3): e36.
- DataDrive2030. 2022. *Policy Brief: Improving the quality of teaching and learning in South African early learning programmes, at scale*.
- Dawes, A., Biersteker, L., Snelling, M., Horler, J., and Girdwood, E. 2023. "To What Extent Can Community-Based Playgroup Programmes Targeting Low-Income Children Improve Learning Outcomes Prior to Entering the Reception Year in South Africa? A Quasi-Experimental Field Study". *Early Education and Development* 34(1): 256-273.
- Department of Basic Education. 2023. *Guidelines for ECD Conditional Grant 2023/23. Infrastructure Component*. Pretoria: Department of Basic Education. Page 10
- Department of Basic Education and World Bank. 2022. *South Africa Public Expenditure and Institutional Review for Early Childhood Development*. Washington, DC: World Bank.
- Department of Basic Education. 2014. *Policy on Screening, Identification, Assessment and Support 2014*. Pretoria: Department of Basic Education.
- Department of Higher Education and Training. (2017). *Policy on Minimum Requirements for Programmes Leading to Qualifications in Higher Education for Early Childhood Development Educators*. www.gpwonline.co.za
- Department of Higher Education and Training. 2017. *Policy on Minimum Requirements for Programmes Leading to Qualifications in Higher Education for Early Childhood Development Educators*. Government Gazette No. 40750, Clause 1.2.12.
- Donald K.A., Wedderburn, C.J., Barnett, W., Nhapi, R.T., Rehman, A.M., Stadler, J.A.M., Hoffman, N., Koen, N., Zar, H.J. and Stein, D.J. 2019. "Risk and Protective Factors for Child Development: An Observational South African Birth Cohort". *PLoS Med* 16(9): e1002920; Shuffrey LC, Sania A, Brito NH, Potter M, Springer P, Lucchini M, Rayport YK, Du Plessis C, Odendaal HJ, Fifer WP. 2022. "Association of Maternal Depression and Anxiety with Toddler Social-Emotional and Cognitive Development in South Africa: a Prospective Cohort Study. *BMJ Open* 13;12(4):e058135.
- Dowdall N, Murray L, Skeen S, Marlow M, De Pascalis L, Gardner F, Tomlinson M and Cooper PJ. 2021. "Book-Sharing for Parenting and Child Development in South Africa: A Randomised Controlled Trial." *Child Development* 92(6):2252-2267.
- Engle, P.L., Fernald, L.C.H., Alderman, H., Behrman, J., O'Gara, C., Yousafzai, A., Cabral de Mello, M., Hidrobo, M., Ulkuer, N., Ertem, I., and Iltus, S.. 2011. "Strategies for Reducing Inequalities and Improving Developmental Outcomes for Young Children in Low-Income and Middle-Income Countries." *The Lancet* 378(9799): 1339–53.
- Fall, C.H.D., Harshpal S.S., Osmond, C., Restrepo-Mendez, M.C., Victora, C., Martorell, R., Stein, A.D., Sinha, S., Tandon, N., Adair, L., Bas, I., Norris, S., Richter, L.M. and the cohort investigators. 2015. "Association Between Maternal Age at Childbirth and Child and Adult Outcomes in the Offspring: A Prospective Study in Five Low-Income and Middle-Income Countries." *Lancet Global Health* 3: e336-377.
- Garces, E., Thomas, D., and Currie., J. 2002. "Longer Term Effects of Head Start." *American Economic Review*, 92(4): 999-1012; García JL, Heckman JJ and Ziff AL. 2019. *Early Childhood Education and Crime*. *Infant Ment Health Journal* 40(1):141-151

- García J.L., Heckman J.J., and Ziff AL. 2019. Early Childhood Education and Crime. *Infant Mental Health Journal* 40(1):141-151.
- Gertler, P., Heckman, J.J., Pinto, R., Chang, S.M., Grantham-McGregor, S., Vermeersch, C., Walker, S., and Wright, A. 2021. Effect of the Jamaica Early Childhood Stimulation Intervention on Labour Market Outcomes at Age 31. National Bureau of Economic Research Working Paper 29292.
- Gertler, P., Heckman, J.J., Pinto, R., Zanolini, A., Vermeerch., C., Walker, S., Chang, S., and Grantham-McGregor, S. 2014. "Labour Market Returns to an Early Childhood Stimulation Intervention in Jamaica". *Science* 344(6187): 998-1001.
- Giese S., Dawes, A., Tredoux, C., Mattes, F., Bridgman, G., van der Berg, S. Schenk, J., and J. Kotzé. 2022. Thrive by Five Index Report. Cape Town. Department of Basic Education, Innovation Edge, USAID and ECD Measure.
- Government Gazette 1 July 2022 No. 46649. Division of Revenue (Act no. 5 of 2022, section 15.1), page 8
- Harrison, G. D. 2020. A snapshot of early childhood care and education in south africa: Institutional offerings, challenges and recommendations. *South African Journal of Childhood Education*, 10(1), 1–10. <https://doi.org/10.4102/sajce.v10i1.797>
- Hedges, H., Peterson, S. S., and Wajskop, G. 2018. Modes of play in early childhood curricular documents in Brazil, New Zealand and Ontario. *International Journal of Play*, 7(1), 11–26. <https://doi.org/10.1080/21594937.2018.1437379>
- Heikka, J., Hirvonen, R., Kahila, S., Pitkäniemi, H., Yada, T., and Hujala, E. 2023. Links between teachers' planning, assessment and development time and implementation of curriculum in early childhood education. *Early Years*, 43(4–5), 1102–1117. <https://doi.org/10.1080/09575146.2022.2059067>
- Hedges, H., Peterson, S. S., and Wajskop, G. 2018. Modes of play in early childhood curricular documents in Brazil, New Zealand and Ontario. *International Journal of Play*, 7(1), 11–26. <https://doi.org/10.1080/21594937.2018.1437379>
- Heckman, J.J. and Karapakula, G. 2019. Intergenerational and Intragenerational Externalities of the Perry Preschool Project. National Bureau of Economic Research Working Paper 25889.
- Heckman J.J., Moon S.H., Pinto R., Savelyev P.A., and Yavitz A. 2010. "The Rate of Return to the High/Scope Perry Preschool Programme". *Journal of Public Economics* 94(1-2):114-128.
- Heckman, J.J. 2008. The Case for Investing in Disadvantaged Young Children. CESifo DICE report 06, 3-8
- Heckman, J.J. 2008. Schools, Skills, and Synapses. National Bureau of Economic Research Discussion Paper 14064
- Heckman, J.J. and Masterov, D.V. 2007. "The Productivity Argument for Investing in Young Children." *Applied Economic Perspectives and Policy* 29(3): 446–493
- Heckman, J.J. 2006. "Skill Formation and the Economics of Investing in Disadvantaged Children". *Science* 312(5782): 1900–02.
- Innovation Edge. 2019. The South African Early Learning Years Index. Preliminary Findings from 2019 Data Collection & Proposed Next Steps. Cape Town. Innovation Edge
- Giese S., Dawes, A., Tredoux, C., Mattes, F., Bridgman, G., van der Berg, S., Schenk, J., and Kotzé, J. 2022. Thrive by Five Index Report. Cape Town. Department of Basic Education, Innovation Edge, USAID and ECD Measure.
- Gregoriadis, *et al.*, 2017.
- Kangas, J., Harju-Luukkainen, H., Brotherus, A., Gearon, L. F., & Kuusisto, A. 2022. Outlining play and playful learning in Finland and Brazil: A content analysis of early childhood education policy documents. *Contemporary Issues in Early Childhood*, 23(2), 153–165. <https://doi.org/10.1177/1463949120966104>
- Karoly, LA, Greenwood, PW, Everingham, SS, Houbé, J, Kilburn, MR, Rydell, CP, Sanders, M, and Chiesa, J. 1998. Investing in Our Children: What We Know and Don't Know About the Costs and Benefits of Early Childhood Interventions. 1st edition. RAND Corporation.
- Knerr, W., Gardner, F., and Cluver, L. 2013. "Improving Positive Parenting Skills and Reducing Harsh and Abusive Parenting in Low- and Middle-Income Countries: A Systematic Review". *Prevention Science* 14(4): 352-363.
- The 2016 Lancet Early Childhood Development Series. Advancing Early Childhood Development: from Science to Scale. *The Lancet*, Vol. 389, No. 10064.
- LEGO Foundation. 2017. What we mean by: Learning through play.
- LEGO Foundation and UNICEF. 2018. Learning through play: Strengthening learning through play in early childhood education programmes. www.unicef.org/publications
- Liu, C., Solis, S.L., Jensen, H., Hopkins, E.J., Neale, D., Zosh, J.M., Hirsh-Pasek, K., and Whitebread, D. 2017. Neuroscience and Learning through Play: A Review of the Evidence (Research Summary). Billund, DK: The LEGO Foundation; UNICEF. 2018. Learning through Play. Strengthening Learning through Play in Early Childhood Education Programmes. New York: UNICEF;
- Massyn, N., Day, C., Ndlovu, N., and Padayachee, T. (eds.). 2020 District Health Barometer 2019/20. Durban: Health Systems Trust.
- May, J., Witten, C., and Lake, L. (eds.). 2020. South African Child Gauge 2020: Food and Nutrition Security. Cape Town: Children's Institute, University of Cape Town.

- McClean, K., Edwards, S., Katiba, T., Bartlett, J., Herrington, M., Evangelou, M., Henderson, M., Nolan, A., and Skouteris, H. 2022. "Beneficial Outcomes and Features of Playgroup Participation for Children and Adult Caregivers: A Systematic Review of the Literature." *Educational Research Review* 37(2):100493.
- Mikhulu Trust. 2021. Annual Report 2020. Cape Town: Mikhulu Trust.
- NAEYC, 2020.
- NAEYC. 2009. "Position Statement on Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth to 8 Years Old." *Young Children* 41(6): 20–29.
- Nelson Mandela Foundation and Project Preparation Trust. 2023. Solving Land Use & Related Issues. ECD Discussion Document #1. Durban: Project Preparation Trust.
- Nocita, G., Perlman, M., McMullen, E., Falenchuk, O., Brunsek, A., Fletcher, B., Kamkar, N., & Shah, P. S. (2020). Early childhood specialisation among ECEC educators and preschool children's outcomes: A systematic review and meta-analysis. In *Early Childhood Research Quarterly* (Vol. 53, pp. 185–207). Elsevier Ltd. <https://doi.org/10.1016/j.ecresq.2019.10.006>
- OECD. (n.d.). Encouraging Quality in Early Childhood Education and Care (ECEC).
- OECD. (2012). EXECUTIVE SUMMARY-9 STARTING STRONG III: A QUALITY TOOLBOX FOR EARLY CHILDHOOD EDUCATION AND CARE.
- OECD. (2022). Early childhood education and care workforce development: A foundation for process quality.
- Perlman *et al.*, 2016.
- Pre-Kindergarten Task Force. 2017. The Current State of Scientific Knowledge on Pre-Kindergarten Effects. University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Institute.
- Project Preparation Trust. 2020. Statutory and Regulatory Barriers to ECD and Possible Solutions – Resource Document. Durban: Project Preparation Trust and key informant interviews with ECD centre principals February 13-24, 2023
- Project Preparation Trust. 2022. Municipal Role in Early Childhood Development. KZN ECD Community of Practice. Durban: Project Preparation Trust.
- Republic of South Africa. 2015. National Integrated Early Childhood Development Policy. Pretoria: Government Printers, p.81.
- Republic of South Africa. 2015. National Integrated Early Childhood Development Policy. Pretoria: Government Printers.
- SALGA and Nelson Mandela Foundation. 2020. Draft 1: Discussion Document. Enhancing the Delivery of Early Childhood Development (ECD) Services in Local Government. Unpublished.
- Zulu, P, Aina, AY and Bipath, K. 2022. "Education and training experiences of early childhood care and education practitioners in rural and urban settings of Durban, South Africa". *South African Journal of Childhood Education* 12(1): 1-11.
- Project Preparation Trust. 2022. Municipal Role in Early Childhood Development. KZN ECD Community of Practice. Durban: Project Preparation Trust.
- Project Preparation Trust. 2020. Statutory and Regulatory Barriers to ECD and Possible Solutions – Resource Document. Durban: Project Preparation Trust.
- Schweinhart, L, Barnes, H. and Weikart, D. 1993. Significant Benefits: The High / Scope Perry Preschool Study through Age 27. Ypsilanti, MI. High/Scope Press.
- Shafiq, M.N., Devercelli, A.E., and Valerio, A. 2018. "Are There Long-Term Benefits from Early Childhood Education in Low- and Middle-Income Countries?" *Education Policy Analysis Archives* 26(122).
- Shonkoff, J.P. and Garner, A.S. 2012. "The Lifelong Effects of Early Childhood Adversity and Toxic Stress". *Paediatrics* 121:1: e232-e246.
- Shuey, E. A. (OECD), Kim, N. (OECD), Cortazar, A. (CEPI), Poblete, X. (CEPI), Rivera, L. (CEPI), Lagos, M. J. (CEPI), Favero, F. (CEPI), and Engel, A. (OECD). 2019. Curriculum Alignment and Progression between Early Childhood Education and Care and Primary School: A Brief Review and Case Studies. OECD. www.oecd.org/edu/workingpapers
- Slot, P., Lerkkanen, M.-K., and Leseman, P. 2015. The relations between structural quality and process quality in European early childhood education and care provisions: secondary analyses of large scale studies in five countries. <https://www.researchgate.net/publication/303985621>
- Statistics South Africa. 2022. Recorded Live Births, 2021. Statistical Release P0305.
- Trude A.C.B., Richter, L.M., Behrman, J.R., Stein, A.D., Menezes, A.M.B., and Black, M.M.; 1993 Pelotas and Birth to Twenty Plus investigators. 2021. Effects of Responsive Caregiving and Learning Opportunities during Pre-School Ages on the Association of Early Adversities and Adolescent Human Capital: An Analysis of Birth Cohorts in Two Middle-Income Countries. *Lancet Child Adolescent Health*. 5(1): 37-46.
- UNFPA. 2014. Motherhood in Childhood. Facing the Challenge of Adolescent Pregnancy. State of World Population 2013. New York: United Nations Population Fund; UNFPA and UNICEF. (2021). Evolution in the Evidence Base on Child Marriage 2000–2019. New York. United Nations Population Fund and United Nations Children's Fund; WHO. (2016). Global Health Estimates 2015: Deaths by Cause, Age, Sex, by Country and by Region, 2000–2015. Geneva: World Health Organisation.

- Vally, Z., Murray, L., Tomlinson, M., and Cooper P.J. 2015. "The Impact of Dialogic Book-Sharing Training on Infant Language and Attention: A Randomised Controlled Trial in a Deprived South African Community". *J. Child Psychol. Psychiatry* 56(8): 865-73.
- Van Niekerk, L., Ashley-Cooper, M., and Atmore, E. 2017. *Effective Early Childhood Development Programme Options Meeting the Needs of Young South African Children*. Cape Town: Centre for Early Childhood Development.
- Venter, L. 2022. "A Systems Perspective on Early childhood Development Education in South Africa". *Int J Child Care Educ Policy* 16(1): 7.
- Victora, C.G., Christian, P.C. P. Vidaletti, L.P., Gatica-Domínguez, G., Menon, P., and Black, R.E. 2021. Revisiting Maternal and Child Undernutrition in Low-Income and Middle-Income Countries: Variable Progress Towards an Unfinished Agenda. *Maternal and Child Undernutrition Progress* 397(10282): 1388-1399.
- WCGSD. 2019. *Standard Operating Procedures for the Registration, Renewal, Closure and Reinstatement of Pratical Care Facilities*. Western Cape Government Social Development, Early Childhood Development & Partial Care Directorate.
- Western Cape Department of Health and Wellness, University of Cape Town and the DG Murray Trust. 2023. *Western Cape Stunting Baseline Survey on Under-5-Year-Old Children 2022/23*. Cape Town.
- Western Cape Education Department. 2020. *Strategic Plan 2020 - 2025*. Cape Town: Western Cape Education Department.
- Western Cape Department of Social Development. 2022. *Annual Report 2021/22*.
- Wills, G. and Kika Mistry, J. 2021. *Early Childhood Development in South Africa during the COVID-19 Pandemic: Evidence from NIDS-CRAM Waves 2-5*. NIDS-CRAM working paper. Stellenbosch University.
- Wolf *et al.*, 2015.
- World Bank. 2018. *World Development Report 2018: Learning to Realise Education's Promise*. Washington, DC: World Bank.
- World Health Organisation, United Nations Children's Fund, World Bank Group. 2018. *Nurturing Care for Early Childhood Development: A Framework for Helping Children Survive and Thrive to Transform Health and Human Potential*. Geneva: World Health Organisation.
- Zulu, P. P., Aina, A. Y., & Bipath, K. 2022. Education and training experiences of early childhood care and education practitioners in rural and urban settings of Durban, South Africa. *South African Journal of Childhood Education*, 12(1). <https://doi.org/10.4102/sajce.v12i1.1167>

References for Section on Strengthening Teaching and Learning in the Classroom

- Abdul Latif Jameel Poverty Action Lab (J-PAL). 2019. *Teaching at the Right Level to Improve Learning*. J-PAL Evidence to Policy Case Study, available at <https://www.povertyactionlab.org/case-study/teaching-right-level-improve-learning> (last updated August 2022).
- Anand, G., Atluri, A., Crawford, L., Pugatch, T., and Shet, K. 2023. *Improving School Management in Low- and Middle-Income Countries: A Systematic Review*, CGD Working Paper 648. Washington, DC: Centre for Global Development. <https://www.cgdev.org/publication/improving-school-management-low-and-middle-income-countries-systematic-review>.
- Banerjee, A., Banerji, R., Berry, J., Duflo, E., Kannan, H., Mukerji, S., Shotland, M., and Walton, M. 2017. "From Proof of Concept to Scalable Policies: Challenges and Solutions, with an Application," *Journal of Economic Perspectives*, American Economic Association, vol. 31(4), pages 73-102, Fall.
- Bashir, S., Lockheed, M., Ninan, E., and Tan, J-P. 2018. *Facing Forward. Schooling for Learning in Africa*. Washington D.C.: A co-publication of the Agence Française de Développement and the World Bank.
- Böhmer, B. and Gustafsson, M. 2023. *Provincial Educator Demand Projections for South Africa 2021 – 2030*, Research on Socio-Economic Policy (RESEP), Teacher Demographic Dividend (TDD) project, Stellenbosch University.
- Branch, G.F., Hanushek, E.A., and Rivkin, S.G. (2013). School leaders matter; measuring the impact of effective principals. *Education Next*, 13(1), 62–69.
- Bruns, B.; Schneider, B.R., and Saavedra, J. 2023. *The Politics of Transforming Education in Peru: 2007-2020*. Research on Improving Systems of Education (RISE) Working Paper Series. 23/135. https://doi.org/10.35489/BSG-RISE-WP_2023/135.
- Bush, T. and Glover, D. 2016. School leadership and management in South Africa: Findings from a systematic literature review. *International Journal of Educational Management*, 30(2), 211– 231.
- Cameron, R. and Levy, B. 2018. *Provincial Governance of Education—The Western Cape Experience*, in Levy, B., Cameron, R., Hoadley, U., and Naidoo, V. (eds.). 2018. *The Politics and Governance of Basic Education. A Tale of Two South African Provinces*, Oxford: Oxford University Press.
- Centre for International Teacher Education (CPUT). 2019. *Understanding Teachers' work in the Western Cape*. The Voice of Teaches, report prepared for the Western Cape Education Department (WCED), mimeograph.
- City, E.A. Elmore, R.F., Fiarman, S.E., and Teitel, L. 2009. *Instructional Rounds in Education: A Network Approach to Improving Teaching and Learning*, Harvard Education Press.
- Christian, D. and Sayed, Y. 2023. *Teacher Motivation to Teach in Challenging School Contexts on the Cape Flats*, Western Cape, South Africa. *Educ. Sci.* 2023, 13, 165. <https://doi.org/10.3390/educsci13020165>

- Crawford, L., Hares, S., and Sandefur, J. 2020. What Has Work at Scale? In Sandefur, J (ed.). 2020. *Schooling for All Feasible Strategies to Achieve Universal Education*, Washington D.C.: Centre for Global Development.
- Cruz, L. and Loureiro, A. 2020. "Achieving World Class Education in Adverse Socioeconomic Conditions: The Case of Sobral in Brazil." World Bank. <https://openknowledge.worldbank.org/bitstream/handle/10986/34150/Achieving-World-Class-Education-in-Adverse-Socioeconomic-Conditions-The-Case-of-Sobral-in-Brazil.pdf?sequence=4&isAllowed=y>.
- Darling-Hammond, L., Hyley, M.E., and Gardner, M. 2017. *Effective Teacher Professional Development*. Palo Alto, CA: Learning Policy Institute, at <https://learningpolicyinstitute.org/product/teacher-prof-dev>.
- Department of Basic Education (DBE). Multiple years, from 2013 to 2021. *School Realities Reports, 2013-2021*. Accessed at <https://education.gov.za/Programmes/EMIS/StatisticalPublications/tabid/462/ItemID/28812/Default.aspx>
- Department of Basic Education (DBE). 2015. *Action Plan to 2019 Towards the Realisation of Schooling 2030. Taking forward South Africa's National Development Plan 2030*. Pretoria, South Africa: Department of Basic Education.
- Department of Basic Education (DBE). 2020. *Action Plan to 2024 Towards the Realisation of Schooling 2030. Taking forward South Africa's National Development Plan 2030*. Pretoria, South Africa: Department of Basic Education.
- Department of Planning, Monitoring and Evaluation (DPME)/Department of Basic Education (DBE). 2017. *Implementation Evaluation of the National Curriculum Statement Grade R to 12 Focusing on the Curriculum and Assessment Policy Statements (CAPS)*; Pretoria, South Africa: Department of Planning, Monitoring and Evaluation/Department of Basic Education.
- DuFour, R. 2004. What is a 'professional learning community'? *Educational Leadership*, 61(8), 6–11.
- DuFour, R. and Fullan, M. 2013. *Cultures Built to Last: Systemic PLCs at Work*. Solution Tree Press.
- Ehren, M., and Baxter, J. (eds.). 2021. *Trust, Accountability and Capacity in Education System Reform. Global Perspectives in Comparative Education*, Routledge Press.
- Elmore, R.F. 2000. *Building a New Structure for School Leadership*, Washington D.C.: The Albert Shanker Institute.
- Fryer, R.G.. Jr. 2014. "Injecting Charter School Best Practices into Traditional Public Schools: Evidence from Field Experiments," *The Quarterly Journal of Economics*, Volume 129, Issue 3, August 2014, Pages 1355–1407, <https://doi.org/10.1093/qje/qju011>.
- Grissom, J.A., Egalite, A.J., and Lindsay, C.A. 2021. "How Principals Affect Students and Schools: A Systematic Synthesis of Two Decades of Research." New York: The Wallace Foundation. Available at <http://www.wallacefoundation.org/principalsynthesis>.
- Gustafsson, M. 2019. Pursuing Equity Through Policy in the Schooling Sector 2007–2017, in Nic Spaull and Jonathan D. Jansen (eds.). 2019. *South African Schooling: The Enigma of Inequality. A Study of the Present Situation and Future Possibilities* Springer Nature Switzerland AG 2019, <https://doi.org/10.1007/978-3-030-18811-5>.
- Gustafsson, M. 2021. "A retirement wave is about to hit South Africa: what it means for class size," *The Conversation*, August 26, at <https://theconversation.com/a-teacher-retirement-wave-is-about-to-hit-south-africa-what-it-means-for-class-size-164345>.
- Gustafsson, M. and Taylor, N. 2022. *The Politics of Improving Learning Outcomes in South Africa. Research on Improving Systems of Education*. PE03. <https://doi.org/10.35489/BSG-RISE-2022/PE03>
- Hoadley, U. 2023. *COVID-19 and the South African Curriculum Policy Response*, Research Note prepared for the COVID-Generation Project led by Research on Socio-Economic Policy (RESEP) at Stellenbosch University. Mimeo.
- Honig, D. 2022. *Managing for Motivation as Public Performance Improvement Strategy in Education & Far Beyond. Research on Improving Systems of Education (RISE) Essay* at https://doi.org/10.35489/BSG-RISE-Misc_2022/04.
- Honig, D and Pritchett, L. 2019. *The Limits of Accounting-Based Accountability in Education (and Far Beyond): Why More Accounting Will Rarely Solve Accountability Problems. Research on Improving Systems of Education (RISE) Working Paper Series 19/030*.
- Hu, Y. 2020. *Historical Perspectives on the Teaching Research System and Teacher Learning since the Founding of New China, Chinese Education and Society*. Vol. 53, Nos. 5-6, 274-299. <https://doi.org/10.1080/10611932.2021.1876421>.
- Hwa, Y. and Leaver, C. 2021. *Management in Education Systems. Oxford Review of Economic Policy*, 37(2), 367-391.
- Hwa, Y-Y. 2022. 'Our system fits us': comparing teacher accountability, motivation, and sociocultural context in Finland and Singapore, *Comparative Education*, 58:4, 542-561, DOI: 10.1080/03050068.2022.2102754.
- Keaveney, E., Fierros, C., Rigaux, A., and Menendez, A. 2021. *USAID Reading and Access Tusome External Evaluation, Endline Report*. Washington, DC: USAID.
- Keo, S-D. 2016. *Shaping Strong Principals in Singapore: Success by Design*, National Centre on Education and the Economy, February 26, 2016, at <https://ncee.org/quick-read/shaping-strong-principals-in-singapore-success-by-design/#:~:text=To%20become%20a%20principal%20in,vice%20principal%2C%20and%20then%20principal>.
- Lee, S.K., Lee, W.O., Low, E.L., and Tan, J.S.Y. 2014. *Introduction: Levelling Up and Sustaining Educational Achievement*, in Lee, Sing Kong; Wing On Lee; and Ee Ling Low (eds.). 2014. *Educational Policy Innovations. Levelling Up and Sustaining Educational Achievement*, Springer Singapore Heidelberg New York Dordrecht London.

- Lee, S-S., Ho, J., and Tay, L.Y. 2021. "Hierarchical Structures with Networks for Accountability And Capacity Building in Singapore. An evolutionary approach, in Ehren and Baxter (eds. 2021). *Trust, Accountability and Capacity in Education System Reform. Global Perspectives in Comparative Education*, Routledge Press.
- Levy, B., Cameron, R., Hoadley, U., and Naidoo, V (eds.). 2018. *The Politics and Governance of Basic Education. A Tale of Two South African Provinces*, Oxford: Oxford University Press.
- Liang, X., Kidwai, H., and Zhang, M. 2016. *How Shanghai Does It—Insights and Lessons from the Highest-Ranking Education System in the World*. Washington, DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/24000>.
- McGregor, D. 1960. *The Human Side of Enterprise*, New York: McGraw Hill.
- Nielson, C., Gallegos, S., Calle, F., and Karnani, M. 2022. *Screening and Recruiting Talent at Teacher Colleges Using Pre-College Academic Achievement*, mimeograph, Department of Economics, Princeton University.
- OECD. 2021. *Education in Brazil: An International Perspective*, OECD Publishing, Paris, <https://doi.org/10.1787/60a667f7-en>
- OECD. 2019a. *TALIS 2016 Results (Volume 1): Teachers and School Leaders as Lifelong Learners, [Brazil Country Report]*. OECD <https://doi.org/10.1787/1d0bc92a-en>.
- OECD. 2019b. *TALIS 2018 Results (Volume 1): Teachers and School Leaders as Lifelong Learners (TALIS) [South Africa Country Report]*. OECD. <https://www.education.gov.za/Portals/0/Documents/Reports/Talis%20Teachers%20and%20Principals%20as%20Lifelong%20Learners%20Final.pdf?ver=2019-07-02-090156-000>
- Piper, B., Sitabkhan, Y., Mejia, J., and Betts, K. 2018. *Effectiveness of Teachers' Guides in the Global South: Scripting, Learning Outcomes; and Classroom Utilisation*. RTI press, 9857.
- Pritchett, L. 2019. *A Review Essay—The Politics and Governance of Basic Education: A Tale of Two South African Provinces, Research on Improving Systems of Education (RISE) Insight Note*. https://riseprogramme.org/sites/default/files/publications/20190701_Pritchett_SA_Book_Review_Insight_0.pdf
- Popova, A., Evans, D.K., Breeding, M.E., and Arancibia, V. 2022. "Teacher Professional Development around the World: The Gap between Evidence and Practice." *The World Bank Research Observer*, 37 (1): 107– 36. doi:10.1093/wbro/lkab006
- Reddy, V., Juan, A., Winnaar, L., Arends, F., Harvey, J., Hannan, S., and Zulu, N. 2020. *TIMSS 2019: Highlights of Western Cape Province Grade 9 Results in Mathematics and Science: Building Achievement and Bridging Achievement Gaps*. HSRC: Pretoria.
- Reddy, V., Winnaar, L., Arends, F., Juan, A., Harvey, J., Hannan, S., and Isdale, K. 2022. *TIMSS National Reports*, Pretoria, South Africa: HSRC. <https://www.timss-sa.org/publication/the-south-african-timss-2019-grade-9-results>.
- Reddy, V., Juan, A., Isdale, K., and Fongwa, S. 2019. *Mathematics Achievement and the Inequality Gap: TIMSS 1995 to 2015, in Nic Spaull and Jonathan D. Jansen (eds.). 2019. South African Schooling: The Enigma of Inequality. A Study of the Present Situation and Future Possibilities*, Springer Nature Switzerland AG 2019, <https://doi.org/10.1007/978-3-030-18811-5>.
- Research on Socio-Economic Policy (RESEP). 2023. *Western Cape Province Educator Demand Projections 2021-2030*, PowerPoint presentation (June). Teacher Demographic Dividend (TDD) project, University of Stellenbosch.
- Shanmugaratnam, T. 2005. *Speech by Mr Tharman Shanmugaratnam, Minister for Education, at the MOE Workplan Seminar 2005, 22 September 2005 at 10.00 a.m. at the Ngee Ann Polytechnic Convention Centre*. Retrieved from <http://www.nas.gov.sg/archivesonline/speeches/view-html?filename=20050922991.htm>.
- Shepherd, D. 2022. *The Teacher Labour Market and Pay How does it compare to other professions?* Research on Socio-Economic Policy (RESEP), Teacher Demographic Dividend (TDD) project, University of Stellenbosch.
- Scholtz, M. 2020. *Feasibility and Appetite for a Teaching School in the Western Cape. Final Report to DG Murray Trust, GA-1908-70503*, mimeograph.
- Spaull, N. 2019. *Equity: A Price Too High to Pay?* in Nic Spaull and Jonathan D. Jansen (eds.). 2019. *South African Schooling: The Enigma of Inequality. A Study of the Present Situation and Future Possibilities*, Springer Nature Switzerland AG 2019, <https://doi.org/10.1007/978-3-030-18811-5>.
- Spaull, N. 2022. "Teacher production, class size, and learner population growth. How many teachers will be required for South Africa to maintain or reduce the LE ratio given increase in learner population numbers?" Research on Socio-Economic Policy (RESEP), Teacher Demographic Dividend (TDD) project, University of Stellenbosch.
- Spaull, N, and Kotze, J. 2015. "Starting Behind and Staying Behind in South Africa: The Case of Insurmountable Learning Deficits in Mathematics." *International Journal of Educational Development* 41: 13–24.
- Spaull, N., and Pretorius, E. (eds). 2022. *Early Grade Reading in South Africa*, Cape Town: Oxford University Press.
- Taylor, N. 2019. *Inequalities in Teacher Knowledge in South Africa*, in Nic Spaull and Jonathan D. Jansen (eds.). 2019. *South African Schooling: The Enigma of Inequality. A Study of the Present Situation and Future Possibilities*) Springer Nature Switzerland AG 2019, <https://doi.org/10.1007/978-3-030-18811-5>
- Taylor, N. 2021. *The dream of Sisyphus: Mathematics Education in South Africa*. *South African Journal of Childhood Education*. Vol. 11, No. 1 at <https://doi.org/10.4102/sajce.v11i1.911>.
- Taylor, S. and Spaull, N. 2022. *What works and what scales? Returning to a tradition of evidence based system-wide programmes*. In Spaull, Nic. and Stephen Taylor, (eds), 2022. *Early Grade Reading and Mathematics Interventions in South Africa*. Cape Town: Oxford University Press.

- Thoonen, E. E., Slegers, P. J., Oort, F. J., Peetsma, T. T., and Geijssel, F. P. 2011. How to improve teaching practices: The role of teacher motivation, organisational factors, and leadership practices. *Educational administration quarterly*, 47(3), 496-536.
- Tucker, M (ed.). 2014. *Chinese Lessons: Shanghai's Rise to the Top of the PISA League Tables*, Centre on International Education Benchmarking, Washington D.C.: National Centre on Education and the Economy.
- Venkat, H. and Roberts, N. (eds.). 2022. *Early Grade Mathematics in South Africa*. Cape Town: Oxford University Press.
- Wills, G. 2019. *School Leadership and Management: Identifying Linkages with Learning and Structural Inequalities*, in Nic Spaull and Jonathan D. Jansen (eds.). 2019. *South African Schooling: The Enigma of Inequality. A Study of the Present Situation and Future Possibilities* Springer Nature Switzerland AG 2019, <https://doi.org/10.1007/978-3-030-18811-5>
- Wills, G., Shepherd, D., and Kotzé, J. 2018. *Explaining the Western Cape Performance Paradox. An Econometric Analysis*, in Levy, Brian; Robert Cameron, Ursula Hoadley, and Vinothan Naidoo (eds.). 2018. *The Politics and Governance of Basic Education. A Tale of Two South African Provinces*, Oxford: Oxford University Press.
- Wilson, J.Q. 1989. *Bureaucracy. What Government Agencies Do and Why They Do It*, Basic Books.
- World Bank. 2007. "What do we know about school-based management (English). Washington, D.C. : World Bank Group." <http://documents.worldbank.org/curated/en/885381468141573206/What-do-we-know-about-school-based-management>
- World Bank. 2018. *World Development Report. Learning to Realise Education's Promise*. Washington D.C.: The World Bank Group.
- World Bank. 2023. *Making Teacher policy Work: Small Changes, Big Results*. Washington, DC: World Bank. License: Creative Commons Attribution CC BY 3.0 IGO

References for Section on Expansion of the Basic Education System with a Focus on Public Private Partnerships

- Abdul-Hamid, H., Baum, D.R., Lewis, L., Lusk-Stover, O., and Anna-Maria, T. 2015. *The role of the private sector in providing basic education services in Kasoa, Ghana. Systems Approach for Better Education Results (SABER)*, Washington, D.C.: World Bank Group.
- Abdulkadiroğlu, A., Pathak, P.A., Schellenberg, J., and Walters, C.R. 2020. Do parents value school effectiveness? *American Economic Review* 110(5): 1502-39.
- Abdulkadiroğlu, A., Angrist, J.D., Hull, P.D., Pathak, P.A. 2016. Charters without lotteries: Testing takeovers in New Orleans and Boston. *American Economic Review* 106(7): 1878-1920.
- Abdulkadiroglu, A., Angrist, J.D., Dynarski, S.M., Kane, T.J., and Pathak, P.A. 2011. Accountability and flexibility in public schools: Evidence from Boston's charters and pilots. *Quarterly Journal of Economics* 126(2): 699-748.
- Aguirre, J. 2022. How can progressive vouchers help the poor benefit from school choice? Evidence from the Chilean voucher system. *Journal of Human Resources* 57(3): 956-997.
- Ahlin, Å. 2003. *Does School Competition Matter? Effects of a Large-Scale School Choice Reform on Student Performance*. Uppsala University, Department of Economics Working Paper No. 2003: 2.
- Akabayashi, H. and Araki, H. 2011. Do education vouchers prevent dropout at private high schools? Evidence from Japanese policy changes. *Journal of the Japanese and International Economies* 25(3): 183-198.
- Allcott, H.V. and Ortega, D. 2009. *The Performance of Decentralised School Systems: Evidence from Fe Y Alegría in Venezuela*. World Bank Policy Research Working Paper No. 4879.
- Anand, P., Mizala, A., and Repetto, A. 2009. Using school scholarships to estimate the effect of private education on the academic achievement of low-income students in Chile. *Economics of Education Review* 28: 37-381.
- Andersen, S.C. 2008. Private schools and the parents that choose them: Empirical evidence from the Danish school voucher system. *Scandinavian Political Studies* 31(1): 44-68.
- Angrist, J.D., Dynarski, S.M., Kane, T.J., Pathak, P.A., and Walters, C.R. 2012. Who Benefits from KIPP? *Journal of Policy Analysis and Management* 31: 837-860.
- Angrist, J.D., Dynarski, S.M., Kane, T.J., Pathak, P.A., and Walters, C.R. 2010. Inputs and impacts in charter schools: KIPP Lynn. *American Economic Review* 100(2): 239-43.
- Angrist, J., Bettinger, and E., Kremer, M. 2006. Long-term educational consequences of secondary school vouchers: Evidence from administrative records in Colombia. *American Economic Review* 96(3): 847-862.
- Angrist, J., Bettinger, E., Bloom, E., King, E., and Kremer, M. 2002. Vouchers for private schooling in Colombia: Evidence from a randomised natural experiment. *American Economic Review* 92(5): 1535-1558.
- Angrist, J., Bettinger, E., and Kremer, M. 2006. Long-Term Educational Consequences of Secondary School Vouchers: Evidence from Administrative Records in Colombia. *American Economic Review* 96(3): 847-862.
- Angrist, N., Djankov, S., Goldberg, and P.K., Patrinos, H.A. 2021. Measuring human capital using global learning data. *Nature* 592: 403-408.

- Angrist, N., Evans, D.K., Filmer, D., Glennerster, R., Rogers, F.H., and Sabarwal, S. 2020. How to improve education outcomes most efficiently. World Bank Policy Research Working Paper 9450.
- Arcelo, A.A. 2000. Public-Private Partnership in the Philippine Education Sector. In Wang, Y., ed., *Public-Private Partnerships in the Social Sector: Issues and Country Experience in Asia and the Pacific*. Asian Development Bank Institute Policy Papers No. 1: 206-218.
- Ardington, C., Wills, and G., Kotze, J. 2021. COVID-19 learning losses: Early grade reading in South Africa. *International Journal of Educational Development* 86.
- Ardington, C. and Henry, J. 2021. FundaWandeLimpopo Evaluation. Midline Report. SALDRU Cape Town.
- SALDRU 2022. Funda Wande Western Cape Evaluation. Baseline Report. https://fundawande.org/img/cms/news/WC%20Baseline%20Report_2022_V05.pdf
- Aslam, M., Rawal, S., and Saeed. 2017. Public-private partnerships in education in developing countries: A rigorous review of the evidence. Ark Education Partnerships Group.
- Balsa, A.I. and Cid, A. 2016. A Randomised Impact Evaluation of a Tuition-Free Private School Targeting Low Income Students in Uruguay. *Journal of Applied Economics* 19(1): 65-94.
- Banerjee, A. and Dufo, E. 2006. Addressing absence. *Journal of Economic Perspectives* 20(1): 117-132.
- Barrera-Osorio, F., Blakeslee, D.S., Hoover, M., Linden, L., Raju, D., and Ryan, S.P. 2022. Delivering education to the underserved through a public-private partnership programme in Pakistan. *Review of Economics and Statistics* 104(3): 399-416.
- Barrera-Osorio, F., de Galbert, P., Habyarimana, and J., Sabarwal, S. 2018. Impact of Public-Private Partnerships on Private School Performance. World Bank Policy Research Working Paper 7905. Washington DC: World Bank.
- Barrera-Osorio, F. 2007. The impact of private provision of public education: empirical evidence from Bogota's concession schools. World Bank Policy Research Working Paper No. 4121.
- Barrera-Osorio, F., Galbert, P.D., Habyarimana, and J., Sabarwal, S. 2020. The impact of public-private partnerships on private school performance: Evidence from a randomised controlled trial in Uganda. *Economic Development and Cultural Change* 68(2): 429-469.
- Barrera-Osorio, F. and Raju, D. 2015. Evaluating the Impact of Public Student Subsidies on Low-Cost Private Schools in Pakistan. *Journal of Development Studies* 51(7): 808-825.
- Barrera-Osorio, F., Gertler, P., Nakajima, N., and Patrinos, H. 2020. Promoting parental involvement in schools: Evidence from two randomised experiments. National Bureau of Economic Research Working Paper No. w28040.
- Barro, R., Lee, J.-W. 2013. A New Data Set of Educational Attainment in the World, 1950-2010. *Journal of Development Economics* 104: 184-198.
- Baum, D.R. 2021. Non-State Actors in Early Childhood Education: Implications for Education Equity and Quality. Paper prepared for the Global Education Monitoring Report. UNESCO.
- Baum, D. 2018a. Private school vouchers in developing countries: A survey of the evidence. Charlottesville VA: Centre for Open Science.
- Baum, D.R. 2018b. The effectiveness and equity of public-private partnerships in education: A quasi-experimental evaluation of 17 countries. *Education Policy Analysis Archives* 26: 105-105.
- Baum, D.R., Cooper, R., and Lusk-Stover, O. 2018. Regulating market entry of low-cost private schools in Sub-Saharan Africa: Towards a theory of private education regulation. *International Journal of Educational Development* 60: 100-112.
- Baum, D., L. Lewis, O. Lusk-Stover, and H. Patrinos. 2014. What Matters Most for Engaging the Private Sector in Education: A Framework Paper. Systems Approach for Better Education Results (SABER) Working Paper No. 8. World Bank.
- Beg, S., Lucas, A., Halim, W., and Saif, U. 2019. Beyond the Basics: Improving Post-Primary Content Delivery through Classroom Technology. NBER Working Paper No. 25704.
- Bettinger, E.P. 2005. The effect of charter schools on charter students and public schools. *Economics of Education Review* 24(2): 133-147.
- Bettinger, E., Kremer, M., and Saavedra, J.E. 2010. Are educational vouchers only redistributive? *Economic Journal* 120(546): 204-228.
- Betts, J.R. and Tang, Y.E. 2016. A meta-analysis of the literature on the effect of charter schools on student achievement. Evanston IL: Society for Research on Educational Effectiveness.
- Bianchi, N., Lu, Y., and Song, H. 2022. The Effect of Computer-Assisted Learning on Students' Long-Term Development. *Journal of Development Economics* 158.
- Biyase, M. and Zwane, T. 2015. Does education pay in South Africa? Estimating returns to education using two stage least squares approach. *International Business & Economics Research Journal* 14(6): 807-814.
- Blaug, M. 1984. Education vouchers: it all depends on what you mean, in: J. Le Grand, R. Robinson, eds., *Privatisation and the Welfare State*. London: George Allen and Unwin.

- Böhlmark, A. and Lindahl, M. 2015. Independent schools and long-run educational outcomes: Evidence from Sweden's large-scale voucher reform. *Economica* 82(327): 508-551.
- Bonilla, J.D. 2011. Contracting Out Public Schools for Academic Achievement: Evidence from Colombia. https://eesp.fgv.br/sites/eesp.fgv.br/files/file/Juan_Bonilla.pdf
- Borghesan, E., Vasey, G. 2021. The Marginal Returns to Distance Education: Evidence from Mexico's Telesecundarias. Working Paper.
- Borzekowski, D. 2018. A Quasi-Experiment Examining the Impact of Educational Cartoons on Tanzanian Children. *Journal of Applied Developmental Psychology* 54: 53-59.
- Borzekowski, D. and Henry, H. 2011. The Impact of Jalan Sesama on the Educational and Healthy Development of Indonesian Preschool Children: An Experimental Study. *International Journal of Behavioral Development* 35(2): 169-179.
- Borzekowski, D., Lando, A., Olsen, S. and Giffen, L. 2019. The Impact of an Educational Media Intervention to Support Children's Early Learning in Rwanda. *International Journal of Early Childhood* 51(1): 109-126.
- Bravo, D., Mukhopadhyay, S., and Todd, P.E. 2010. Effects of school reform on education and labour market performance: Evidence from Chile's universal voucher system. *Quantitative Economics* 1(1): 47-95.
- Brown, FL, de Graaf, AM, Annan, J, Betancourt, TS. 2017. Breaking cycles of violence: Core components of interventions for children, adolescents and youth affected by war. *Journal of Child Psychology and Psychiatry* 58: 507-524.
- Burch, P., Steinberg, M., Donovan, J. 2007. Supplemental Educational Services and NCLB: Policy Assumptions, Market Practices, Emerging Issues. *Educational Evaluation and Policy Analysis* 29(2): 115-33.
- Burgess, S., Greaves, E., Vignoles, A., and Wilson, D. 2015. What parents want: School preferences and school choice. *Economic Journal* 125(587): 1262-1289.
- Burke, L. and Bedrick, J. 2018. Personalising Education: How Florida Families Use Education Savings Accounts. EdChoice. <https://eric.ed.gov/?id=ED591348>.
- Card, D., Dooley, M.D., and Payne, A.A. 2010. School competition and efficiency with publicly funded Catholic schools. *American Economic Journal: Applied Economics* 2(4): 150-176.
- Case, A. and Yogo, M. 1999. Does School Quality Matter? Returns to Education and the Characteristics of Schools in South Africa. NBER Working Paper w7399.
- Centre for Education Reform. 2022a. National Charter School Law Rankings and Scorecard 2022. <https://edreform.com/wp-content/uploads/2022/05/cer-charterlaws-scorecard-2022.pdf>
- Centre for Education Reform (CER). 2022b. Parent Power Index: Empowering parents, students, and community: General rankings of Opportunity, Innovation, and Policy Environment. <https://parentpowerindex.edreform.com/>
- Centre for Development and Enterprise (CDE). 2013. Affordable Private Schools in South Africa. Johannesburg.
- Chabrier, J., Cohodes, S., and Oreopoulos, P. 2016. What can we learn from charter school lotteries? *Journal of Economic Perspectives* 30(3): 57-84.
- Chakrabarti, R. and Peterson, P.E. 2008. *School Choice International: Exploring Public-Private Partnerships*. Cambridge: MIT Press.
- Cheng, K.-M. 2010. Shanghai and Hong Kong: Two distinct examples of education reform in China. In *OECD, Strong performers and successful performers in education: Lessons from PISA for the United States*. Paris: OECD, pp. 83-115.
- Cheng, A., Hitt, C., Kisida, B., and Mills, J.N. 2017. No excuses" charter schools: A meta-analysis of the experimental evidence on student achievement. *Journal of School Choice* 11(2): 209-238
- Chingos, M.M. and West, M.R. 2015. The uneven performance of Arizona's charter schools. *Educational Evaluation and Policy Analysis* 37(1): 120-134.
- Chumacero, R.A., Gómez, D., and Paredes, R.D. 2011. I would walk 500 miles (if it paid): Vouchers and school choice in Chile. *Economics of Education Review* 30(5): 1103-1114.
- Christel House South Africa. 2021. Annual Report 2021: 20 year of transforming lives.
- Cilliers J., Fleisch, B., Prinsloo, C., and Taylor, S. 2023. How to Improve Teaching Practice? An Experimental Comparison of Centralised Training and In-Classroom Coaching. *Journal of Human Resources* 55(3): 926-962.
- Claremont High School. n.d. The dawn of a new school. <http://claremonthigh.co.za/index.php/in-the-beginning/>
- Cohodes, S. and Parham, K. 2021. Charter Schools' Effectiveness, Mechanisms, and Competitive Influence. *Oxford Research Encyclopedia of Economics and Finance*.
- Coleman, J.S. and Hoffer, T. 1987. *Public and private high schools. The impact of communities*. New York: Basic Books.
- Cooper, A., Gordon, S., and Groenewald, C. 2023. National Survey of Parents Perceptions and Experiences of Education Quality. Human Sciences Research Council. Pretoria, South Africa.

- Cooper, A., Mahali, A., de Kock, T., Radasi, Z., Mcata, and B., Soudien, C. 2021. Evaluation Prepared for the Pilot Support Office of the Public School Partnerships Programme Evaluation of the Public School Partnerships (PSP) Pilot Programme. Human Sciences Research Council. Pretoria, South Africa.
- Correa, J.A., Parro, F., and Sanchez, R. 2021. The Effect of School Voucher Spending on Initial Earnings. IZA Discussion Paper No. 14552.
- Corten, R. and Dronkers, J. 2006. School achievement of pupils from the lower strata in public, private government-dependent and private government-independent schools: A cross-national test of the Coleman-Hoffer thesis. *Educational Research and evaluation* 12(2): 179-208.
- Crawford, L., Hares, S., and Todd, R. 2021. The Impact of Private Schools, School Chains and PPPs in Developing Countries. World Bank Research Observer.
- Crump, S. and Slee, R. 2005. Robbing the public to pay private? Two cases of refinancing education infrastructure in Australia. *Journal of Education Policy* 20(2): 243-258.
- Dallavis, J.W. and Berends, M. 2023. Charter schools after three decades: Reviewing the research on school organisational and instructional conditions. *Education Policy Analysis Archives* 31.
- Department of Basic Education of South Africa (DBE). 2023. School Masterlist Data: Western Cape [dataset]. <https://www.education.gov.za/Programmes/EMIS/EMISDownloads.aspx>
- Department of Basic Education. 2023. Annual Report 2022/23. <https://www.gov.za/documents/annual-reports/department-basic-education-annual-report-20222023-21-sep-2023>
- DataFirst. 2017. Statistics South Africa: Community Survey 2016 [dataset]. <https://www.datafirst.uct.ac.za/dataportal/index.php/catalog/611/study-description>
- Day Ashley, L., McLoughlin, C., Aslam, M., Engel, J., Wales, J., Rawal, S., Batley, R., Kingdon, G., Nicolai, S., and Rose, P. 2014. The Role and Impact of Private Schools in Developing Countries. London: Department for International Development (DFID).
- Depken, C., Chiseni, C., and Ita, E. 2019. Returns to Education in South Africa: Evidence from the National Income Dynamics Study. *Zagreb International Review of Economics and Business* 22(1): 1-12.
- Dixon, P., Egalite, A., Humble, and S., Wolf, P. 2019. Experimental results from a four-year targeted education voucher programme in the slums of Delhi, India. *World Development* 124.
- Dobbie, W. and Fryer, R.G. 2020. Charter Schools and Labour Market Outcomes. *Journal of Labour Economics* 38(4): 915-957
- Dobbie, W. and Fryer Jr, R.G. 2011. Are high-quality schools enough to increase achievement among the poor? Evidence from the Harlem Children's Zone. *American Economic Journal: Applied Economics* 3(3): 158-187.
- Dronkers, J. and Robert, P. 2008. Differences in scholastic achievement of public, private government-dependent, and private independent schools: A cross-national analysis. *Educational Policy* 22(4): 541-577.
- Dronkers, J. and Robert, P. 2008. School choice in the light of the effectiveness differences of various types of public and private schools in 19 OECD countries. *Journal of School Choice* 2(3): 260-301.
- EdChoice. 2022. EdChoice 101: An introduction to the basics of school choice. Indianapolis. <https://www.edchoice.org/wp-content/uploads/2021/06/2021-EdChoice-101.pdf>
- Education Partnerships Group (EPG). 2022. Western Cape Education Partnership Research: Identifying success factors for school improvement.
- Education Partnerships Group (EPG). 2021. Collaboration Schools Policy Review Process: Education Partnership Governance Structures.
- Epple, D., Romano, R., and Zimmer, R. 2016. Charter schools: A survey of research on their characteristics and effectiveness. In *Handbook of the Economics of Education* 5: 139-208.
- Epple, D., Romano, R.E., and Urquiola, M. 2017. School Vouchers: A Survey of the Economics Literature. *Journal of Economic Literature* 55(2): 441-492.
- Equal Education. 2018. Equal Education's Submission on the Western Cape Provincial School Education Amendment Bill, 2018. Khayelitsha, South Africa, Equal Education.
- Erickson, H.H., Mills, J.N., and Wolf, P.J. 2021. The Effects of the Louisiana Scholarship Programme on Student Achievement and College Entrance. *Journal of Research on Educational Effectiveness*
- Eyles, A., Hupkau, C., and Machin, S. 2016. Academies, charter and free schools: do new school types deliver better outcomes? *Economic Policy* 31(87): 453-501.
- Eyles, A. and Machin, S. 2019. The introduction of academy schools to England's education. *Journal of the European Economic Association* 17(4): 1107-1146.
- Fabre, A. and Straub, S. 2023. The Impact of Public-Private (PPPs) in Infrastructure, Health, and Education. *Journal of Economic Literature* 61(2):655-715.
- Feldman, J., 2020. Public-private partnerships in South African education: risky business or good governance? *Education as Change* 24(1): 1-18.

- Fleisch, B. and Alsofrom, K. 2022. Coaching research in the Early Grade Reading Studies in South Africa. In Spaul, N., Taylor, S., eds., *Early Grade Interventions in South Africa: Reading and Mathematics*. Oxford: 48-63.
- Friderichs, T.J., Keeton, G., and Rogan, M. 2023. Decomposing the impact of human capital on household income inequality in South Africa: Is education a useful measure? *Development Southern Africa*: 1-17.
- Friedman, M. 1955. *The Role of Government in Education*. Rutgers University Press New Brunswick, NJ.
- Fryer, R. 2014. Injecting Charter School Best Practices into Traditional Public Schools: Evidence from Field Experiments. *Quarterly Journal of Economics* 129(3): 1355–1407.
- Gamedze, T.S. 2019. The politics of accountability within the collaboration schools: Measures, processes and emerging issues. A mini- thesis submitted in partial fulfilment of the requirements for the degree of Masters of Public Administration in the School of Government, University of the Western Cape.
- Giaconi, V., Bressoux, P., and Felmer, P. 2022. The effect of voucher and public school education on Chilean students' mathematics and reading test score trajectories. *School Effectiveness and School Improvement* 33(2): 303-331.
- Gibbs, E., Jones, C., Atkinson, J., Attfield, I., Bronwin, R., Hinton, R., Potter, A., and Savage, L. 2021. Scaling and 'systems thinking' in education: Reflections from UK aid professionals. *Compare: A Journal of Comparative and International Education* 51(1): 137-156.
- Glazerman, S. and Dotter, D. 2017. Market signals: Evidence on the determinants and consequences of school choice from a citywide lottery. *Educational Evaluation and Policy Analysis* 39(4): 593-619.
- Global Education Evidence Advisory Panel. 2020. *Cost-Effective Approaches to Improve Global Learning*. Washington, DC: World Bank.
- Gray-Lobe, G., Keats, A., Kremer, M., Mbiti, I., and Ozier, O.W. 2022. Can Education be Standardised? Evidence from Kenya. University of Chicago, Becker Friedman Institute for Economics Working Paper 2022-68.
- Groenewald, C., Cooper, A., and Gordon, S. 2023. Education quality and involvement: A qualitative study of parents' perspectives from South Africa. Human Sciences Research Council. Pretoria, South Africa.
- Gustafsson, M. 2020. A revised PIRLS 2011 to 2016 trend for South Africa and the importance of analysing the underlying microdata. Stellenbosch Working Paper Series No. WP02/2020.
- Hanushek, E.A. and Woessmann, L. 2011. The economics of international differences in educational achievement. *Handbook of the Economics of Education* 3: 89-200.
- Hao, J., Gregg, H., and Yao, Y. 2023. COVID-19 and Long-Term Economic Growth. *Australian Economic Review*.
- Harris, D.N. and Larsen, M.F. 2022. Taken by Storm: The Effects of Hurricane Katrina on Medium-Term Student Outcomes in New Orleans. *Journal of Human Resources*.
- Harvey, S. 1999. The impact of coaching in South African primary science INSET. *International Journal of Educational Development* 19(3): 191-205.
- Hastings, J.S. and Weinstein, J.M. 2008. Information, School Choice, and Academic Achievement: Evidence from Two Experiments. *Quarterly Journal of Economics* 123(4): 1373-1414.
- Hattie, J. 2023. *Visible Learning: The Sequel: A Synthesis of Over 2,100 Meta-Analyses Relating to Achievement*. Taylor & Francis.
- Herath, N., Duffield, C., and Zhang, L. 2022. Public-school infrastructure ageing and current challenges in maintenance. *Journal of Quality in Maintenance Engineering*.
- Herbert, A.S. 2023. Shareholder Schools: Racial Capitalism, Policy Borrowing, and Marketised Education Reform in Cape Town, South Africa. *Comparative Education Review* 67.
- Hofflinger, A., Gelber, D., and Cañas, S.T. 2020. School choice and parents' preferences for school attributes in Chile. *Economics of Education Review* 74.
- Holmstrom, B. and Milgrom, P. 1991. Multitask principal-agent analyses: Incentive contracts, asset ownership, and job design. *Journal of Law, Economics, & Organisation*: 7: 24-52.
- Hsieh, C.T. and Urquiola, M. 2006. The effects of generalised school choice on achievement and stratification: Evidence from Chile's voucher programme. *Journal of Public Economics* 90(8-9): 1477-1503.
- Iossa, E. and Martimort, D. 2015. The Simple Microeconomics of Public-Private Partnerships. *Journal of Public Economic Theory* 17(1): 4-48.
- Jimenez, E. and Sawada, Y. 2001. Public for private: The relationship between public and private school enrollment in the Philippines. *Economics of Education Review* 20(4): 389-399.
- Junemann, C. and Olmedo, A. 2020. New policy intercessors: philanthropy and public private partnerships. In Gideon, J. and Unterhalter, E., eds., *Critical Reflections on Public Private Partnerships*. Abingdon, UK: Routledge: 115–133.
- Karlsson, J. 2002. The Role of Democratic Governing Bodies in South African Schools. *Comparative Education* 38(3): 327-336.
- Keswell, M. and Poswell, L. 2004. Returns to education in South Africa: a retrospective sensitivity analysis of the available evidence. *South African Journal of Economics* 72(4): 834–860.

- Kim, G.J. 2010. Private Sector's Role in Education: The Case of Republic of Korea. Presentation at Public-Private Partnership in Education, Bangkok, 17 March 2010.
- Kim, J., Alderman, H., and Orazem, P. 1999. Can Private School Subsidies Increase Enrollment for the Poor? The Quetta Urban Fellowship Programme. *World Bank Economic Review* 13(3) 443-65.
- Kingsbury, I., Greene, J.P., and DeAngelis, C.A. 2022. The Relationship Between Regulation and Charter School Innovation. EF Institute.
- Koning, P. and van der Wiel, K. 2013. Ranking the Schools: How School-Quality Information Affects School Choice in the Netherlands. *Journal of the European Economic Association* 11(2): 466-493.
- Kotze J., Fleisch B., and Taylor, S. 2019. Alternative forms of early grade instructional coaching: Emerging evidence from field experiments in South Africa. *International Journal of Educational Development* 66: 203–213.
- Kraft, M.A., Blazar, D., and Hogan, D. 2018. The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research* 88(4): 547-588.
- Krowka, S., Hadd, A., and Marx, R. 2017. "No Excuses" charter schools for increasing math and literacy achievement in primary and secondary education: a systematic review. *Campbell Systematic Reviews* 13(1): 1-67.
- Kugler, A., Kugler, M., Saavedra, J.E., and Herrera-Prada, L.O. 2022. Long-Term Educational Consequences of Vocational Training in Colombia Impacts on Young Trainees and Their Relatives. *Journal of Human Resources* 57(1): 178-216.
- Ladd, H.F. 2002. School Vouchers: A Critical View. *Journal of Economic Perspectives* 16(4): 3-24.
- Languille, S. 2016. Affordable' Private Schools in South Africa: Affordable for Whom? *Oxford Review of Education* 42(5): 528-542.
- Lanthorn, H., Johnson, D., and Singh, P. 2018. Impact of STIR's programming on teacher motivation and student learning. IDInsight.
- LaRocque, N. 2008. Public-private partnerships in basic education: An international review. Reading: CfBT Education Trust.
- Lavado, P., Cueto, S., Yamada, G., and Wensjoe, M. 2016. The Effect of Fe y Alegria on School Achievement: Exploiting a School Lottery Selection as a Natural Experiment. IZA Discussion Paper 10431.
- Lavy, V. 2010. Effects of Free Choice Among Public Schools. *Review of Economic Studies* 77(3): 1164-1191.
- Lee, J.-W. and Lee, H. 2016. Human Capital in the Long Run. *Journal of Development Economics* 122: 147-169.
- Lee, M., Price, E., and Swaner, L. 2022. The Effect of Private School Choice Regulations on School Participation: Experimental Evidence from the Christian School Sector. *Journal of School Choice* DOI: 10.1080/15582159.2022.2113011
- Lefebvre, P., Merrigan, P., and Verstraete, M. 2011. Public subsidies to private schools do make a difference for achievement in mathematics: Longitudinal evidence from Canada. *Economics of Education Review* 30(1): 79-98.
- Lesufi, P. 2020. Gauteng Department of Education partners with Curro Schools. SABCNews <https://www.sabcnews.com/sabcnews/gauteng-department-of-education-partners-with-curro-schools/#:~:text=The%20Gauteng%20Department%20of%20Education,area%20are%20filled%20to%20capacity>
- Li, H., Liu, Z., Yang, F., and Yu, L. 2023. The Impact of Computer-Assisted Instruction on Student Performance: Evidence from the Dual-Teacher Programme. IZA Discussion Paper No. 15944.
- Liang, X., Kidwai, H., Zhang, M., and Zhang, Y. 2016. How Shanghai does it: Insights and lessons from the highest-ranking education system in the world. Washington DC: World Bank.
- Maynier, D. 2023. The WCape matric 2022 awards. PoliticsWeb <https://www.politicsweb.co.za/documents/the-wcape-matric-2022-awards--david-maynier>
- McEwan, P.J., Urquiola, M., Vegas, E., Fernandes, R., and Gallego, F.A. 2008. School Choice, Stratification, and Information on School Performance: Lessons from Chile. *Economía* 8(2): 1-42.
- Mlachila, M.M. and Moeletsi, T. 2019. Struggling to make the grade: A review of the causes and consequences of the weak outcomes of South Africa's education system. MF Working Papers 2019/047.
- Moll, P.G., 1996. The collapse of primary schooling returns in South Africa, 1960–90. *Oxford Bulletin of Economics and Statistics* 58(1): 185–209.
- Moll, P.G. 1998. Primary schooling, cognitive skills and wages in South Africa. *Economica* 65: 263–284.
- Moll, P.G. 1992. Quality of education and the rise in returns to schooling in South Africa, 1975–1985. *Economics of Education Review* 11(1): 1–10.
- Montenegro, C.E. and Patrinos, H.A. 2021. A data set of comparable estimates of the private rate of return to schooling in the world, 1970–2014. *International Journal of Manpower*.
- Moulin, L. 2023. What are the medium-term educational and labour market effects of private schooling? *Applied Economics*.
- Moulin, L. 2022. Do private schools increase academic achievement? Evidence from France. *Education Economics*.
- Msila, V. 2011. School choice—as if learners matter: Black African learners' views on choosing schools in South Africa. *Mevlana International Journal of Education* 1(1): 1-14.

- Muralidharan, K., Singh, A., and Ganimian, A.J. 2019. Disrupting Education? Experimental Evidence on Technology-Aided Instruction in India. *American Economic Review* 109(4): 1426-60.
- Muralidharan, K. and Sundararaman, V. 2015. The Aggregate Effect of School Choice: Evidence from a Two-Stage Experiment in India. *Quarterly Journal of Economics* 130(3): 1011-1066.
- Murnane, R.J., Waldman, M.R., Willett, J.B., Soledad Bos, M., and Vegas, E. 2017. The Consequences of Educational Voucher Reform in Chile. Inter-American Development Bank Working Paper Series No. 833.
- Mwabu, G. and Schultz, T.P. 1996. Education returns across quintiles of the wage function: alternative explanations for returns to education by race in South Africa. *American Economic Review* 86(2): 335-339.
- Mwabu, G. and Schultz, T.P. 2000. Wage premiums for education and location of South African workers, by gender and race. *Economic Development and Cultural Change* 48(2): 307-334.
- Näslund-Hadley, E., Parker, S., and Hernandez-Agramonte, J. 2014. Fostering Early Math Comprehension: Experimental Evidence from Paraguay. *Global Education Review* 1(4):135-54.
- National Centre for Education Statistics (NCES). 2022. Public Charter School Enrollment. Condition of Education. U.S. Department of Education, Institute of Education Sciences.
- Navarro-Sola, L. 2021. Secondary Schools with Televised Lessons: The Labour Market Returns of the Mexican Telesecundaria. Working Paper.
- Neilson, C.A. 2021. Targeted Vouchers, Competition Among Schools, and the Academic Achievement of Poor Students. Working Papers 2021-48, Princeton University, Economics Department.
- Nikolov, P., Jimi, N., and Chang, J. 2020. The importance of cognitive domains and the returns to schooling in South Africa: Evidence from two labour surveys. *Labour Economics* 65: 101849.
- Olesen, M. 2020. Cooperative collaboration in the hybrid space of google docs based group work. *Education Sciences* 10(10): 1-13.
- Parliamentary Monitoring Group. 2018. Western Cape Provincial School Education Amendment Bill: Public Hearing. Cape Town, South Africa, Parliamentary Monitoring Group.
- Parra Osorio, and J.C., Wodon, Q. 2014. Faith-Based Schools in Latin America: Case Studies on Fe Y Alegria. Washington DC: World Bank.
- Patrinos, H.A. 2009. Education Contracting: Scope of Future Research. In Chakrabarti, R., Peterson, P.E., eds., *School Choice International: Exploring Public-Private Partnerships*. Cambridge: MIT Press.
- Patrinos, H.A. 2013. Private education provision and public finance: the Netherlands. *Education Economics* 21(4): 392-414.
- Patrinos, H.A. 2000. Market Forces in Education. *European Journal of Education* 35(1): 61-80.
- Patrinos, H.A. and Fasih, T. 2009. Decentralised Decision-making in Schools: The Theory and Evidence on School-based Management. World Bank Publications.
- Patrinos, H.A. and Rivera, C. 2023. The Impact of Private Schooling on the Returns to Education.
- Patrinos, H.A. and Sakellariou, C. 2011. Quality of schooling, returns to schooling and the 1981 vouchers reform in Chile. *World Development* 39(12): 2245-2256.
- Patrinos, H.A., Osorio, F.B. and Guáqueta, J. 2009. The Role and Impact of Public-Private Partnerships in Education. Washington DC: World Bank.
- Preston, C., Goldring, E., Berends, M., and Cannata, M. 2012. School innovation in district context: Comparing traditional public schools and charter schools. *Economics of Education Review* 31(2): 318-330.
- Pretorius, C. 2011. New beginnings. *Mg.co.za*. <https://mg.co.za/article/2011-03-11-new-beginnings/>
- Pretorius, D.M., 2019. Private schools in South African legal history. *Fundamina*, 25(2), pp.94-134.
- Psacharopoulos, G. and Patrinos, H.A. 2018. Returns to investment in education: a decennial review of the global literature. *Education Economics* 26(5): 445-458.
- Public School Partnerships. 2023. 2022 NSC Headline Results.
- Raymond, M.E., Woodworth, J.L., Lee, W.Y., and Bachofer, S. 2023. As a Matter of Fact: The National Charter School Study III 2023. Stanford: CREDO.
- Reddy, V., Winnaar, L., Arends, F., Juan, A., Harvey, J., Hannan, S., and Isdale, K. 2022. The South African TIMSS 2019 Grade 9 Results: Building Achievement and Bridging Achievement Gaps. HSRC Press, Cape Town.
- Republic of South Africa (RSA). 1996. South African Schools Act (Act No. 84 of 1996). Pretoria: Government Gazette.
- Roddis, S.M. 2021 Background Paper: Private Investments in K-12 Private Education in Developing Countries. Input to IEG Evaluation of IFC Investments in K-12 Private Schools.
- Rogers, H. and Demas, A. 2013. The what, why, and how of the Systems Approach for Better Education Results (SABER). Washington, D.C.: World Bank Group.
- Romero, M., Sandefur, J., and Sandholtz, W.A. 2020. Outsourcing education: Experimental evidence from Liberia. *American Economic Review* 110(2): 364-400.

- Romero, M. and Sandefur, J. 2022. Beyond short-term learning gains: The impact of outsourcing schools in Liberia after three years. *Economic Journal* 132(644): 1600-1619.
- SABER. 2016. *Engaging the Private Sector*. Washington DC: World Bank.
- South Africa. 2016. *Education Yearbook 2015/16*.
- Salisbury, T. 2016. Education and inequality in South Africa: Returns to schooling in the post-apartheid era. *International Journal of Educational Development* 46: 43-52.
- Samahiya, M. 2020, January. Returns to Investment in Education: Evidence from a Quantile Regression. Centre for the Study of African Economies (CSAE) Conference.
- Sandström, F.M. and Bergström, F. 2005. School vouchers in practice: Competition will not hurt you. *Journal of Public Economics* 89(2-3): 351-380.
- Santibañez, L., Saavedra, J.E., Kattan, R.B., and Patrinos, H.A. 2021. Comprehensive private schooling for low-income children: Experimental case-study evidence from Mexico. *International Journal of Educational Development* 87.
- Sappington, D.E. and Stiglitz, J. E. 1987. Privatisation, information and incentives. *Journal of Policy Analysis and Management* 6(4): 567-585.
- Sayed, Y. and Soudien, C. 2021. Managing a progressive educational agenda in post-apartheid South Africa: the case of education public-private partnerships. In Zajda, J., ed., *Third International Handbook of Globalisation, Education and Policy Research*. Cham, Switzerland: Springer: 117–38.
- Shakeel, M.D., Anderson, K.P., and Wolf, P.J. 2021. The participant effects of private school vouchers around the globe: a meta-analytic and systematic review. *School Effectiveness and School Improvement* 32(4): 509-542.
- Shakeel, M.D. and Peterson, P.E. 2020. Changes in the Performance of Students in Charter and District Sectors of U. S. Education: An Analysis of Nationwide Trends. *Journal of School Choice* 14(4): 604-632.
- Shakeel, M.D. and Peterson, P. 2021. Charter schools show steeper upward trend in student achievement than district schools. *Education Next* 21(1): 40-48.
- Shleifer, A. and Vishny, R. W. 1994. Politicians and Firms. *Quarterly Journal of Economics* 109(4): 995-1025.
- Silberstein, J. 2023. Should Communities Be Managing, Governing or Supporting Schools? A Review Essay on the System Conditions under Which Different Forms of Community Voice Can Improve Student Learning. RISE Working Paper Series. 23/141. https://doi.org/10.35489/BSG-RISE-WP_2023/141.
- Singh, A. 2015. Private school effects in urban and rural India: Panel estimates at primary and secondary school ages. *Journal of Development Economics* 113: 16-32.
- Sniltveit, B., Stevenson, J., Menon, R., Phillips, D., Gallagher, E., Geleen, M., and Jimenez, E. 2016. The Impact of Education Programmes on Learning and School Participation in Low-and Middle-income Countries. International Initiative for Impact Evaluation.
- Spaull, N. 2023. *Background Report for the 2030 Reading Panel*. Cape Town.
- Spaull, N. 2019a. Equity: A price too high to pay? In Spaull, N., Jansen, D. (Eds.), *South African schooling: The engine of inequality*. Springer Nature, Cham, Switzerland, pp.1–24.
- Spaull, N. 2019b. *Priorities for Education Reform in South Africa*. Input Document for Treasury's Economic Colloquium. A Report to President Ramaphosa and Minister Mboweni
- Spaull, N. and Kotze, J. 2015. Starting behind and staying behind in South Africa. The case of insurmountable learning deficits in mathematics. *International Journal of Educational Development* 41: 13-24.
- Spaull, N., Lilenstein, A., and Carel, D. 2020. *The Race between Teacher Wages and the Budget. The Case of South Africa 2008-2018*. Research on Socioeconomic Policy (RESEP). Stellenbosch University. Stellenbosch.
- Spaull, N. 2022. *Background Report for the 2030 Reading Panel*. Cape Town.
- Spaull, N., Courtney, P., and Qvist, J. 2022. *Mathematical Stunting in South Africa. An analysis of Grade 5 mathematics outcomes in TIMSS 2015 and 2019. Early Grade Mathematics in South Africa*. In Venkat, H., Roberts, N., eds., *Early Grade Mathematics in South Africa*. Cape Town: Oxford University Press.
- Spaull, N., and Pretorius, E. 2019. *Still Falling at the First Hurdle: Examining Early Grade Reading in South Africa*. In *South African Schooling: The Enigma of Inequality* (pp. 147–168). Cham, Switzerland: Springer Nature.
- Tikly, L. and Mabogoane, T. 1997. Marketisation as a strategy for desegregation and redress: The case of historically white schools in South Africa. *International Review of Education* 43: 159-178.
- Turner, J.S., Taha, K., Ibrahim, N., Neijenhuijs, K.I., Hallak, E., Radford, K., Stubbé, H., de Hoop, T., Jordans, M.JD., and Brown, F.L. 2022. A proof-of-concept study of Can't Wait to Learn: A digital game-based learning programme for out-of-school children in Lebanon. *Journal on Education in Emergencies* 8(1): 76-109.
- UNESCO. 2021. *Global Education Monitoring Report 2021/2: Non-state actors in education: Who chooses? Who loses?* Paris: UNESCO.
- Vally, S. 2018. The bait-and-switch and echo chamber of school privatisation in South Africa. *The Wiley Handbook of Global Educational Reform*, pp.231-241.

- Vander Ark, T. 2015. Innovation Blend Could be the Spark for South Africa. Getting Smart <https://www.gettingsmart.com/2015/09/innovative-blend-could-be-the-spark-for-south-africa/>
- Van der Berg, S., van Wyk, C., Burger, R., Kotzé, J., Piek, M., and Rich, K. 2017. The Performance of Low Fee Independent Schools in South Africa: What Can Available Data Tell? Stellenbosch Economic Working Papers No. 01/2017.
- Vargas, X.R. 2021. Secondary School Choice in Chile and South Africa: A Literature Review on the Orientations and Determinants of Families' Decision-making Processes in Highly Unequal and Segregated Contexts. *Transcience* 12(2): 62-90.
- Verger, A. 2012. Framing and selling global education policy: the promotion of public-private partnerships for education in low-income contexts. *Journal of Education Policy* 27(1): 109-130.
- Verger, A., Moschetti, M.C., and Fontdevila, C. 2020. How and why policy design matters: understanding the diverging effects of public-private partnerships in education. *Comparative Education* 56(2): 278-303.
- Wennersten, M., Quraishy, Z., and Velamuri, M. 2015. Improving Student Learning via Mobile Phone Video Content: Evidence from the Bridge IT India Project. *International Review of Education* 61(4): 503-528.
- Western Cape Education Department. 2020. Annual Report 2019/2020: Department of Education. Cape Town, South Africa, Western Cape Education Department.
- Wills, G. and Kika Mistry, J., 2021. Supply-side and demand-side approaches to financing early childhood care and education in South Africa. Ilifa Labantwana & Resep ECD Working Paper Series. <https://ilifalabantwana.co.za/wp-content/uploads/2022/04/Supply-side-and-demand-side-approaches-to-financing-early-childhood-care-and-education-in-South-Africa-V09.pdf>
- Woolman, S. and Fleisch, B. 2006. South Africa's unintended experiment in school choice: how the National Education Policy Act, the South Africa Schools Act and the Employment of Educators Act create the enabling conditions for quasi-markets in schools. *Education and the Law* 18(1): 31-75.
- World Bank. 2011. Philippines Private Provision, Public Purpose: A Review of the Government's Education Service Contracting Programme. Washington DC: World Bank.
- Zawacki-Richter, O. and Jung, I. (eds.). 2023. Handbook of Open, Distance and Digital Education. Springer Nature.
- Zhongming, Z., Linong, L., Xiaona, Y., and Wei, L. 2019. School Education in Pakistan: A Sector Assessment. Asian Development Bank.
- Ziebarth, T. 2022. Measuring up to the model: A ranking of state public charter school laws. National alliance for public charter schools. <https://files.eric.ed.gov/fulltext/ED612980.pdf>

References for Section on Education Financing in the Western Cape

- Bertoni, Eleonora et al. 2020. 'Is School Funding Unequal in Latin America?: A Cross-Country Analysis'. <https://publications.iadb.org/en/school-funding-unequal-latin-america-cross-country-analysis> (June 12, 2023).
- Breen, Michael G., and Iain Payne. 2021. 'The Concept and Uses of "Hourglass Federalism"'. <https://papers.ssrn.com/abstract=3826079> (August 17, 2023).
- Chetty, Dhianaraj, Penelope Groome, Kaitlin Alsofrom and John Thurlow. 2022. Professional development to strengthen early grade reading: Lessons from the Primary School Reading Improvement Programme (PSRIP). In *Early Grade Reading and Mathematics Interventions in South Africa. Volume 3: Interventions*. Cape Town and Oxford: Oxford University Press.
- Cruz, Louisee, Matheus Assunção and André Loureiro. 2022. Supporting Subnational Governments to Improve Foundational Learning: How to do it and what will it cost? World Bank Group. Note. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099700306292238784/P174674078c2190580a746055f8fd1a3e08>
- Dass, Sherylle, Amanda Rinquest, Chandre Stuurman, and Tarryn Cooper-Bell. 2022. 'Chapter 8: School Fees'. In *Basic Education Rights Handbook – Education Rights in South Africa*, <http://section27.org.za/wp-content/uploads/2017/02/Chapter-7.pdf>.
- Evans, David K., and Andre Loureiro. 2020. Getting Education Right : State and Municipal Success in Reform for Universal Literacy in Brazil. Text/HTML. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/444581593599662264/Getting-Education-Right-State-and-Municipal-Success-in-Reform-for-Universal-Literacy-in-Brazil> (May 31, 2022).
- Government of Kenya. 2023. Education Sector Budget Proposal Report 2023/24. Government of Kenya. <https://www.treasury.go.ke/sector-budget-proposal-reports/> (March 16, 2023).
- Hall, Katherine. 2023. 'Children Count: Child Poverty'. <http://childrencount.uct.ac.za/indicator.php?domain=2&indicator=98http://childrencount.uct.ac.za/indicator.php?domain=2&indicator=98> (August 17, 2023).
- Lautharte, Ildo, Victor Hugo de Oliveira, and Andre Loureiro. 2021. Incentives for Mayors to Improve Learning: Evidence from State Reforms in Ceará, Brazil. Washington, DC: World Bank. Working Paper. <https://openknowledge.worldbank.org/handle/10986/35024> (April 7, 2022).
- Motala, S. and Carel, D. 2019. Educational Funding and Equity in South African Schools. In Spaul, N. (ed). *A Study of the Present Situation and Future Possibilities*, Springer Nature Switzerland AG 2019. 10.1007/978-3-030-18811-5_4.
- National Treasury. 2023. 'National Treasury EPRE Tables in Excel 2023'. <https://www.treasury.gov.za/documents/provincial%20budget/2023/4.%20EPRE%20tables%20in%20Excel%20Format/Default.aspx> (August 17, 2023).

- OECD 2019. Teachers' and school heads' average actual salaries (2019) In Education at a Glance 2020. [2019 data] https://www.oecd-ilibrary.org/education/teachers-and-school-heads-average-actual-salaries-2019_0af888e3-en
- OECD. 2013. PISA 2012 Results: What Makes Schools Successful (Volume IV): Resources, Policies and Practices. Paris: Organisation for Economic Co-operation and Development. https://www.oecd-ilibrary.org/education/pisa-2012-results-what-makes-a-school-successful-volume-iv_9789264201156-en (August 19, 2023).
- . 2016. PISA 2015 Results (Volume I): Excellence and Equity in Education. Paris: Organisation for Economic Co-operation and Development. https://www.oecd-ilibrary.org/education/pisa-2015-results-volume-i_9789264266490-en (August 16, 2023).
- . 2017. 'The Funding of School Education: Main Findings and Policy Pointers'. [oecd-ilibrary.org. https://doi.org/10.1787/9789264276147-4-en](https://doi.org/10.1787/9789264276147-4-en) (April 7, 2022).
- . 2019. PISA 2018: Insights and Interpretations. https://www.oecd.org/pisa/PISA%202018%20Insights%20and%20Interpretations%20FINAL%20PDF.pdf?_ga=2.171180643.232764973.1699960230-1605216814.1699361048 (November 16, 2023).
- . 2022a. Education at a Glance 2022: OECD Indicators. OECD. https://www.oecd-ilibrary.org/education/education-at-a-glance-2022_3197152b-en (August 17, 2023).
- . 2022b. 'Review Education Policies - Education GPS - OECD: Teacher Working Conditions. From Education at a Glance 2022'. <https://gpseducation.oecd.org/revieweducationpolicies/#!node=41734&filter=all> (August 20, 2023).
- Sachs, Michael, Arabo Ewinyu, and Olwethu Shedi. 2022. 'Public Services, Government Employment and the Budget'. Southern Centre for Inequality Studies Working Paper (39). https://www.wits.ac.za/media/wits-university/faculties-and-schools/commerce-law-and-management/research-entities/scis/images/PEP%20Public%20services%20and%20employment%20report_WP39.pdf (August 17, 2023).
- Samuels, J. A., S. S. Grobbelaar, and M. J. Booysen. 2021. 'Light-Years Apart: Energy Usage by Schools across the South African Affluence Divide'. *Energy Research & Social Science* 70: 101692. <https://www.sciencedirect.com/science/article/pii/S221462962030267X> (August 19, 2023).
- Sandefur, Justin. 2018. 'Chart of the Week: Teacher Pay around the World: Beyond "Disruption" and "De-Skilling"'. Centre For Global Development | Ideas to Action. <https://www.cgdev.org/blog/chart-week-teacher-pay-around-world-beyond-disruption-and-deskilling> (August 18, 2023).
- UK Government. 2022. The national funding formulae for schools and high needs 2023/24. July 2022. https://assets.publishing.service.gov.uk/media/62d679d98fa8f50c0a8a3ffc/2023-24_NFF_Policy_Document_.pdf
- UNICEF, UNESCO, and World Bank. 2023. '2023 Cost-Effective Approaches to Improve Global Learning - What Does Recent Evidence Tell Us Are "Smart Buys" for Improving Learning in Low- and Middle-Income Countries?' World Bank. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099420106132331608/IDU0977f73d7022b104770980c0c5a14598eef8> (June 26, 2023).
- Western Cape Government. 2024. Western Cape Estimates of Provincial Revenues and Expenditure 2024. <https://www.westerncape.gov.za/provincial-treasury/sites/provincial-treasury.westerncape.gov.za/files/atoms/files/1.%20WC%20Estimates%20of%20Provincial%20Revenue%20and%20Expenditure%20%28EPRE%29%202024%20for%20web.pdf>
- Western Cape Education Department. 2022. 'Circular0032/2022: Particulars of the Financial Allocation to Section 21 Schools for the 2023/24 Financial Year and Guidelines for the Procurement of Goods and Services.' <https://wcedonline.westerncape.gov.za/circulars/circulars22/Circular0032-2022.pdf> (August 18, 2023).
- World Bank. 2021. 'Eswatini Education Sector Analysis (English)'. World Bank. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail> (June 29, 2023).
- Zoch, A. 2017. 'The effect of neighbourhoods and school quality on education and labour market outcomes in South Africa'. Stellenbosch Economic Working Papers: WP08/2017



