THE COST OF REPETITION IN SOUTH AFRICA
REPORT FOR THE DG MURRAY TRUST

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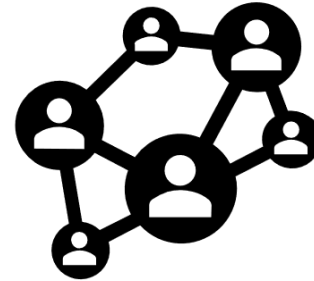
REPORT HIGHLIGHTS
QER SEPTEMBER 2019

LEARNER REPETITION CAN IMPACT…

government

schools

society

the child

Approaches to deal with repetition really do depend on a weighing up of the empirical evidence for and against repetition at each of these levels.

ADVANTAGES AND DISADVANTAGES OF REPETITION

DISADVANTAGES	ADVANTAGES
IMPACTS ON GOVERNMENT AND SCHOOLS	
Higher resource usage in provinces to accommodate repeaters. Forgone national spending on repeaters: How else could the money have been used?	SA: Higher repetition in poorer provinces ➔ adds pro-poor dimension to allocation of budgets to provinces through equitable share formula Potential reduction in the cost of remediation at later ages
Higher pupil to teacher ratios and class sizes at earlier grades.	Potential reduction in the variability of learner abilities within classrooms ➔ alignment between learner ability and grade-level curriculum.
Increased range of learner ages within classrooms.	

ADVANTAGES AND DISADVANTAGES OF REPETITION

DISADVANTAGES	ADVANTAGES
IMPACTS ON THE CHILD	
Potential harmful psychological impacts (lowered self-esteem/motivation) *(Jimerson et al., 1997)*	Potential for mastery of concepts ('catch-up')
Higher risks of drop-out if learners repeat *(Jimerson et al, 2002; Manacorda 2010)* – lower grade attainment reduces chances of more attractive jobs & higher earnings after school	Incentive effect – kids work harder to avoid grade failure *(Koppensteiner, 2014)*
IMPACTS ON SOCIETY	
Social exclusion of poor learners from higher grades as they are more likely to repeat than wealthier learners (equity)	Improves the signalling of school qualifications in the labour market if grade promotion is more closely tied to mastery of concepts

WHAT DO WE KNOW ABOUT REPETITION IN SA?

Entrenched culture of repetition
Repetition rates are high, particularly in gr. 1 & gr. 10

(DBE, 2016; Van Wyk et al. 2017, Jika & Kotze 2018)
Tracks 78,000 grade 1's in 2007 in WC schools: 44% repeated at least once after 6 years.

Significant concerns about repetition being randomly applied

(Lam, Ardington & Leibbrandt, 2011; Van der Berg & Shepherd, 2015; Van Wyk, Gondwe, & De Villiers, 2017; Von Fintel & Van der Berg, 2017)

Repetition is strongly correlated with drop-out

students > two years older than the recommended age for their grade were 24% points more likely to have dropped out between NIDS 2008 & 2010

(Branson, Hofmeyr & Lam 2013)

Van Wyk et al. (2017) tracked grade 9s in the WC in 2008 to 2010: three-quarters of those who had failed grade 9 had dropped out within the next four years.

WHAT DO WE KNOW ABOUT REPETITION IN SA?

While repetition is identified as key determinant of dropout, home-background factors and school quality are the most critical determinants of repetition or grade failure in South Africa. (Branson, Hofmeyr, & Lam, 2013).

No existing causal evidence on links between repetition and learning gains: Descriptive evidence from WC (CEMIS, Systemic Evaluations) suggests different results by grade, gender and district:

- Grade 3s who repeated did a little better the second time round, mostly in maths not language. But district dependent.
- Grade 6s: Some evidence of better performance second time round. Gender and district dependent.
- Grade 9: repetition appeared to lead to very little gains in learning

RESEARCH QUESTIONS

1. **More specificity on repetition & drop-out rates:**

How large is repetition and dropout at different grades, nationally and in all the provinces? Inequalities?
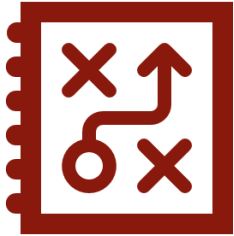
2. **Correlations:**

How are dropout, repetition and flow-throughs related?

3. **Costs:**

- What is the cost of repetition in fiscal terms?

- Cost in perspective: What difference would it make, in monetary terms, if a 21-year-old who had repeated 3 times and failed to attain matric, had been more successful?

DATA USED IN THE REPORT

Household Survey Data
- General Household Survey (2009-2018)
- Community Survey 2016 (1 million youth aged 6-18 years)

Administrative data (school-level)
- Data from the Annual Survey of Schools (School Census) used to illustrate flows through the education system
- Long process to obtain permission and requests to obtain ASS data:
  - A series was obtained for 7 of 9 provinces (excludes Mpumulanga and Free State).
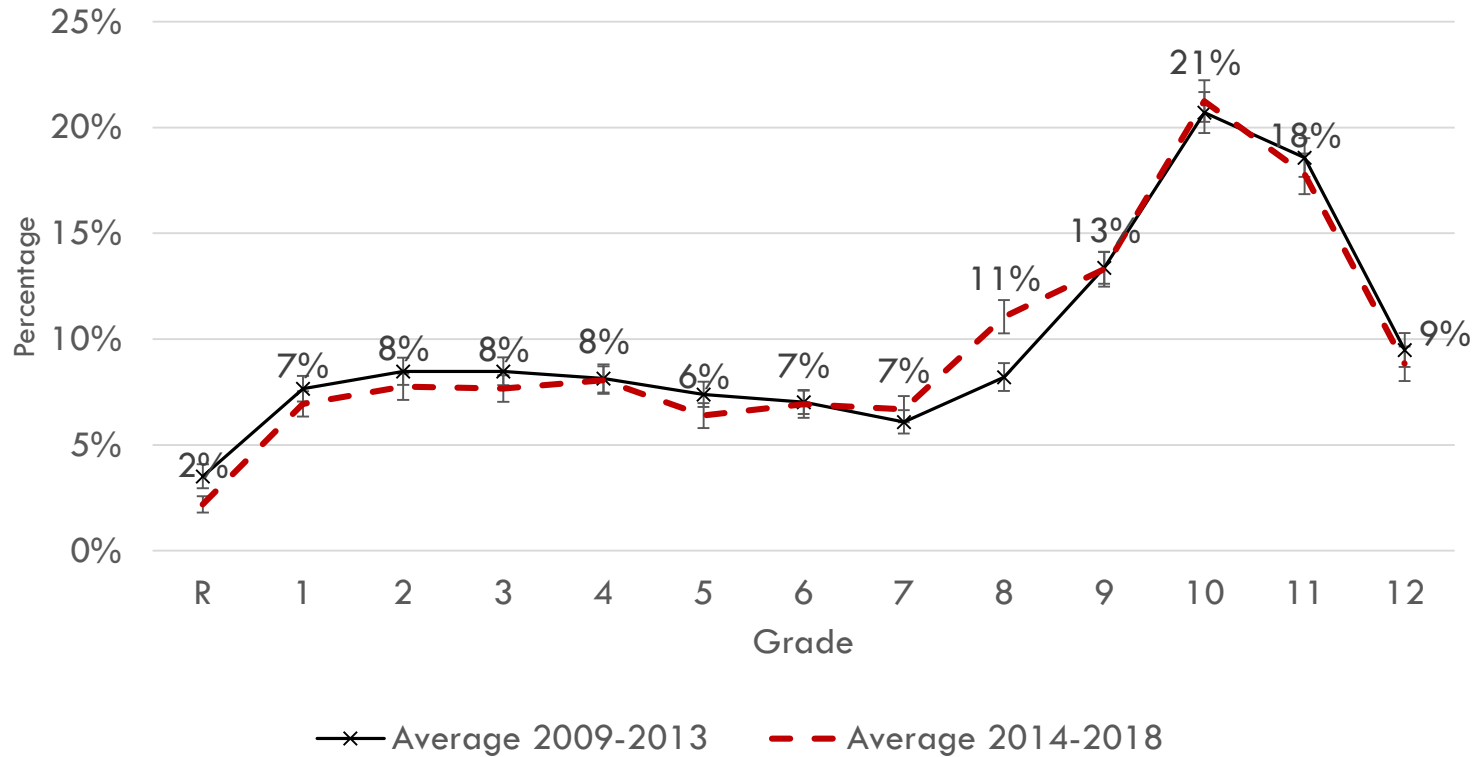
Administrative data that track learners
- SA-SAMS data for the Northern Cape only, 2014-2018

How large is repetition at different grades?

Percentage of repeaters: 2009-2013 and 2014-2018, GHS

'PERCENTAGE OF REPEATERS' FROM GENERAL HOUSEHOLD SURVEY

'Self' reported repetition rates. Significantly different by grade.

Administrative samples retained for analyses

ANNUAL SURVEY OF SCHOOLS	SA-SAMS
7 provinces	Northern Cape Only
Significant data quality issues • Missing data on repetition for some or all grades. • Improbable repetition or enrolment numbers; EC most problematic.	Learner records retained if they were in a school that recorded data every year from 2014 to 2018, or if the learner's grade was recorded every year.
2010 & 2015 most reliable data.	Grade imputed where possible if learners were not captured in a specific year (use adjacent years).
Final sample: 16-17% of learners in 26% of schools in 7 provinces.	**Final sample: 79% of original learner sample and 93% of the original school sample.**

CALCULATING REPETITION RATES:
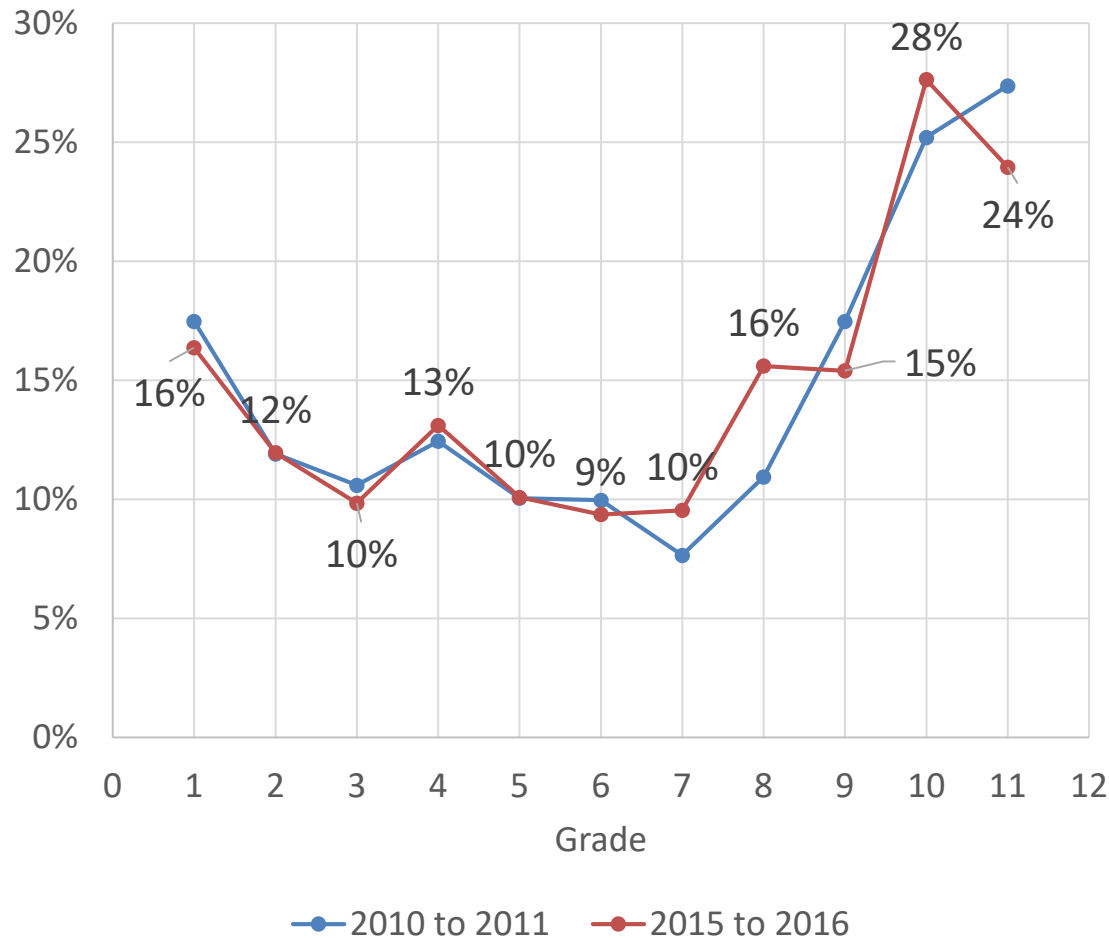# HOUSEHOLD SURVEYS VERSUS ADMINISTRATIVE DATA

HOUSEHOLD SURVEYS	
Advantages	
▪Can identify nationally representative trends (GHS/ NIDS)	
Disadvantages	
▪Tend to under-estimate repetition, particularly in grade 1: - GHS averages 7%, 2014-2018 - LURITS > twice as much at 15% (DBE, 2016) or even over 20% (DBE, 2018). ▪Recall bias from household respondent	

Figure 6: Repetition rates using a reliable and consistent ASS school-level sample from 7 provinces, 2010 & 2015

Source: Calculated from a subset of Annual Survey of Schools data 2010-2011 and 2015-2016 for 7 provinces, excluding FS and MPU. Note: The sample excludes schools with unreliable or improbable data on repetition or dropout. As learners are not observed one year after grade 12, it is not possible to calculate repetition rates in grade 12.

REPETITION RATES
ANNUAL SURVEY OF SCHOOLS

Grade 1: 16-17%
Declines in grades 2-7
Grade 9: 15-17%

Grades 1-9 repetition rates are close to LURITS estimates (DBE, 2016).

But,
extremely high rates of repetition in grades 10 *and* 11.

	Total enrolment 2016 (in thousands)	Lower estimate		Higher estimate	
		% of repeaters from GHS 2016	# of repeaters (in thousands)	Repetition rates using ASS subset (2015-2016) for 7 provinces	# of repeaters (in thousands)
Gr1	1148	7.5%	86	16.4%	188
Gr2	1124	7.0%	79	12.0%	134
Gr3	1066	7.3%	78	9.8%	105
Gr4	1077	7.4%	80	13.1%	141
Gr5	983	6.8%	67	10.1%	99
Gr6	908	6.9%	63	9.4%	85
Gr7	863	7.6%	66	9.5%	82
Gr8	912	11.0%	100	15.6%	142
Gr9	867	11.9%	103	15.4%	134
Gr10	1067	23.5%	251	27.6%	295
Gr11	865	18.3%	158	24.0%	207
Gr12	665	8.0%	53	11.5%	77
Total	**11 545**		**1 183**		**1 690**
Primary repeater rate		**7.2%**		**10.5%**	
Secondary repeater rate		**15.2%**		**19.5%**	

FIGURE 9 High but declining repetition rates in sub-Saharan Africa

Primary and lower secondary repetition rates in sub-Saharan Africa, 1999, 2004 and 2009
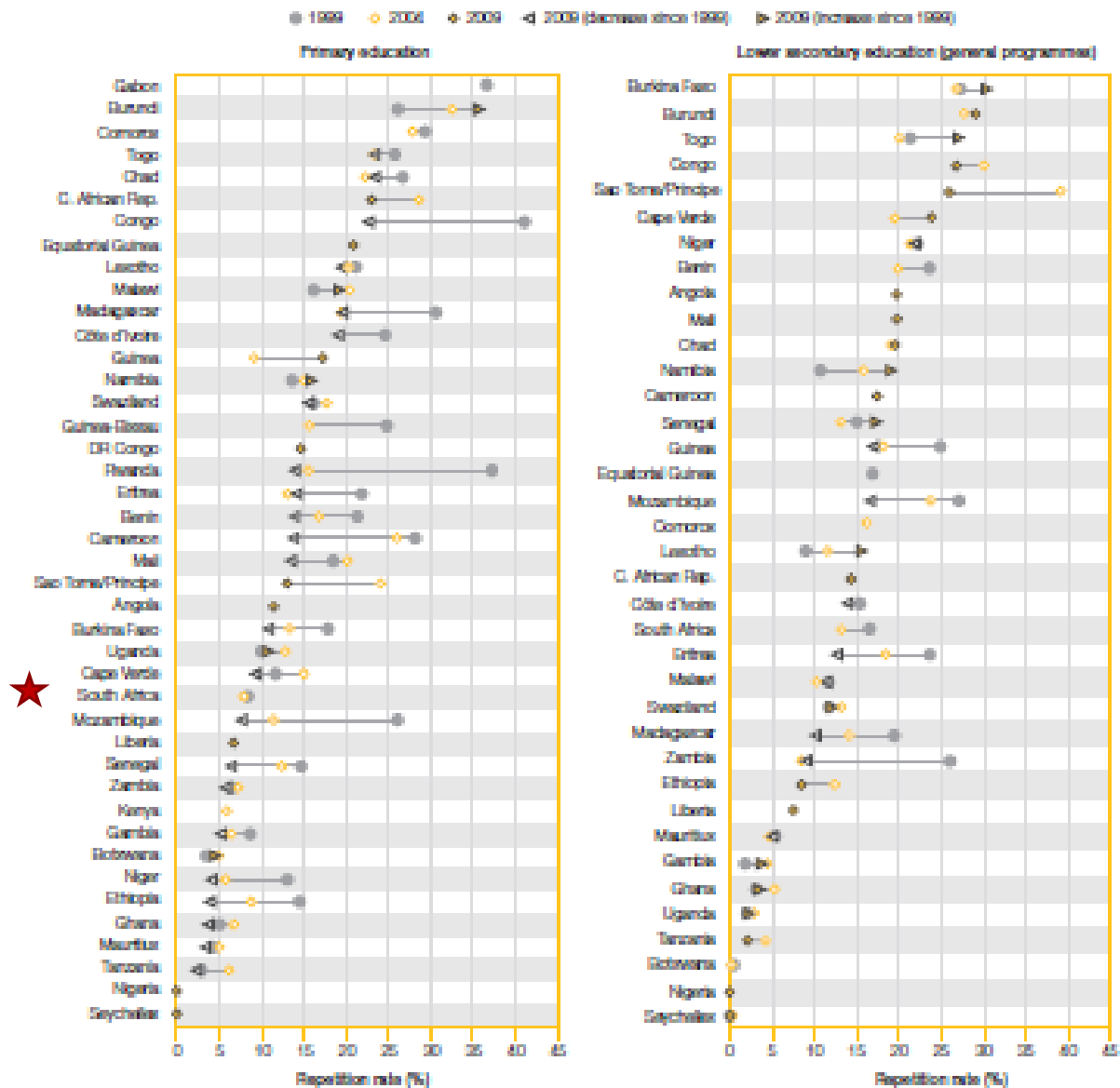
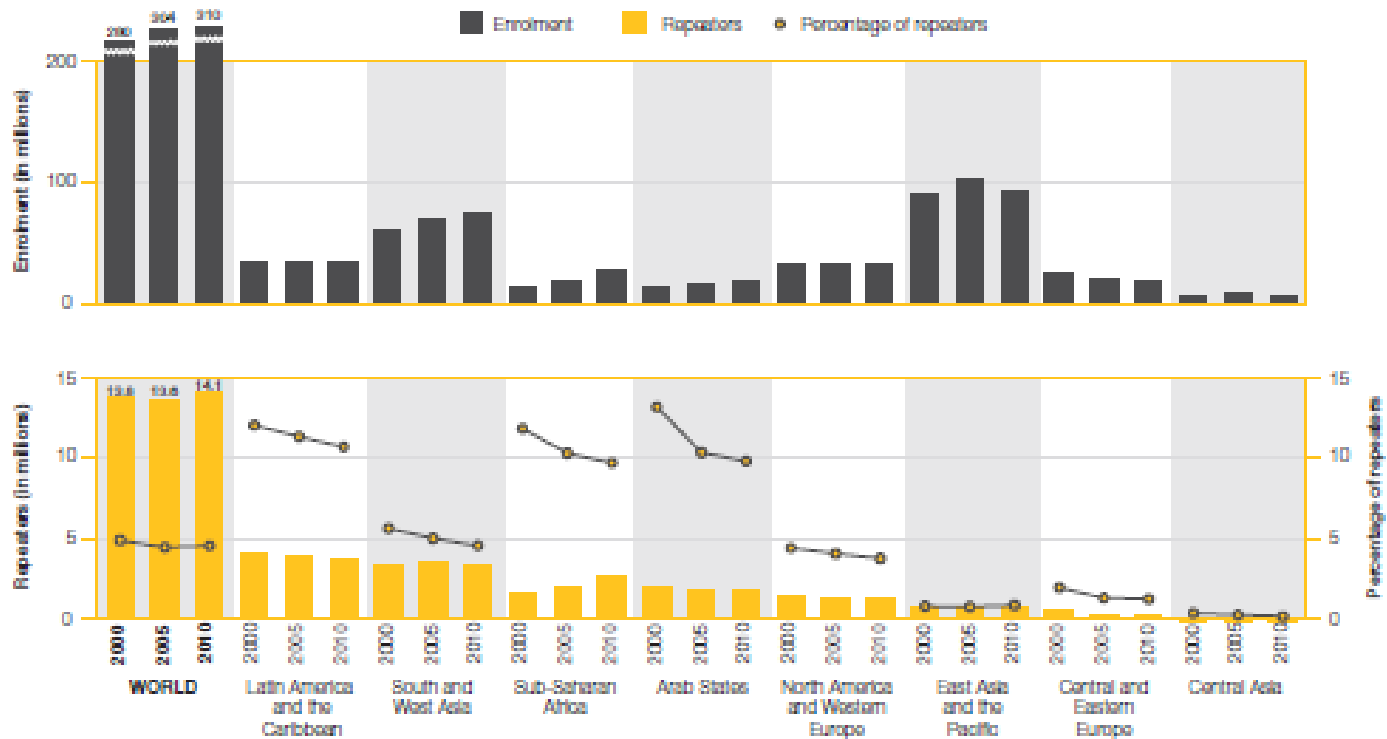Source: UNESCO Institute for Statistics, 2012

FIGURE 8 How do trends in grade repetition and enrolment in lower secondary education compare across regions?
Repeaters and enrolment in lower secondary education (general programmes) by region, 2000, 2005 and 2010

Note: Regions are ranked by the number of repeaters in 2010.

Source: UNESCO Institute for Statistics database.

Source: UNESCO Institute for Statistics, 2012

OVER-AGE LEARNERS

Due to repetition there is a steady rise in the proportion of children that are over-age for their grade with each successive grade.

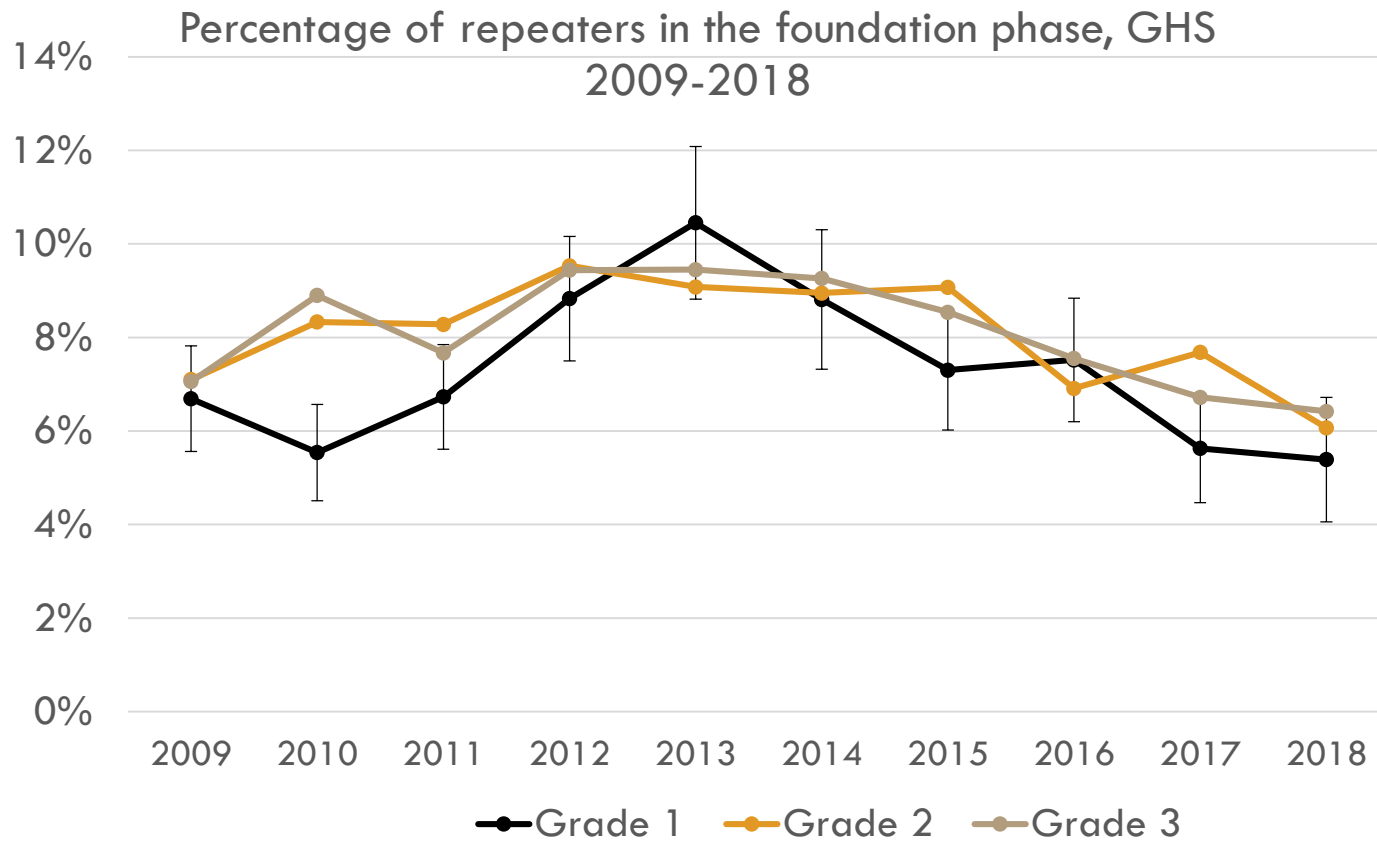------------------------------------

Trends:

2000-2009: Declines in % of learners over-age in primary phase.

2009-2013: Increase in % of learners over-age in grades 9 to 12.

Figure 10: Trends in the percentage of learners by grade that are over-age, EMIS 2000 to 2016 for 7 provinces

Percentage of repeaters in the foundation phase, GHS
2009-2018
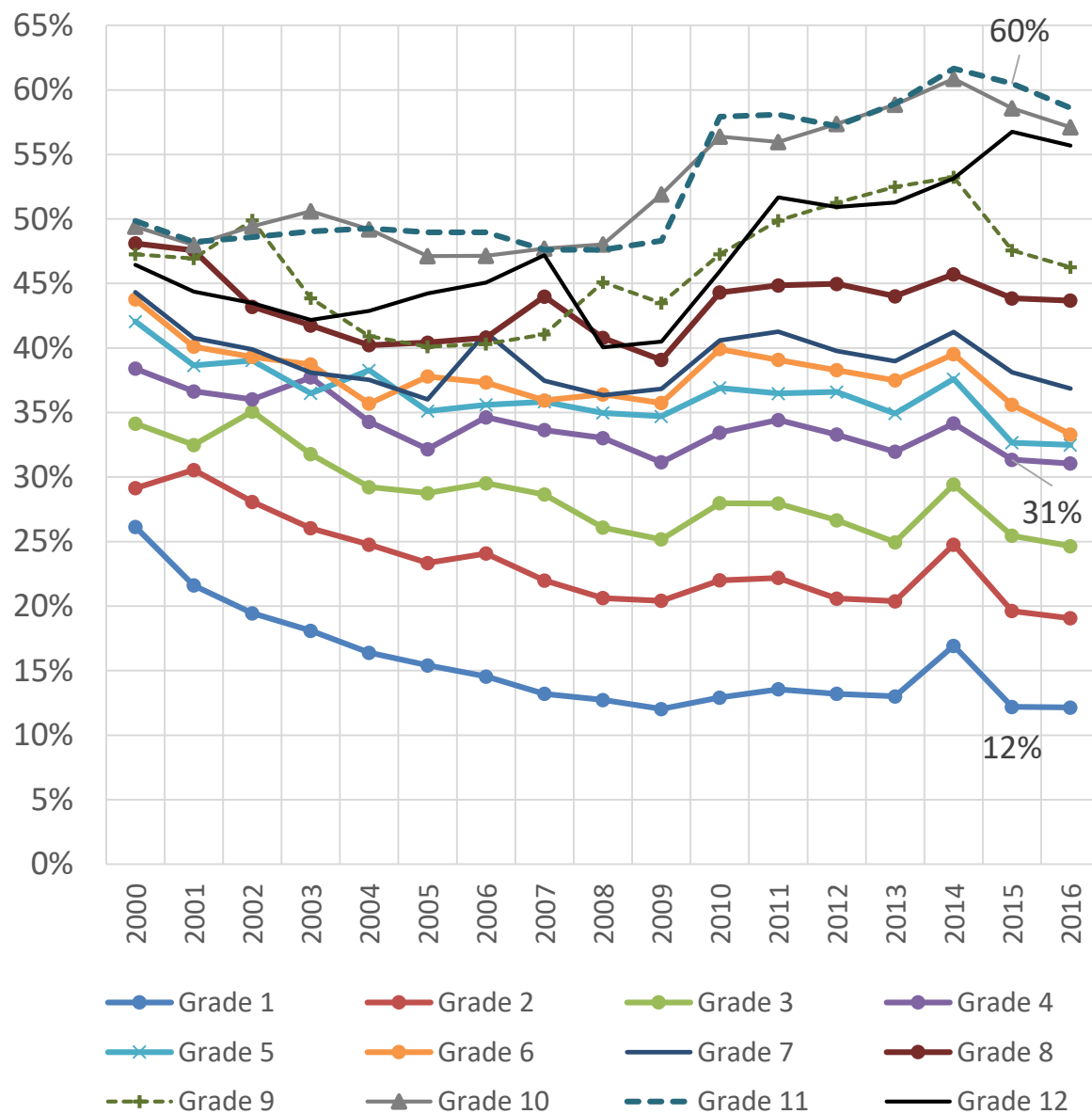
DECLINING TREND IN FP
REPETITION (2013-2018)

Percentage of repeaters in grades 9 to 12, GHS 2009-2018
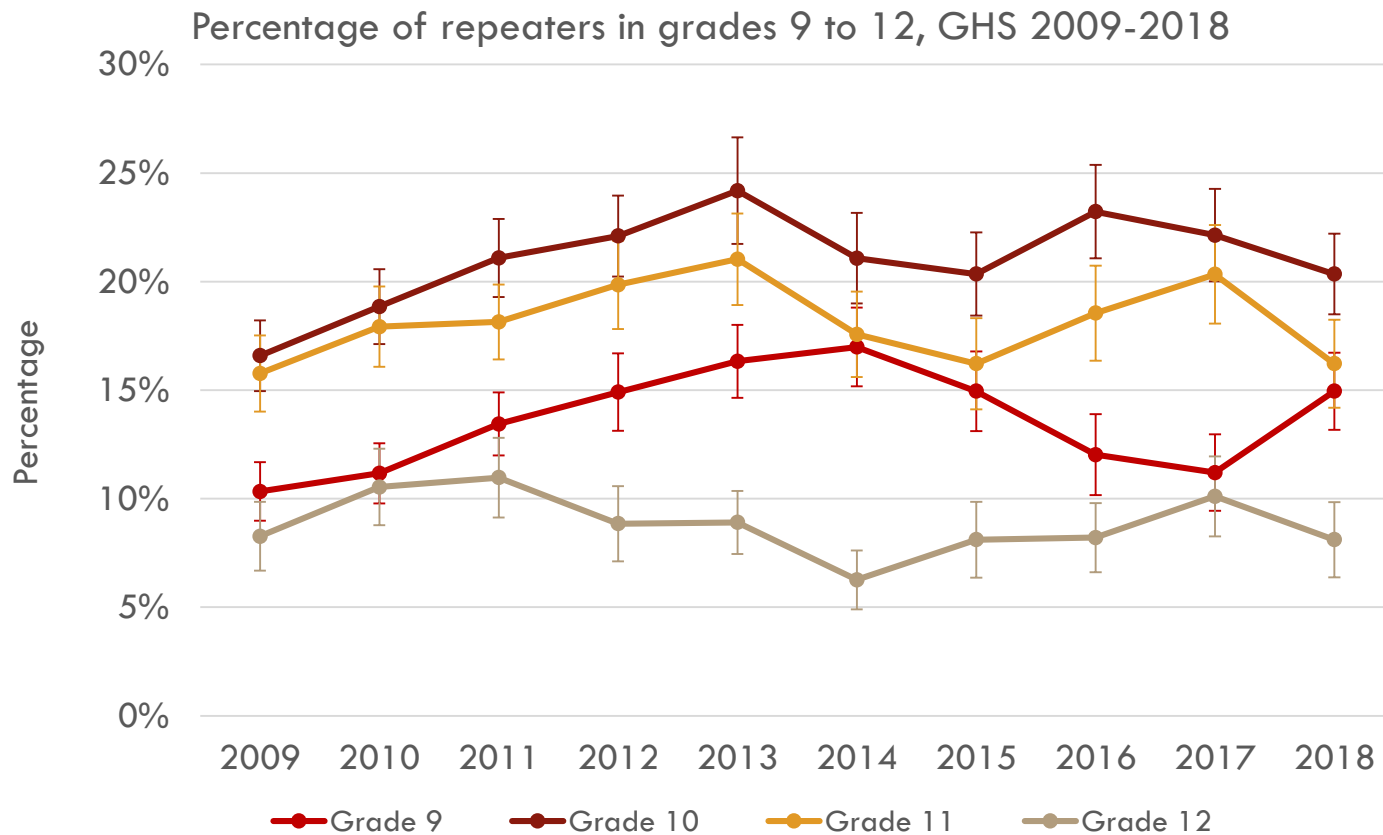
INERTIA: REPETITION RATES IN HIGHER GRADES SUSTAINED DESPITE POLICY CHANGE

Initial suggestions of a decline in repetition rates (Kika & Kotzé, 2018) after the introduction of FET repetition policy in 2012 have not been sustained.

PROVINCIAL DIFFERENCES

Average household reported repetition rates in Grade 10 by province
(GHS 2014-2018)
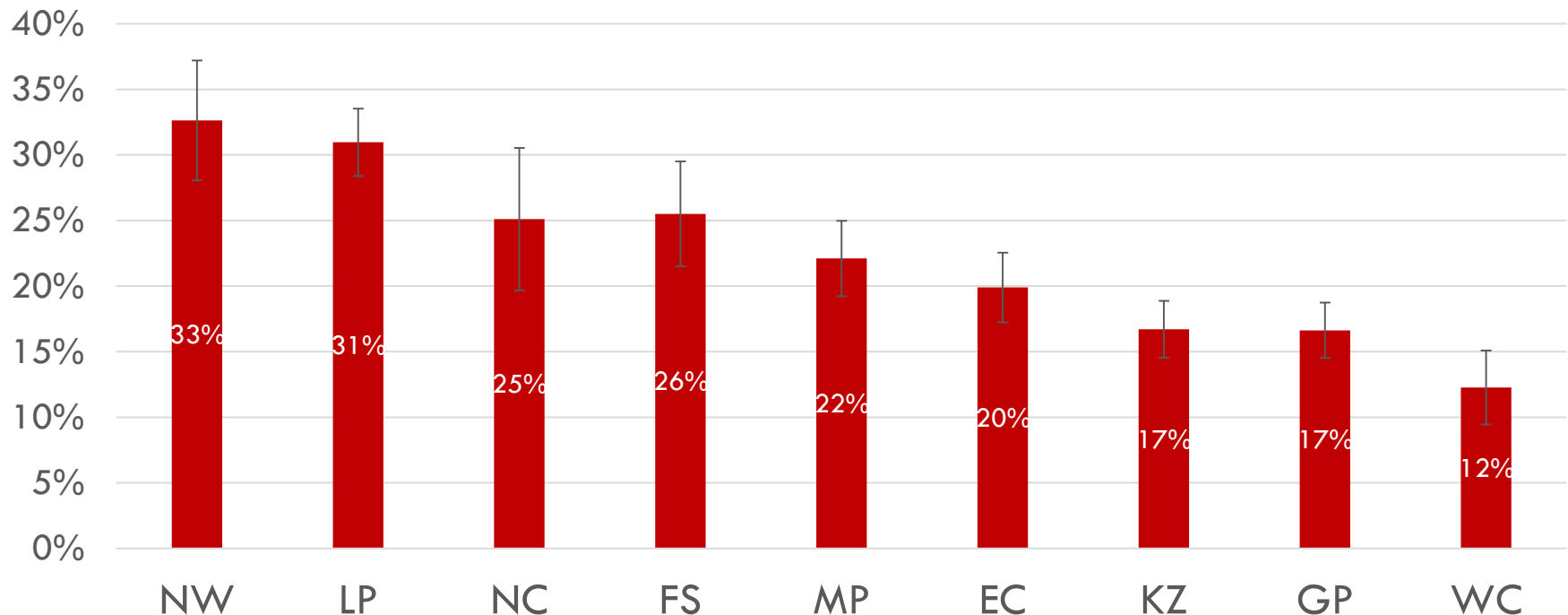
- ASS: A clear and consistent pattern is that of 7 provinces (excl. MP and FS), the Western Cape and Gauteng have the lowest repetition rates in the primary phase.

- CS: Highest percentage of 13 & 17 year olds that have completed the correct grade for their age are in GP, WC, KZN.

INEQUALITIES IN REPETITION RATES

Inequalities in educational attainment and school success are well-documented in the South African literature.

There are also considerable differences in rates of repetition, dropout and over-age learners by household or school wealth. But this should be contextualised against the significant progress that has been made in reducing inequalities in grade attainment in post-apartheid South Africa.

Figure 14: Repetition rates across Quintile 1 & 5 schools, using a reliable & consistent ASS school-level sample from 7 provinces for 2010 & 2015

Source: Calculated from a subset of Annual Survey of Schools data 2010-2011 and 2015-2016 for 7 provinces, excludes FS and MPU. Note: The sample excludes schools with unreliable or improbable data on repetition or dropout. As learners are not observed one year after grade 12, it is not possible to calculate repetition rates in grade 12.
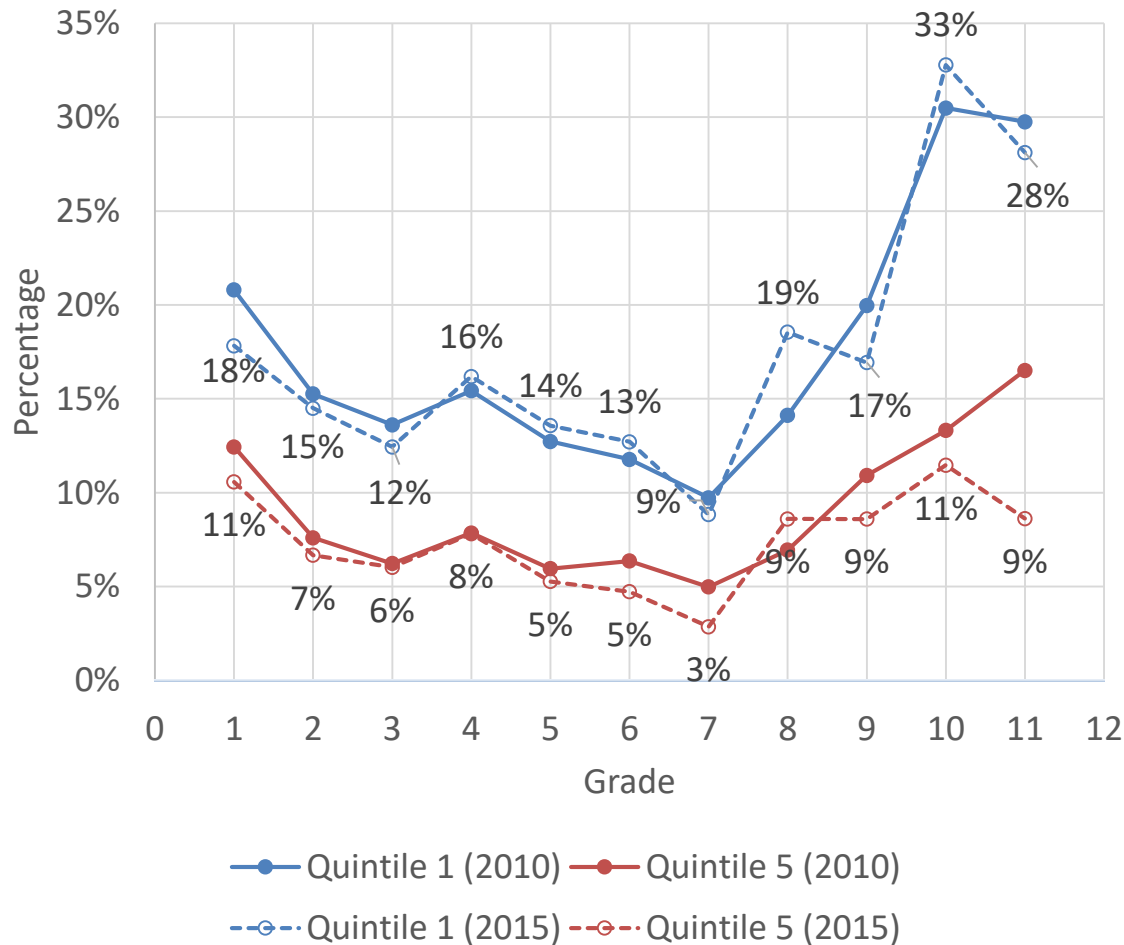
## HIGHER REPETITION IN POORER SCHOOLS AT ALL GRADES

Grade 1 repetition in 2015: 18% Q1 vs 11% Q5 schools

From grades 2 to 9, repetition rates in Q1 schools are at least double that in Q5 schools. They diverge further from grade 10 onwards

Grade 10 repetition rate 2015 in Q1 schools was almost triple that in Q5 schools

Figure 16 & 17: Repetition and dropout rates by gender using a reliable and consistent ASS school-level sample from 7 provinces, 2010 & 2015
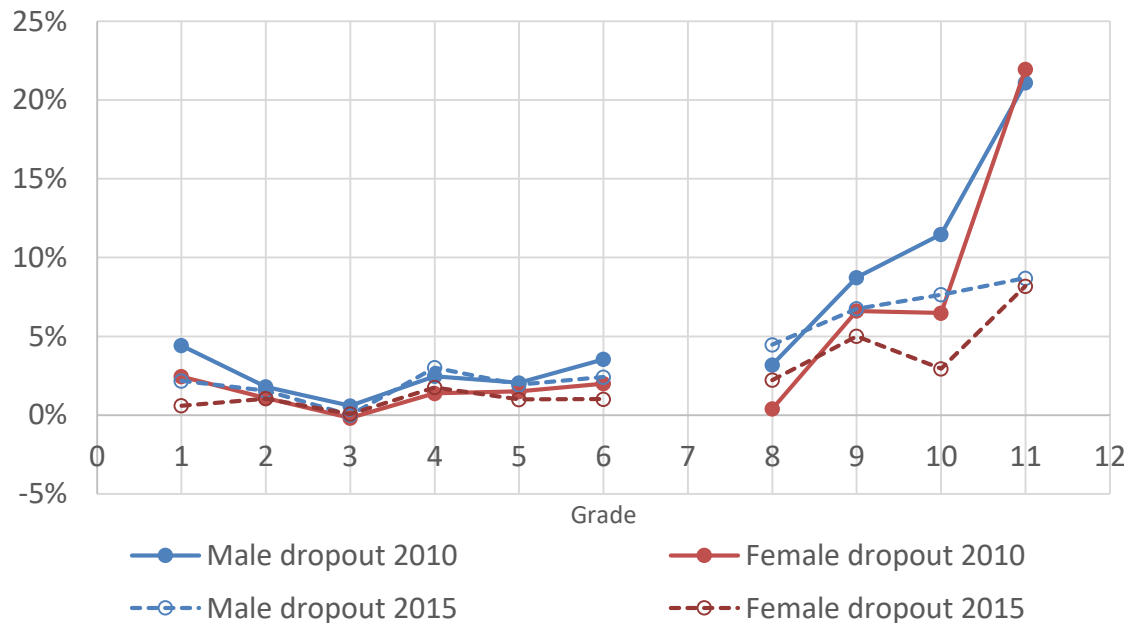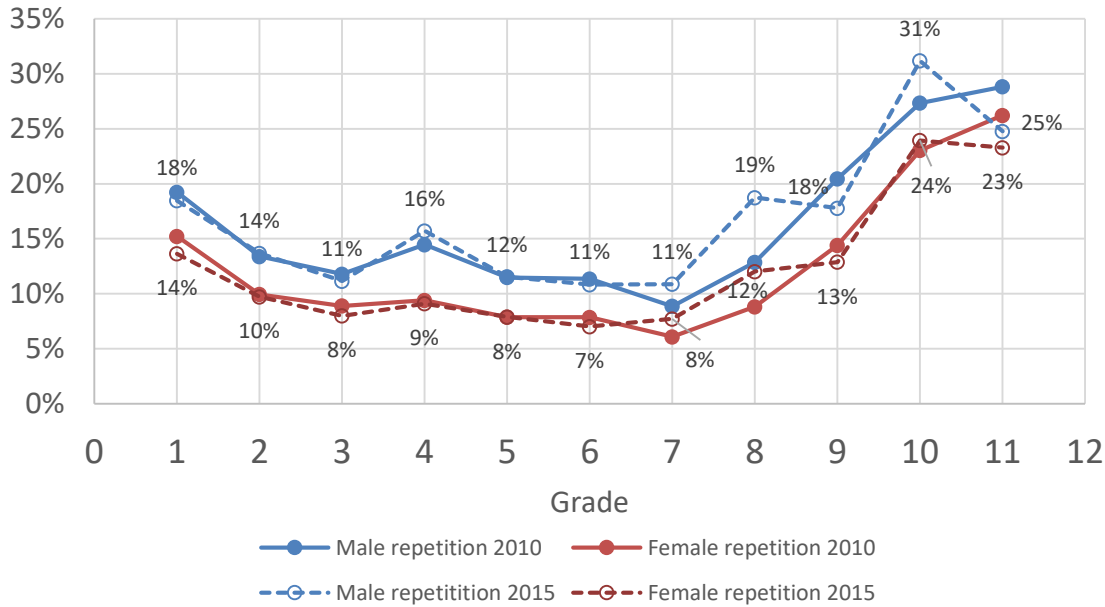
HIGHER REPETITION AND DROPOUT AMONG BOYS

Well documented female advantage in almost all aspects of the schooling system (Spaull and van Broekhuizen, 2017)

Females are more likely than males to be on track in terms of completed grade for age and are less likely to drop out.

BENEFITS OF SA-SAMS DATA — WHAT CAN WE LEARN?

1. Can track individual learners from year to year. Flows for 4 periods with 5 years of data (2014-2018). Reliable sample (79% of learners) — data quite stable over years, although data accuracy can be compromised by switches to secondary schools.

2. Obtain better estimates of drop-out as learners can be tracked across schools in NC public system (but not across provinces or into private schools).

3. Explore links between repetition and drop-out.

4. Some learners "drop-in". How often does this happen?

5. Investigate the implementation of repetition policy.

6. Explore correlates of repetition and dropout.

Figure 19: Percentage of previous year's learners repeating, Northern Cape SA-SAMS
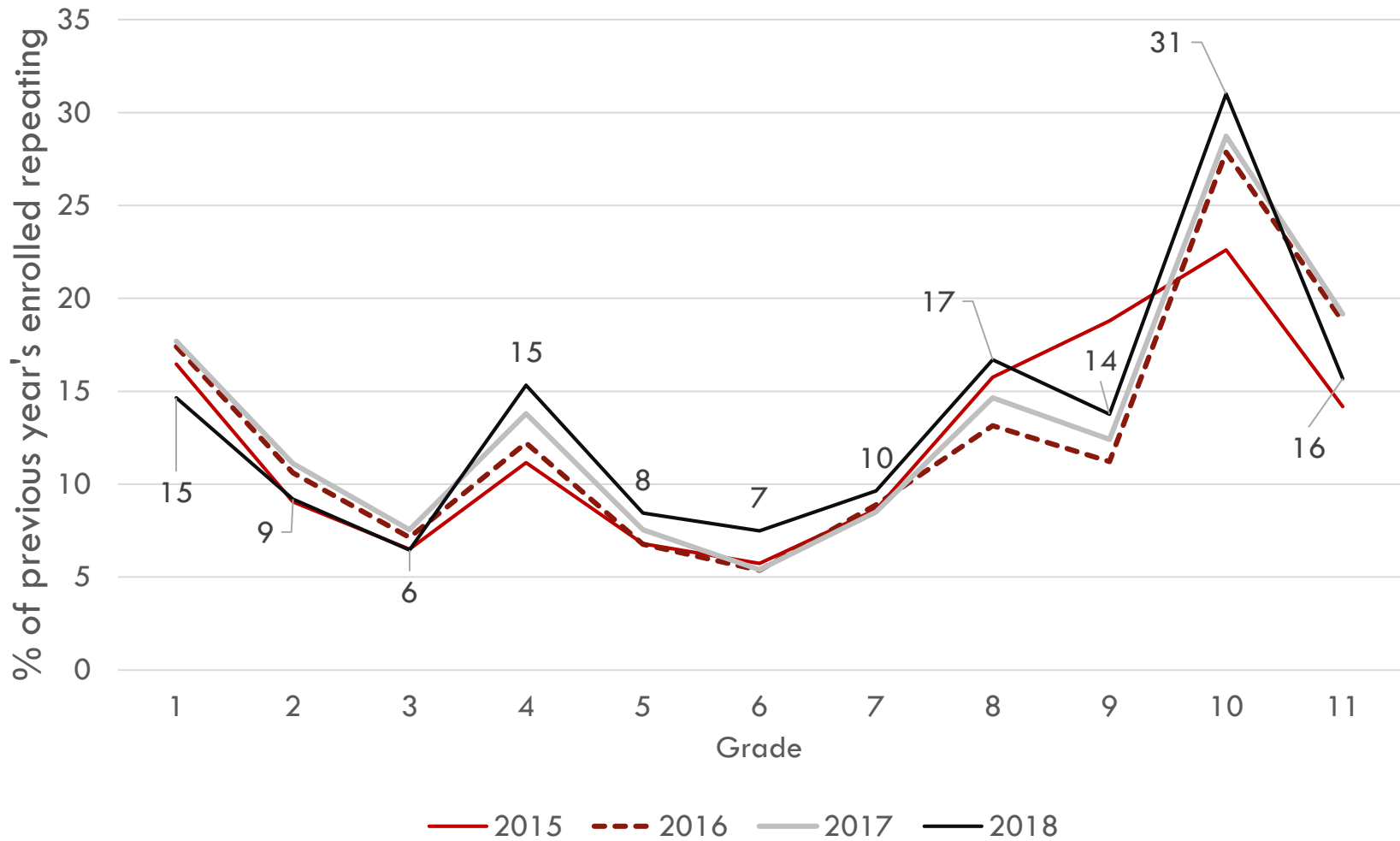
Source: Subset of SA-SAMS data for the Northern Cape Province.

IMPLEMENTATION OF REPETITION POLICY IN THE NORTHERN CAPE

Table 6: Repetition per phase, SA-SAMS data for the NC

Foundation phase	Intermediate phase	FET Phase
• Track grade 1s in 2014/15 • 25-29% repeat 1x • 2-3% repeat more than once	• Track grade 4s in 2014/15 • 15-22% repeat 1x • 1-2% repeat more than once	• Track grade 10s 2014/15 • 18-24% 1x repeat • **8%** repeat more than once

- Progress needs to be made in ensuring repetition policy is implemented in the Northern Cape but also in other provinces
  - Kika and Kotzé (2018) using NIDS 2017 show that 7% of youth aged 15 – 30 had repeated more than once in the FET phase

DROP-OUT IN THE NORTHERN CAPE

Transitions using SA-SAMS data.

The likelihood of drop-out is higher among repeaters

- Grade 10s who repeat: 16% drop out a year later
- Grade 10s who don't repeat: 7% drop out a year later
- Probability of drop-out is also twice as high for repeaters in grade 9 compared to non-repeaters

'Drop-in' may actually occur

- Grades 9s who drop-out: 11% drop-in a year later

- Grade 10s who drop-out: 13% drop-in a year later

  - Data errors?
  - Go to school in another province / private and return
  - Or actually go back to schools

Table: Repetition per phase, SA-SAMS data for the Northern Cape

	In first year of phase in 2014:			In first year of phase in 2015 (for the first time):	
Tracking learner success from grade 1 to 3 (Foundation phase)					
	Frequency	**%**		**Frequency**	**%**
No repetition	1 3134	61%	No repetition	1 3121	58%
1 repetition	5264	25%	1 repetition	6 574	29%
2 repetitions	624	3%	2 repetitions	432	2%
3 repetitions	29	0%	3 repetitions	11	0%
Dropout	2397	11%	Dropout	2573	11%
Total	21 448	100%		22 711	100%
Tracking learner success from grade 4 to 6 (Intermediate phase)					
	Frequency	**%**		**Frequency**	**%**
No repetition	13 464	68%	No repetition	1 1671	64%
1 repetition	2 955	15%	1 repetition	4 065	22%
2 repetitions	410	2%	2 repetitions	264	1%
3 repetitions	42	0%	3 repetitions	17	0%
4 repetitions	1	0%			
Dropout	2 895	15%	Dropout	2 246	12%
Total	19 767	100%	Total	18 263	100%

Table 6: Repetition per phase, SA-SAMS data for the Northern Cape (cont)

	In first year of phase in 2014:		In first year of phase in 2015 (for the first time):		
	Tracking learner success from grade 10 to 12 (FET phase)				
	Frequency	%		Frequency	%
No repetition	7 339	45%	No repetition	5 414	43%
1 repetition	3 028	18%	1 repetition	3 002	24%
2 repetitions	945	6%	2 repetitions	876	7%
3 repetitions	272	2%	3 repetitions	147	1%
4 repetitions	25	0%			
Dropout	4 796	29%	Dropout	3 212	25%
Total	16 405	100%	Total	12 651	100%

PROBABILITIES OF PROMOTION, DROP-OUT & REACHING GRADE 12 IN THE NORTHERN CAPE

NC SA-SAMS in 2015: **Outcome end of 2015: Promoted**	NC SA-SAMS in 2015: **Outcome end of 2015: Drops out**	Gr 9s in the NC in 2014: **Promoted to Gr12 by 2017 or 2018**

Controls: Population group, Gender, grades, school Quintile, years overage

Key insights Table 7: Multivariate estimation of promotion, dropout & reaching Gr12

Being male is more strongly associated with repetition than drop-out	Over-age learners are less likely to be promoted, more likely to drop-out	Grade 9 learners who are over-age are particularly at risk of not being promoted to grade 12 in good time
School quintile is more strongly associated with differences in repetition than in drop-out	Grade 9 learners in Q5 schools are 12 percentage points more likely to get to matric within 4 years than Grade 9 learners in Q1 schools	Differences in the probability of promotion are driven more by unmeasured factors than measured factors
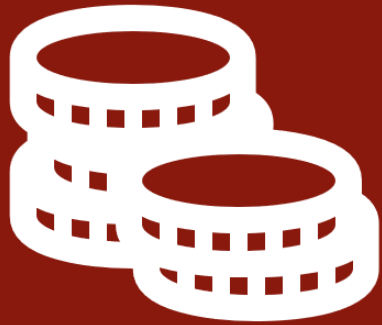
WHAT IS THE COST OF REPETITION?

1. Calculating the cost of repetition is not straightforward. Various assumptions need to be made.

2. Requires accurate figures on enrolment and public expenditure per child
   - School EMIS releases by DBE used to get learner enrolment by grade
   - Lilenstien and Spaull (2019) – cost per learner for 2016/17 FY was R16 264. Estimated from National Treasury releases. Inflate by CPI for 2017 (4.5%) to cost of R16 996 by first quarter of 2018. This is a conservative cost estimate.

3. Economies of scale complicate the determination of costs
   - We ignore this

4. Different datasets produce different estimates of repetition
   - Treat GHS as lower bound estimate
   - Treat ASS for 7 provinces as upper bound & interpolate repetition rate for grade 12

	NUMBER OF REPEATERS	COST PER LEARNER	COST OF REPETITION
Lower bound (GHS)	1 183 000	R16 996	R20 billion
Upper bound (ASS)	1 690 000	R16 996	R29 billion

|	Gr1	Gr2	Gr3	Gr4	Gr5	Gr6	Gr7	Gr8	Gr9	Gr10	Gr11	Gr12	Total
Total enrolment in 2016 (in thousands)	1 148	1 124	1 066	1 077	983	908	863	912	867	1 067	865	665	
Lower bound costings													
Repetition rates using GHS 2016	7.5%	7%	7.3%	7.4%	6.8%	6.9%	7.6%	11%	11.9%	23.5%	18.3%	8%	
Number of repeaters (in thousands)	86	79	78	80	67	63	66	100	103	251	158	53	1 183
Spending on repetition (in millions & 2018 prices)	R1 463	R1 337	R1 323	R1 355	R1 136	R1 065	R1 115	R1 705	R1 754	R4 262	R2 689	R905	R20 108
Upper bound costings													
Repetition rates using ASS subset (2015) for 7 provinces	16.4%	12.0%	9.8%	13.1%	10.1%	9.4%	9.5%	15.6%	15.4%	27.6%	24.0%	11.5%*	
Number of repeaters (in thousands)	188	134	105	141	99	85	82	142	134	295	207	77	1 690
Spending on repetition (in millions and 2018 prices)	R3 195	R2 286	R1 784	R2 402	R1 685	R1 445	R1 400	R2 418	R2 270	R5 011	R3 521	R1 305	R28 722

COSTS IN PERSPECTIVE

There are obvious costs imposed upon the fiscus (and taxpayers) of a learner repeating school

But there are far greater costs to society if a learner does not obtain a matric or higher qualification

Forgone life-time earnings, and what this means in terms of lost income for the economy, vastly outweigh the direct costs of repetition or higher education

Figure 20: A monthly earnings profile for South Africans with a grade 9, grade 10, matric or a 3-year degree
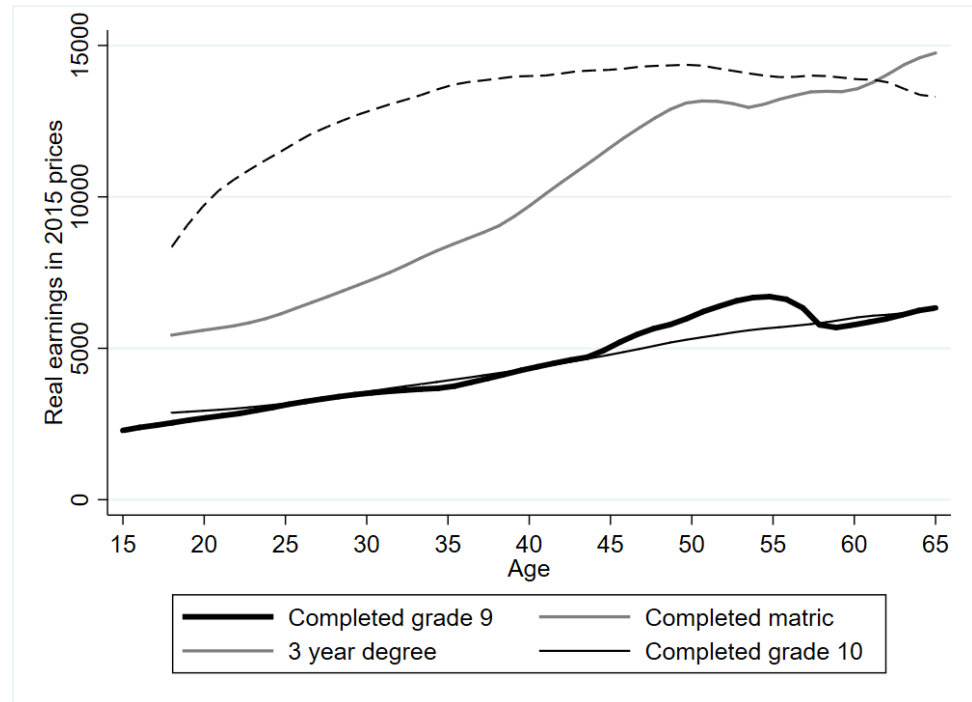
Source: Post-Apartheid Labour Market Series (Andrew, Lam, & Wittenberg, 2017), own calculations. Notes: Local polynomial regression lines shown. The real earnings variable in PALMS version 3.2 has been used. Calculated in 2015 rand prices.

DROPOUTS

UNESCO method:

X = enrolment initial year 'n'

Y = learners promoted

Z = repeaters in initial year 'n'

Drop-out in year 'n' = X − Y − Z

Limitations of method:

1. Dropouts could have moved to private schools, died or moved to another country

2. Dropouts can re-enter a system

3. Difficult to track movements across provinces

4. If repeaters are under-estimated, dropout is over-estimated

5. Can't calculate for grades 7 and 12

Figure 11: Dropout rates using a reliable and consistent ASS school-level sample from 7 provinces, 2010 and 2015
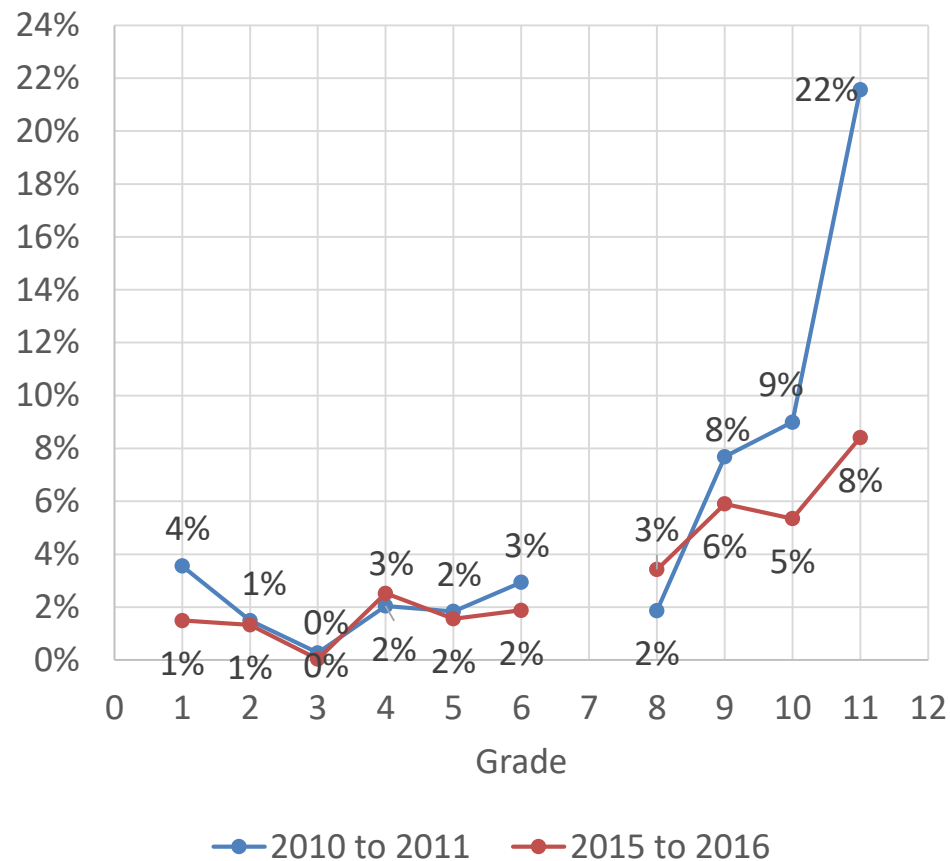
Source: A subset of Annual Survey of Schools data 2010-2011 and 2015-2016 for 7 provinces, excluding Free State and Mpumalanga. Notes: The sample excludes schools with unreliable or improbable data on repetition or dropout.

THE POOREST YOUTH ARE MORE LIKELY NOT TO BE ENROLLED IN SCHOOL

Figure 13: Percentage of youth aged 7 to 19 not enrolled in any educational institution and that have not completed matric by household wealth quintile, Community Survey 2016
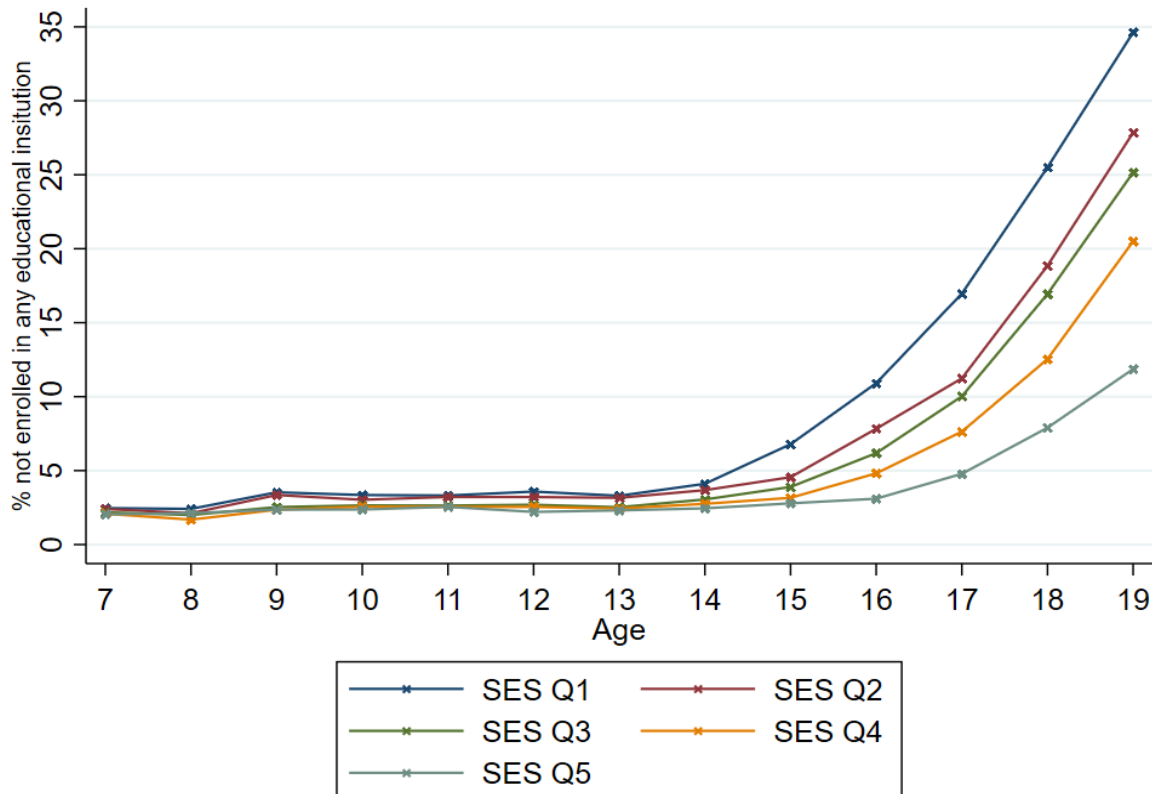
The % of youth not enrolled is low in primary school, but then rises from age 14 with large and widening gaps between the poorest and wealthiest learners

The % of 18-year-olds (excluding those who have a matric) that are not enrolled in school is 3.6 times higher among those living in the poorest 20% of households compared with those in the wealthiest 20% of households

EXAMPLE OF COSTS OF REPETITION & DROPOUT: COMPARING 21-YEAR OLDS WITH ALTERNATE EDUCATIONAL TRAJECTORIES
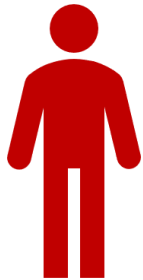
Point of reference: **Red person**, a 21-year-old who repeats a grade 3 times but never completes matric (**drops out at 19 with a grade 10, *commences work* at 20**). Express costs relative to the government cost of educating and the cumulative lifetime incomes earned of 3 other 21-year-olds individuals.

1)Compare to Green 2)person

- Never repeats
- Obtains a matric by 18
- No post-secondary education
- Commences work age 19, remains employed until 65

Compare to Blue person
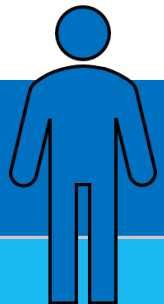
- Never repeats
- Obtains a matric by 18
- Obtains a bachelor's degree within 3 years
- Commences work age 22, remains employed until 65

*PALMS used to get median income for different individuals with specified educ. levels. at different ages.
*PSET costs from DHET report (2018)

COSTS AT 21 FOR A PERSON WHO REPEATS A GRADE 3 TIMES BUT NEVER COMPLETES MATRIC (GRADE 10 ONLY) RELATIVE TO

1)Compared to Green Person

- Never repeats
- Obtains a matric by 18
- No post-secondary education
- Commences work age 19, remains employed until 65

Extra spending on green: R17 000

Life time forgone earnings of not getting a matric: R1.7 million

Forgone earnings are a much stronger contributor to long run costs than repetition. The additional costs of repetition account for merely 1% of the total lost value.

Compared to Blue person

- Never repeats
- Obtains a matric by 18
- Obtains a bachelor's degree within 3 years
- Commences work age 22, remains employed until 65.

A lot more to educate blue person PSET: R250,000
Life time forgone earnings of not getting a matric & PSET: R7.5 million

Illustrates the immense cost of poor quality education which limits opportunities to achieve matric exceptions and thus access to degree studies.

COSTS AT 21 FOR A PERSON WHO NEVER REPEATS AND DROPS-OUT END OF GRADE 9

1)Compared to Green Person

- Never repeats
- Obtains a matric by 18
- No post-secondary education
- Commences work age 19, remains employed until 65

Compared Blue person

- Never repeats
- Obtains a matric by 18
- Obtains a bachelor's degree within 3 years
- Commences work age 22, remains employed until 65.

R51 000 less expensive for yellow person as less time in school.
Life time forgone earnings of not getting a matric: R2 million

A lot more to educate blue person with PSET R250,000
Life time forgone earnings of not getting a matric & PSET: R8 million

An even worse outcome for the economy than repetition is drop-out, and thus failing to progress to higher levels of education. If repetition at higher grades encourages drop-out this a very sub-optimal outcome.

DISCUSSION

- Repetition rates in South Africa are high. Inertia.
  - Although repetition policy is currently not applied as it should be, it is unlikely to resolve the issue (legally allows 33% of learners to repeat once in a 3 grade cycle)

- Repetition is potentially a large waste, both of state resources (8-12% of current total education budget) but even more so for the wider economy if repetition drives higher drop-out. But we need a lot more research though to draw a hard position:
  - Causal estimates of both impacts of repetition on learning and on later outcomes such as drop-out.
  - Research on remediation and on learning amongst repeaters and non-repeaters (see Banerjee et al., 2007)
  - Patterns of repetition and class sizes, & how class sizes impact on learning outcomes.

DISCUSSION (CONT.)

- Sudden changes in repetition policy e.g. placing a ceiling on repetition rates, may cause unforeseen consequences:
  - This may be a particularly difficult issue in grade 1, where school readiness is difficult to judge.
  - Changes in learner enrolment have implications for calculations using equitable share formulas and post-provisioning (sudden declines in learner enrolment would reduce PPNs).

The problem of **poor-quality schooling** – of which repetition is a symptom – is a far greater cost to individuals and the South African economy than considering the issue of repetition in isolation.

- But as a start we need better data from schools to at least effectively monitor repetition.
- Better teaching and more support (remediation?) in the early grades are essential.

THE POOREST LEARNERS ARE MORE LIKELY TO FALL BEHIND AT SCHOOL.

Figure 12: Percentage of children in school that are not on track by household wealth quintile, Community Survey 2016
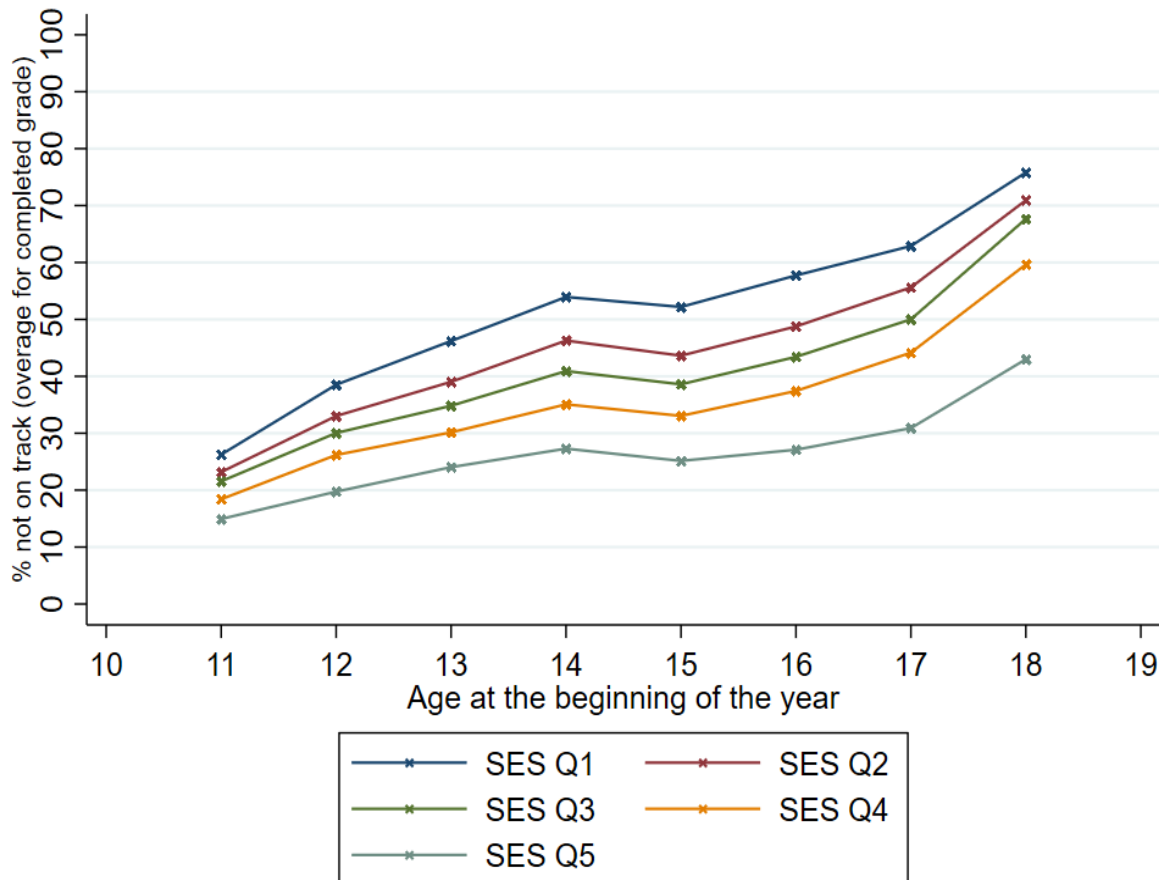
% OF 15 YEAR OLDS OVERAGE FOR THEIR COMPLETED GRADE

Roughly a half (52%) living in the poorest 20% of households

vs.

A quarter (24%) in the wealthiest 20% of households.

BACKGROUND TO THE ISSUE

Table 2: Repetition rates at the end of various school phases in public schools in francophone African countries, circa 1999

	End of primary	End of lower secondary	End of upper secondary
Burkina Faso	35%	44%	34%
Mali	37%	35%	n/a
Senegal	29	24%	28%
Madagascar	30%	37%	41%
Côte d'Ivoire	43%	14%	32%

Source: Calloids 2001: 147

"…Median level of repeaters at 15% in 2004. In Burundi, Cameroon, the Central African Republic, Chad, Comoros, the Congo, Equatorial Guinea, Gabon, Malawi, Sao Tome and Principe, and Togo – i.e. three out of ten countries – 20% or more of primary pupils are repeaters. The repetition rate is highest in grade 1: above 20% in Chad, Eritrea, Lesotho, Malawi, Sao Tome and Principe, and Togo, and above 30% in Burundi, Comoros and Gabon". UNESCO 2008:3

Repetition Rates in Primary School and PPP GDP per-capita (US$1,000) across Countries
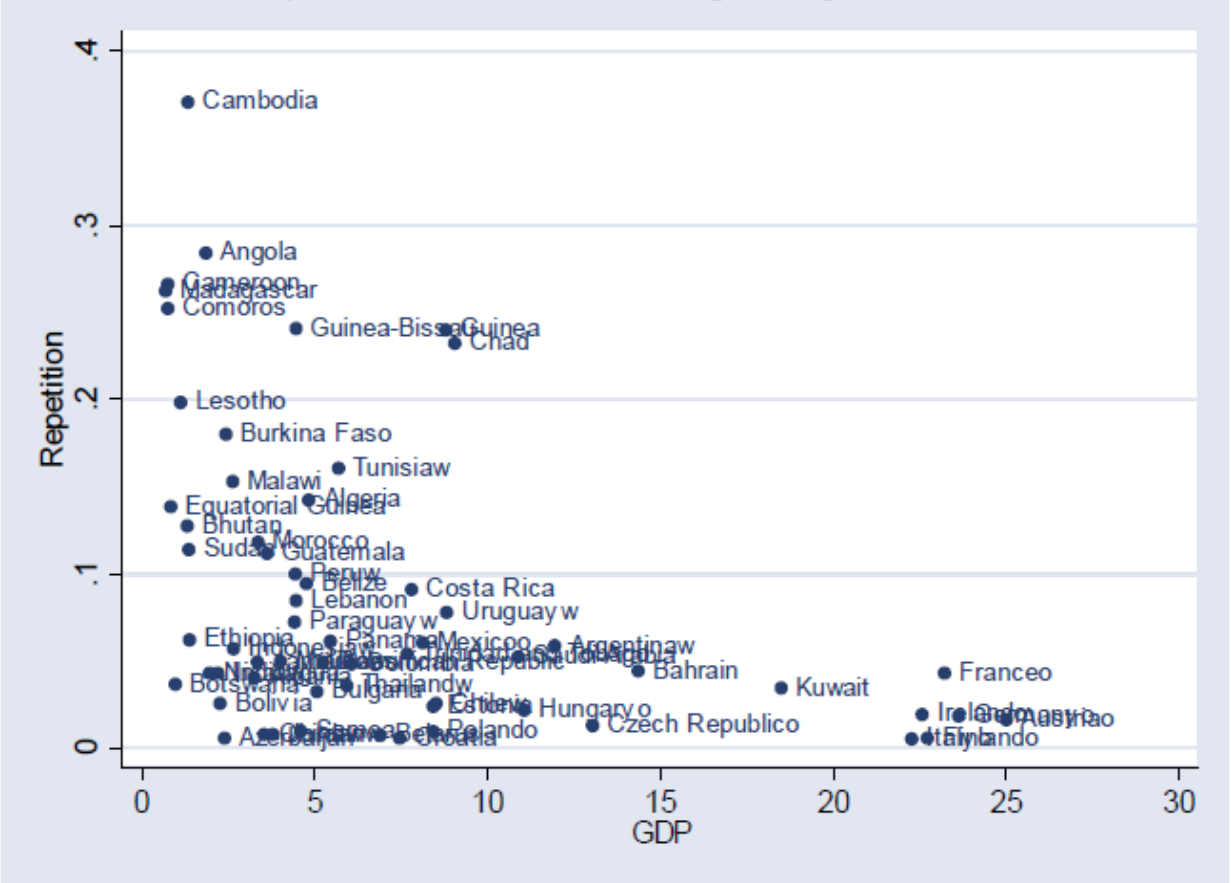
GRADE ATTAINMENT

South Africans are more educated now than they have ever been in the past 100 years

Reduced racial gaps in grade attainment

Figure 1: Average years of schooling by birth cohort, Community Survey 2016
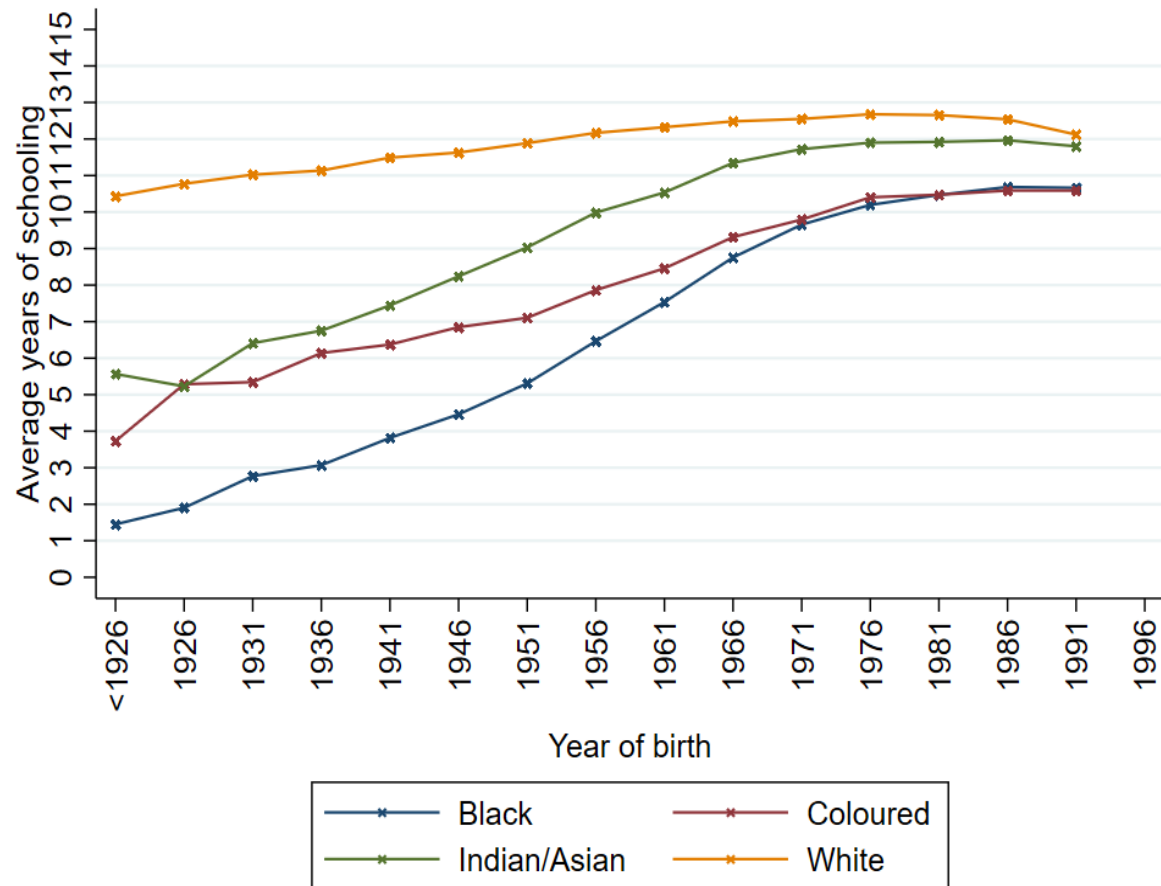
BLACK AFRICANS

Born 1941-1945:
2 in 5 no schooling
2 in 100 matric

Born 1991-1996:
2 in 5 matric
2 in 100 no schooling

ENROLMENT

It is important to contextualise the extent of dropout in an international setting.

Comparing enrolment rates among adolescents with neighbouring countries is one way to do this.

Figure 3: Percentage of each age group attending school in SACU countries, circa 2011
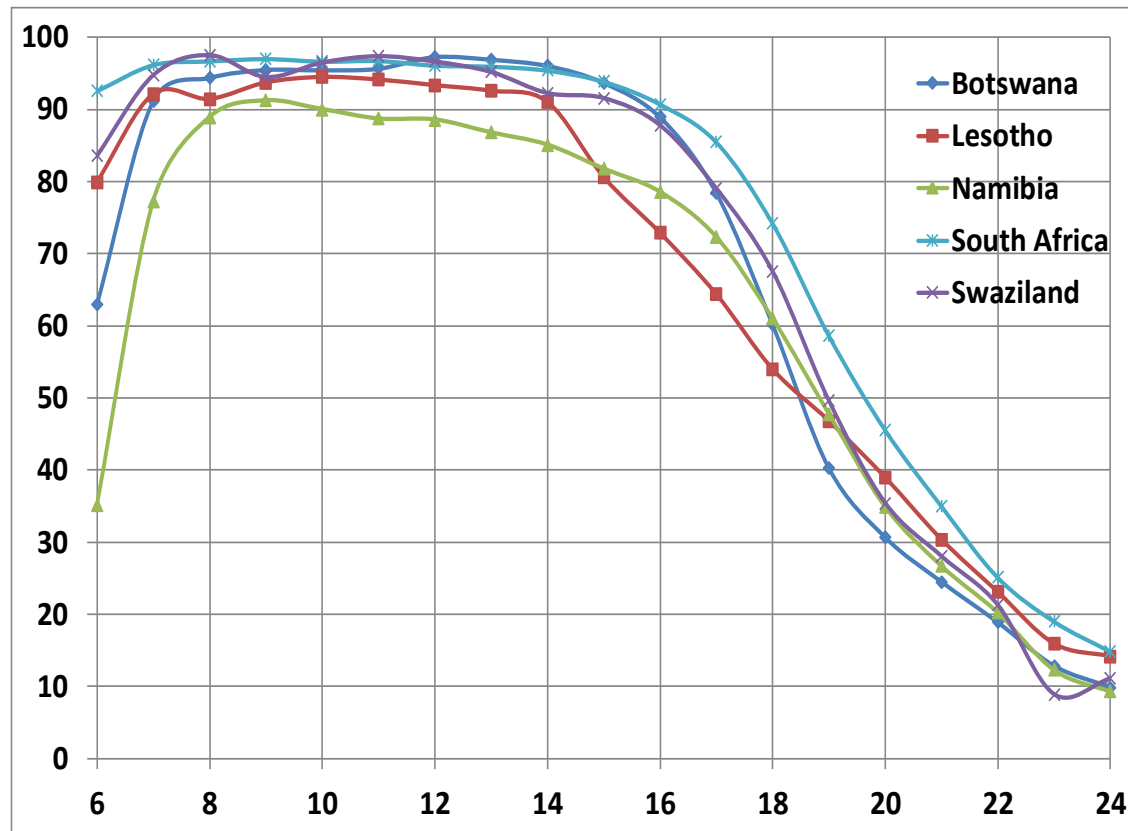
Source: Van der Berg and Knoesen (2015)

SA enrolment rates are quite high in comparison to other SACU countries, remaining above 90% even up to age 18.

Figure 18: Gender parity index by grade, national EMIS statistics (2009, 2016, 2018)
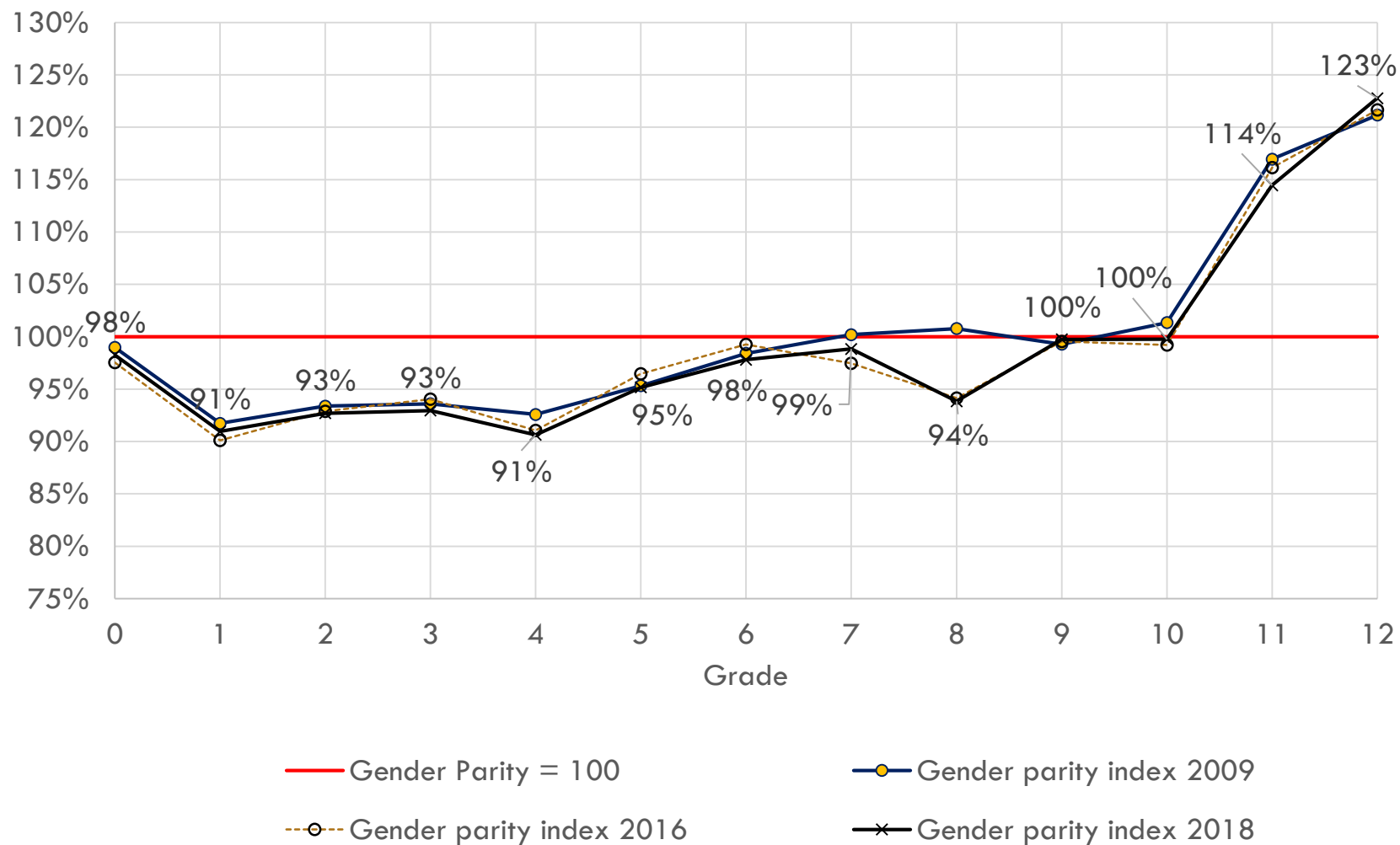
Source: The national enrolment data for females and males are taken from the School Realities reports for 2009, 2016 and 2018. Notes: Enrolments for public ordinary schools are used.
Data labels are only shown for 2018.

Figure A1: Educational status of children aged 13 by province, Community Survey 2016

Percentage of youth aged 13

	WC	EC	NC	FS	KZN	NW	GP	MP	LP	National
Enrolled in school: 2 or more years behind	13	18	17	16	11	15	7	15	12	13
Enrolled in school: 1 year behind	22	24	23	25	18	22	17	21	18	20
Enrolled in school: CCGFA	61	54	57	56	66	59	72	60	68	63

Legend:
- ■ Enrolled in school: CCGFA
- ■ Enrolled in school: 1 year behind
- ■ Enrolled in school: 2 or more years behind
- ■ Enrolled in other institution
- ■ Not enrolled
- ■ Missing

Figure 8: Educational status of youth aged 8 to 20, Community Survey 2016

Legend:
- Enrolled in school: CCGFA
- Enrolled in school: 1 yr behind
- Enrolled in school: 2 year behind
- Enrolled in school: 3 or more years behind
- Enrolled in other institution: CCGFA
- Enrolled in other institution: 1 yr behind
- Enrolled in other institution: 2 year behind
- Enrolled in other institution: 3 or more years behind
- Completed schooling

Figure A3: Educational status of children aged 17 by province, Community Survey 2016

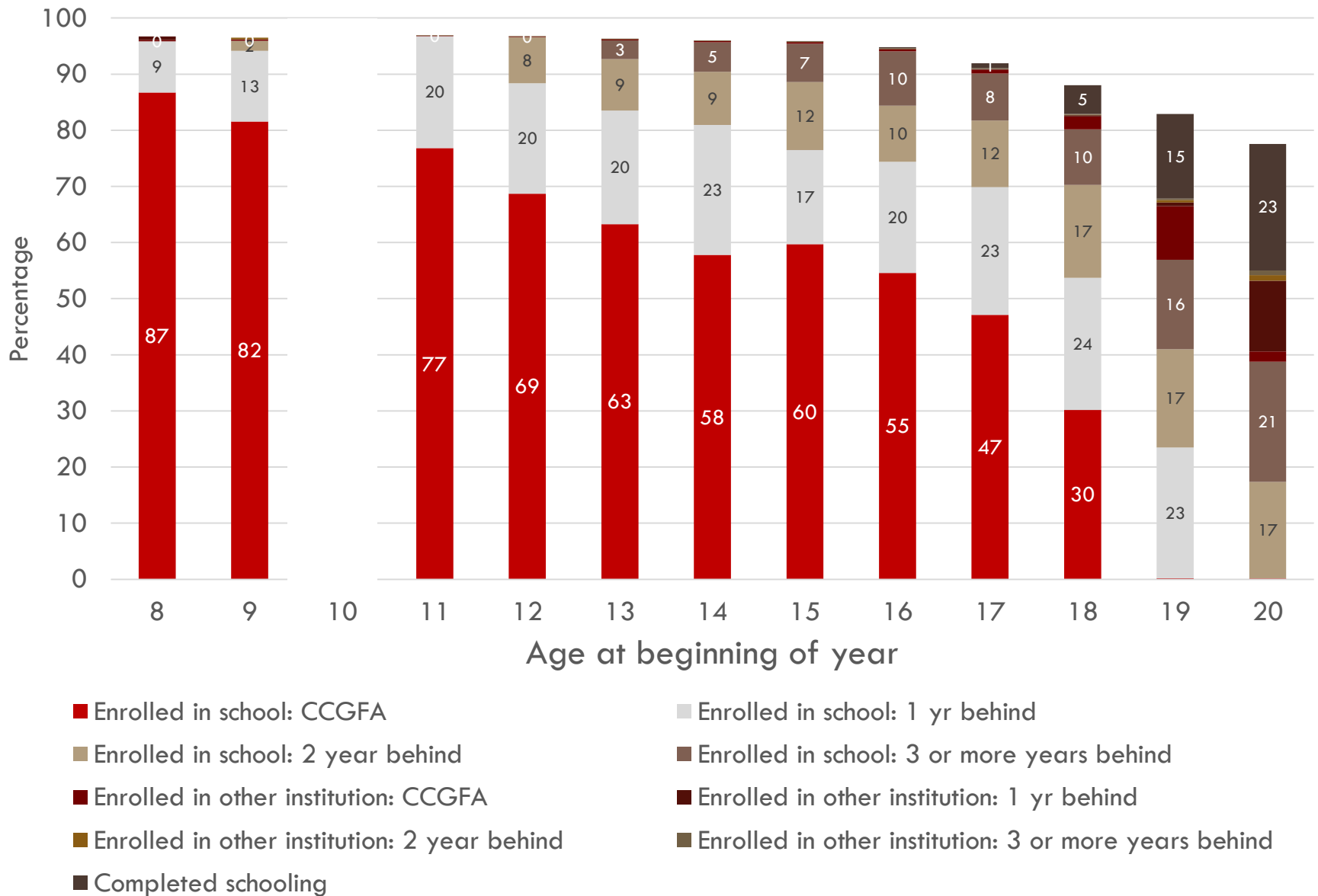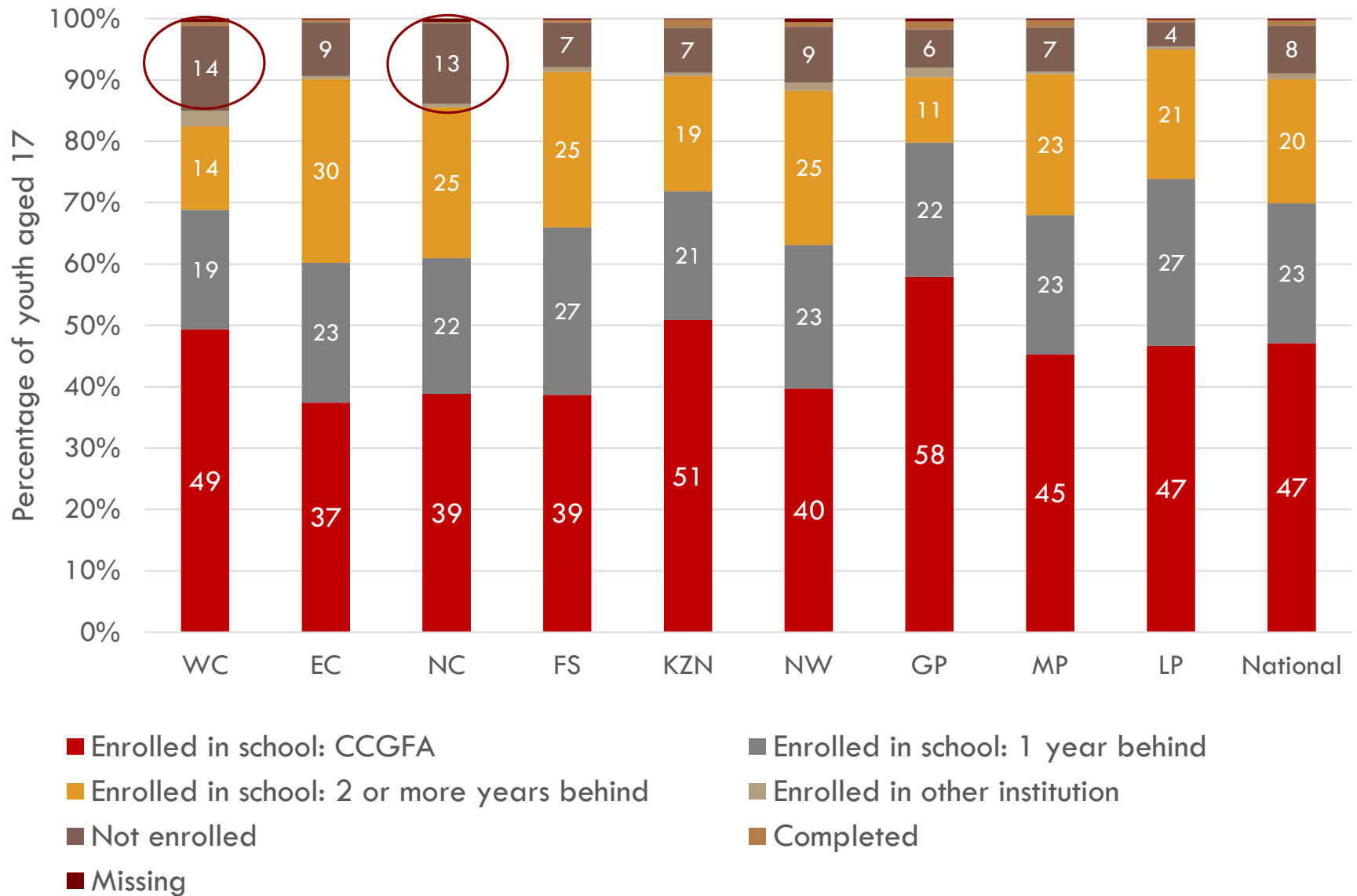Figure A3: Educational status of children aged 17 by province, Community Survey 2016

Legend:
- Enrolled in school: CCGFA
- Enrolled in school: 1 year behind
- Enrolled in school: 2 or more years behind
- Enrolled in other institution
- Not enrolled
- Completed
- Missing
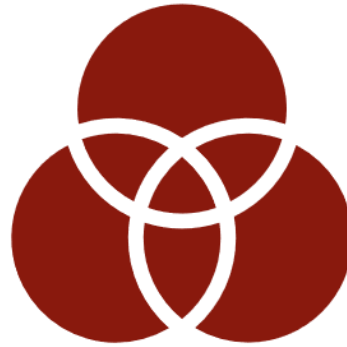
It is necessary to consult **multiple data sources** to obtain the most accurate picture of learner repetition and dropout. Additionally, these two measures should be considered against other measures to highlight the efficiency of an education system from **various angles.**
(see DoE, Ministerial Committee on Learner Retention, 2008)

Sample:	Learners in the Northern Cape SA-SAMS in 2015		Grade 9 learners in the Northern Cape in 2014
	1. Outcome end of 2015: Promoted	2. Outcome end of 2015: Drops out	3. Promoted to Gr 12 by 2017 or 2018
Female	0.051***	0.002	0.009
	(0.00)	(0.00)	(0.01)
Population group: Coloured	-0.038***	0.028***	-0.097***
	(0.01)	(0.01)	(0.02)
Population group: White	0.026*	0.065***	0.102***
	(0.02)	(0.01)	(0.04)
Population group: Asian/Indian	0.021	0.031**	-0.04
	(0.02)	(0.01)	(0.08)
Population group: Other	-0.023*	0.039***	0.253**
	(0.01)	(0.01)	(0.11)
1-year over-age	**-0.037*****	**0.035*****	**-0.225*****
	(0.01)	(0.00)	(0.01)
2 years over-age	-0.103***	0.101***	-0.370***
	(0.01)	(0.01)	(0.02)
3 years over-age	-0.164***	0.173***	-0.462***
	(0.01)	(0.01)	(0.02)
4 years over-age	-0.180***	0.201***	-0.525***
	(0.02)	(0.02)	(0.02)
5 years over-age	-0.183***	0.230***	-0.573***
	(0.03)	(0.02)	(0.03)
>= 6 years over-age	-0.211***	0.269***	-0.585***

Sample:	Learners in the Northern Cape SA-SAMS in 2015		Grade 9 learners in the Northern Cape in 2014
	1. Outcome end of 2015: Promoted	2. Outcome end of 2015: Drops out	3. Promoted to Gr 12 by 2017 or 2018
School quintile 2	0.017	0.002	0.056
	(0.01)	(0.01)	(0.04)
School quintile 3	0.005	0.016*	0.061*
	(0.01)	(0.01)	(0.03)
School quintile 4	0.023	0.002	0.058
	(0.02)	(0.01)	(0.04)
School quintile 5	0.055***	0	0.121***
	(0.02)	(0.01)	(0.04)
Independent school	0.021	-0.004	0.149**
	(0.05)	(0.02)	(0.08)
Constant	0.780***	0.001	0.644***
	(0.01)	(0.01)	(0.03)
Observations	177,198	177,198	15,030
R-squared	0.074	0.064	0.165

Source: Subset of SA-SAMS data for the Northern Cape Province. Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Reference group: Black male in grade 1, not over-age, in a Quintile 1 school. In estimations 1 and 2, grade 7s are excluded from the sample due to data validity concerns for this group… **Grade controls in regression 1 and 2**