

Northern Cape Province

31 July 2023

Educator Demand Projections 2021-2030



Introduction (1)



- The proportion of educators that are 50 years or older has steadily risen between 2012 to 2021 in South Africa.
 - ⇒ Nationally a **wave of educator retirements is expected** as older educators reach the standard retirement age of between 60 and 65.

Implications:

- **Many more appointments:** The retirement wave will open up both teaching & school management & leadership positions & other office-based education specialists.
- **Total compensation of educators:** Since older teachers earn more, when retiring they are replaced with younger (less costly) teachers, although this overall benefit is offset by shift to 1.5% annual notch progression.

Introduction (2)



- As retirements increase, the required number of **new appointments will need to increase** to ensure that total educator numbers (at a minimum) stay at current levels and/or are sufficient to **meet learner enrolment growth** to **prevent deterioration in learner-educator ratios**.
- Planning will be required to ensure that provinces are ready for the sustained increase in appointments.
- If these positions are not filled, this could result in a further deterioration in the learner-educator ratio and lead to further increases in already large class sizes.

Objective



- In each province there are some differences in the age profile of teachers, differences in the expected growth of the school-going population and differences in expected teacher attrition (resignations & retirements).
 - ⇒ The year of the retirement wave peak will differ across provinces.
 - ⇒ Also some provinces need to accommodate much more growth in learners than others.

In this presentation, we highlight the situation in the Northern Cape to inform province-specific planning.

Overview

- 1 Age distributions
- 2 Projected retirements & resignations
- 3 Provincial population and enrolment trends
- 4 Public and independent school growth
- 5 Educator growth: Teachers and senior educators
- 6 Expected financial implications to 2030
- 7 Movement of educators: Between and within provinces
- 8 Gender imbalance in school management
- 9 The implications for appointments and class sizes
- 10 Discussion

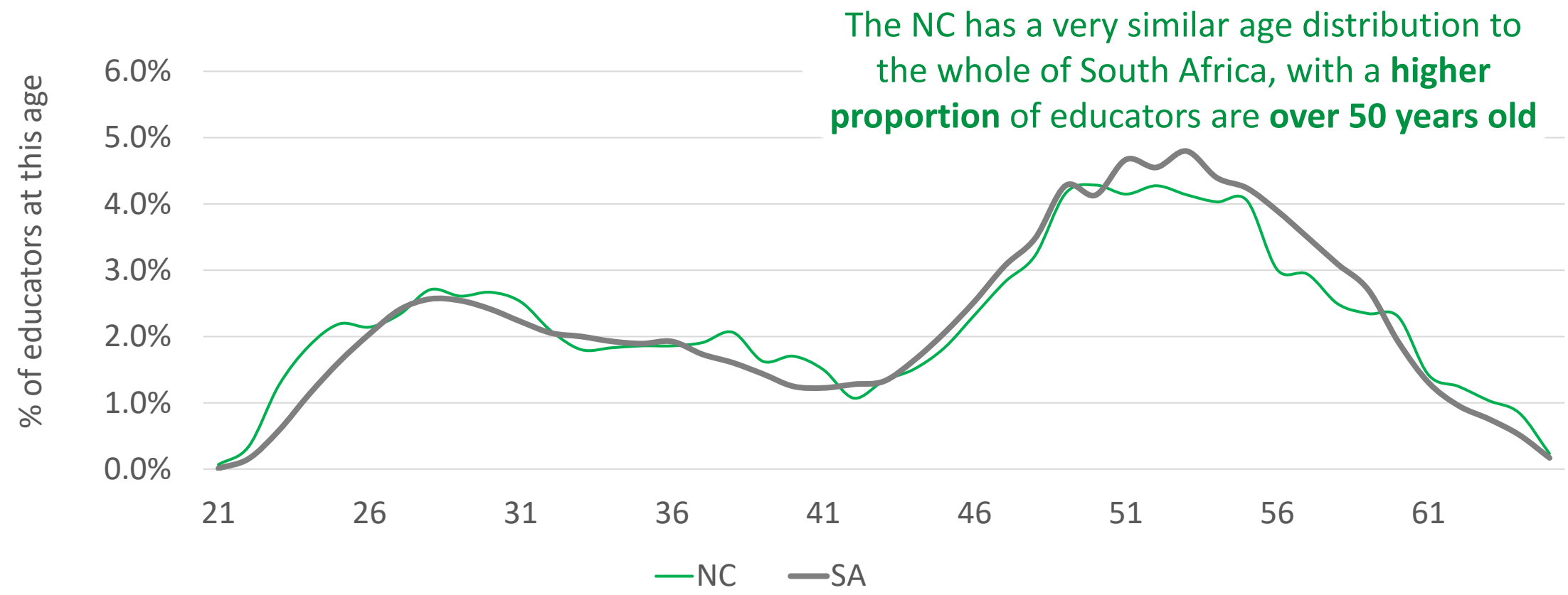
Northern Cape educator demand summary

- **Age distribution:** The age distribution in the NC had a peak at around 49-51 years of age in 2021
- **Projected resignations and retirements:** From 2022 onwards, the majority of educators projected to exit PERSAL were younger educators (ages 21 to 55); the number of senior educators (SMT positions and other specialists) that are retiring is expected to increase (69% were 50+ years old in 2021)
- **Enrolment and population growth:** Enrolment in NC ordinary schools increased by 10% from 2012-2021 (~ 27K learners), and the school-aged population is forecast to stay roughly constant to 2030. School rationalization may need to continue in response to this decrease.
- **School and educator growth:** Between 2012 and 2021, the public educator number has increased (+6%), and the number of public ordinary schools has decreased (-3%)
- **SMT position changes:** In NC, there has been a large decline in the number of Principals between 2012 and 2021 (-17%), conversely, the number of deputy principals has increased (+24%). Teacher (+9%) and HOD (+6%) numbers have also increased over this period.
- **Projected educator cost trends:** Educator unit cost to 2030 is projected to remain roughly constant (~+0,5%), mainly as change in age distribution leads to a decrease in senior educators' unit costs (-6%)
- **Educator movements:** There is high movement out of the NC (~6%) as well as high movement to the NC (~6%) over 7 yrs. More than 8% of educators moved to a different school from 2018 to 2019.
- **Appointments and LE Ratio:** The learner-public educator ratio stayed similar (27.7 to 27.4) between 2012 and 2021. Little change to appointments numbers expected to 2030.



Age distributions and projected retirements and resignations

Educator age distribution (2021)



Source: Anonymised PERSAL data from 2021, only educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers and ABET teachers were removed.

Older teacher proportions for senior educator and primary schools educators

Percentage of educators aged 50+ in 2021

Province	All educators	Senior educators (HOD, Dep.- principals, Principals & Other)	Primary school educators
EC	51%	71%	58%
FS	43%	65%	49%
GP	41%	65%	42%
KN	39%	65%	44%
LP	58%	81%	63%
MP	50%	73%	55%
NC	43%	69%	44%
NW	47%	70%	52%
WC	42%	73%	40%
SA	46%	69%	49%

Source: Anonymised PERSAL data from 2021, only educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers and ABET teachers were removed. The 2021 rankclass file was expanded to include ranks found only in years prior to 2021, used to classify educators by rank. Primary school only includes all educators that are in a component that is classified as a Primary school.

Older teacher proportions for senior educator and primary schools educators

Percentage of educators aged 50+ in 2021

Province	All educators	Senior educators (HOD, Dep.- principals, Principals & Other)	Primary school educators
EC	51%	71%	58%
FS	43%	65%	49%
GP	41%	65%	47%
KN	39%	65%	44%
LP	58%	60%	63%
MP	50%	73%	55%
NC	43%	69%	44%
NW	47%	70%	52%
WC	42%	73%	40%
SA	46%	69%	49%

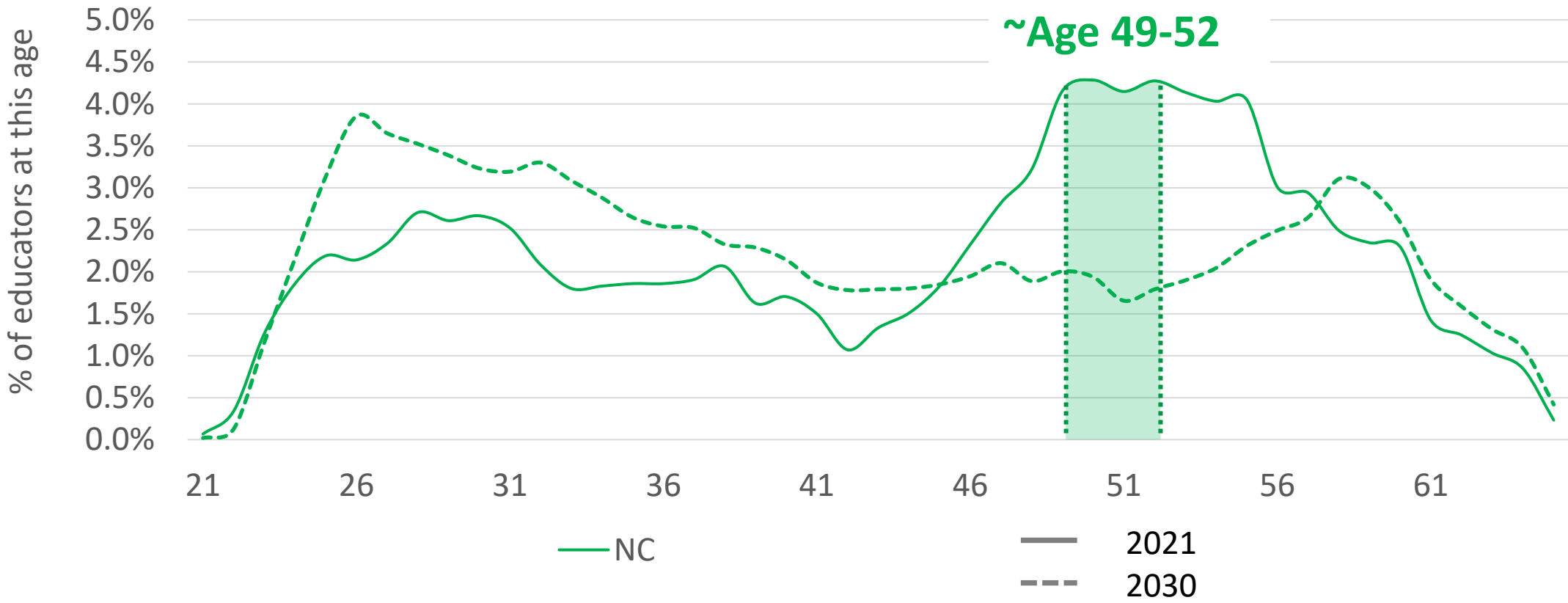
Almost 70% of senior educators were aged 50 years and older in 2021 in the NC

Source: Anonymised PERSAL data from 2021, only educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers and ABET teachers were removed. The 2021 rankclass file was expanded to include ranks found only in years prior to 2021, used to classify educators by rank. Primary school only includes all educators that are in a component that is classified as a Primary school.

Educator age distribution in 2021 & 2030



Assume constant 2021 educator numbers

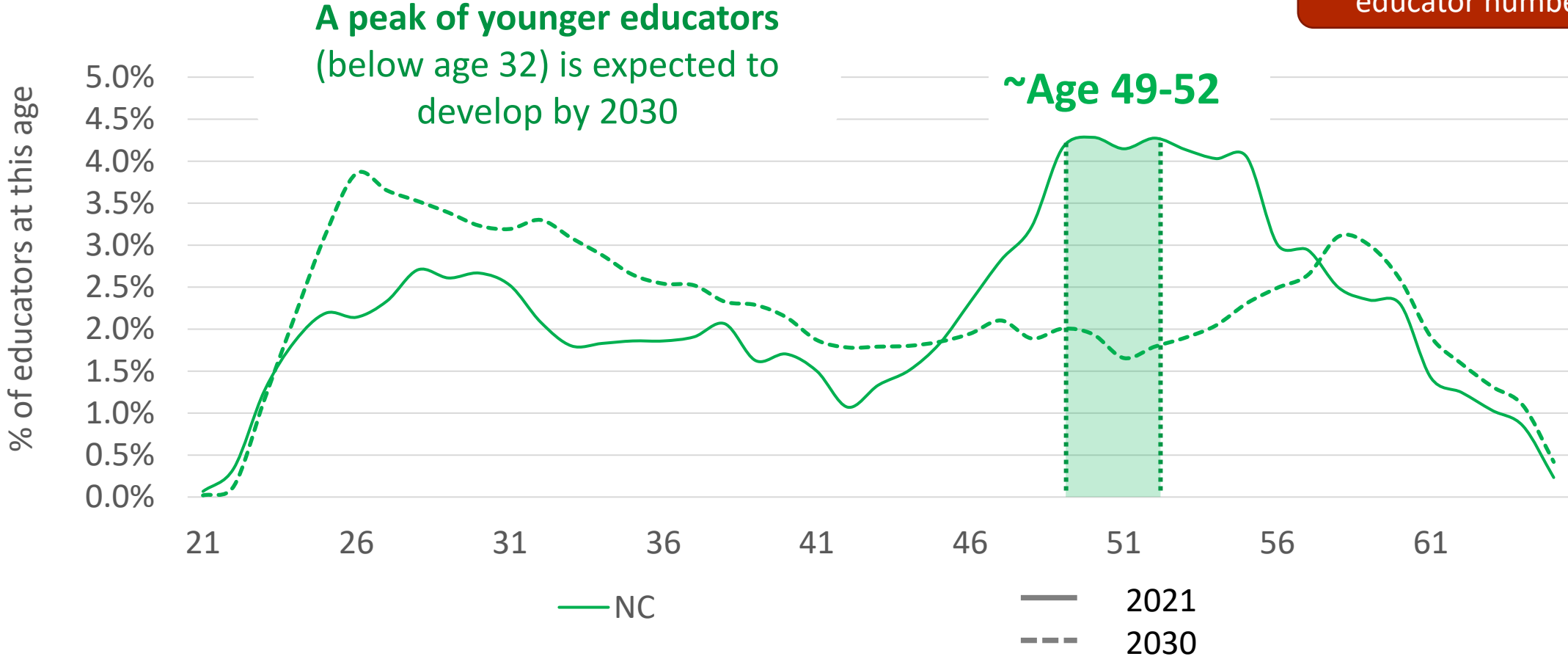


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Educator age distribution in 2021 & 2030



Assume constant 2021 educator numbers

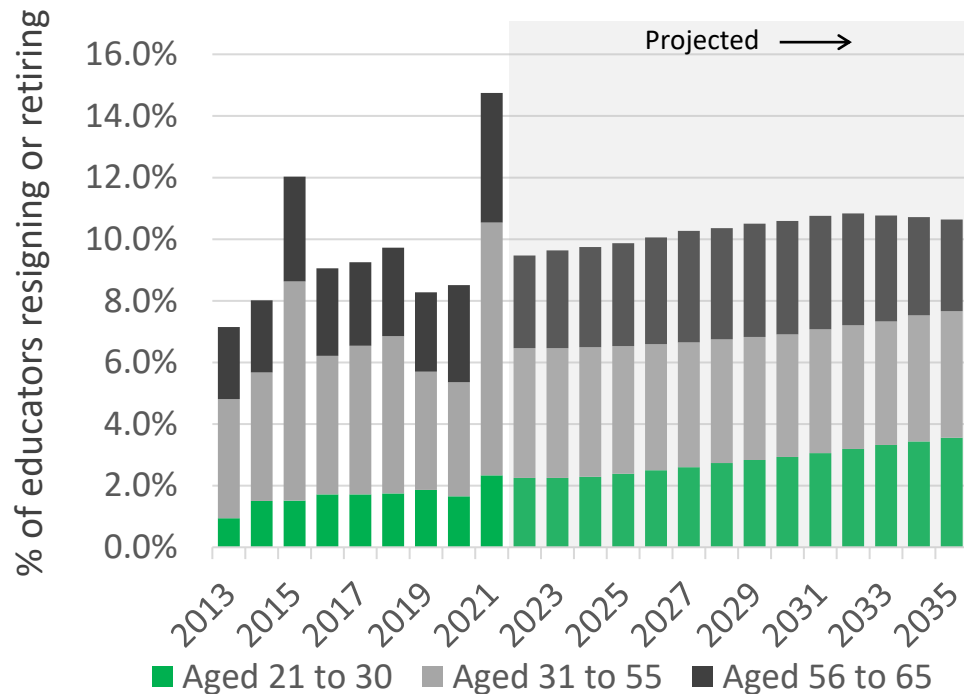


Source: Anonymised PERSAL data from 2021, only educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers and ABET teachers were removed.

Projected resignation & retirements (NC)

Assume constant 2021 educator numbers

Proportion of Educators



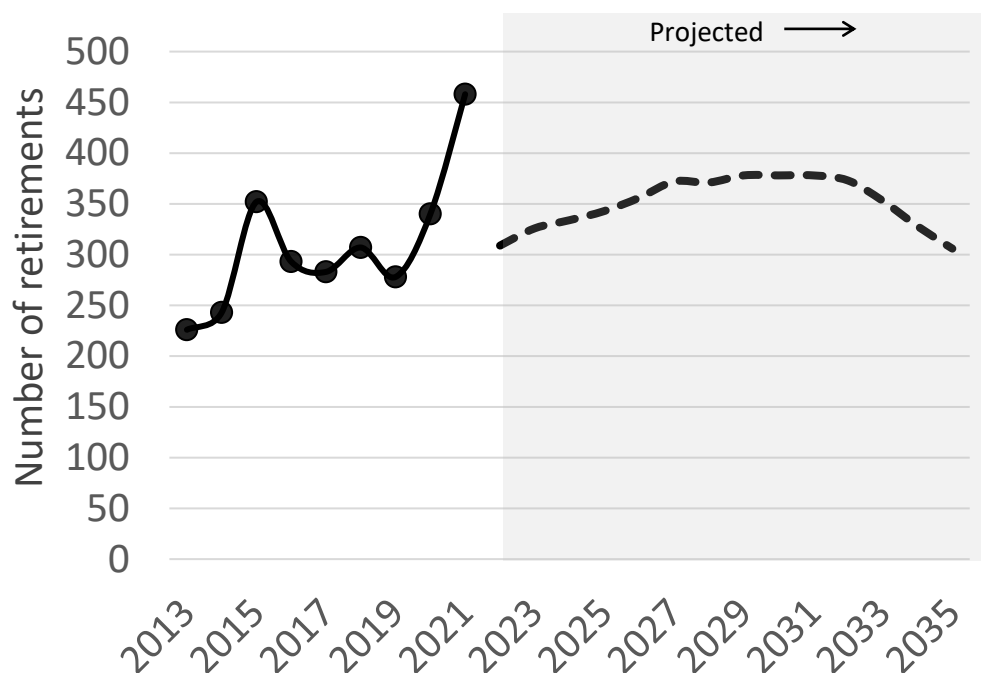
- The majority of educators that exit PERSAL in the NC are resignations (ages 21 to 55), not retirements
- Large spike in resignations and retirements in 2021 in the NC, perhaps due to COVID? And also, in 2015, due to pension reform rumours
- The number of young teachers (ages 21-30) resigning is projected to increase

Source: Anonymised PERSAL data from 2021, only educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers and ABET teachers were removed. Estimates to 2035 derived from the National and provincial teacher supply and demand models – assumption of no growth in educator numbers. Note: Retirements refer to all educators, aged 56 to 65, that leave PERSAL, whilst resignations refer to all educators aged 55 and below that leave PERSAL (as educators) for any reason.

Projected retirements (NC)

Assume constant 2021 educator numbers

Retirement headcount



- The number of retirements is projected to increase slightly, peaking in ~2029 & 2032 and then declining
- The number of retirements is projected to increase slightly from about 300 in 2022 to about 375 in 2030-32, an increase of about 75 retirements annually, a small change relative to total resignations and spike in 2020 and 2021

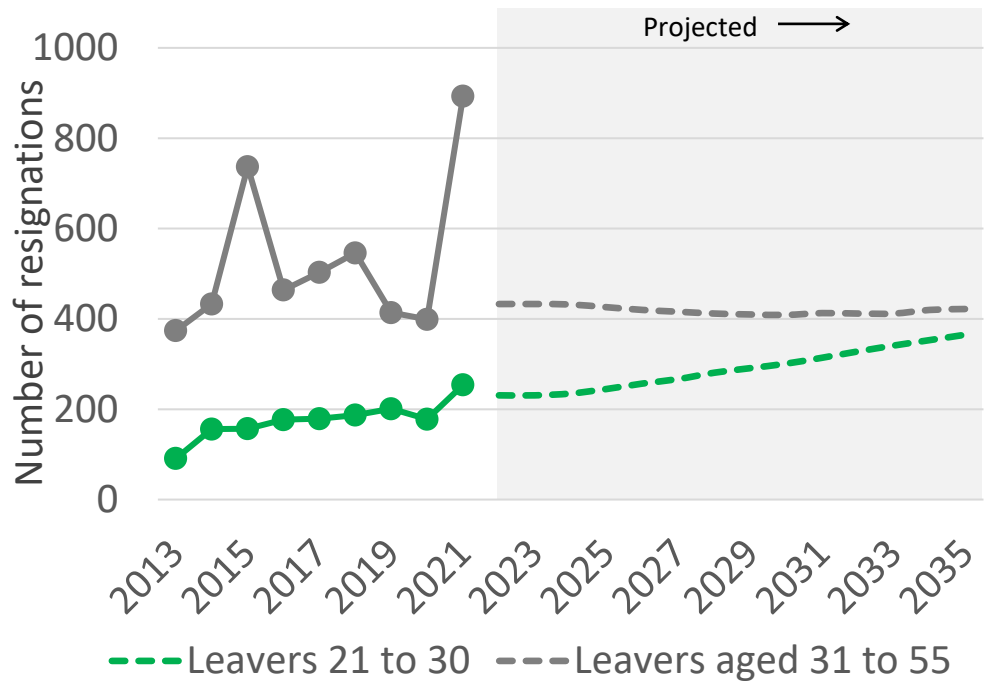
Source: Anonymised PERSAL data from 2021, only educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers and ABET teachers were removed. Estimates to 2035 derived from the National and provincial teacher supply and demand models – assumption of no growth in educator numbers. Note: Retirements refer to all educators, aged 56 to 65, that leave PERSAL, whilst resignations refer to all educators aged 55 and below that leave PERSAL (as educators) for any reason.

Projected resignations (NC)



Assume constant 2021 educator numbers

Resignation headcount



- The number of resignations of 21 to 30 year-olds is projected to increase, almost doubling from 2022 to 2030, but numbers for 31 to 55 year olds is projected to remain relatively constant.
- There were two large spikes in resignations of educator aged 31-55. One in 2014 to 2015 (retirement fund rumours) and another from 2020 to 2021 (COVID?), such a spike is not observed elsewhere in SA

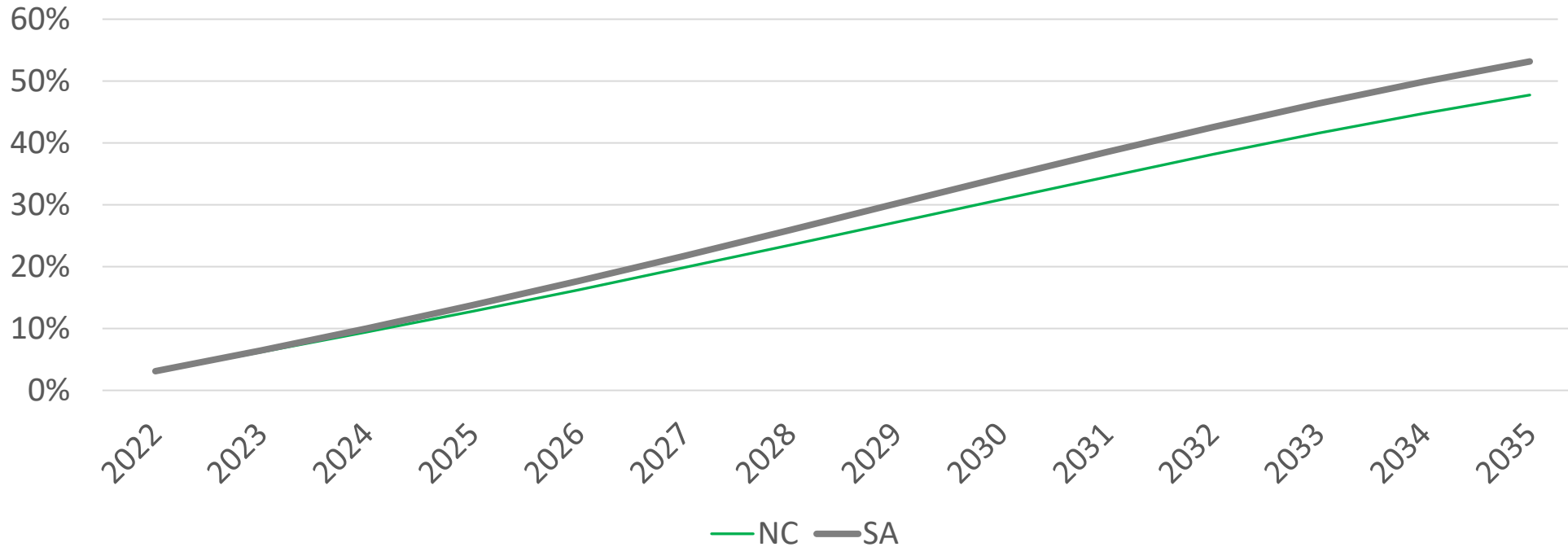
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Older leaver trend estimates to 2035



Assume constant 2021 educator numbers

Cumulative proportion of estimated leavers aged 56-65 as a proportion of total educators in 2022



About 5,000 educators estimated to retire by 2035 in the EC (48% of total educators in 2021)

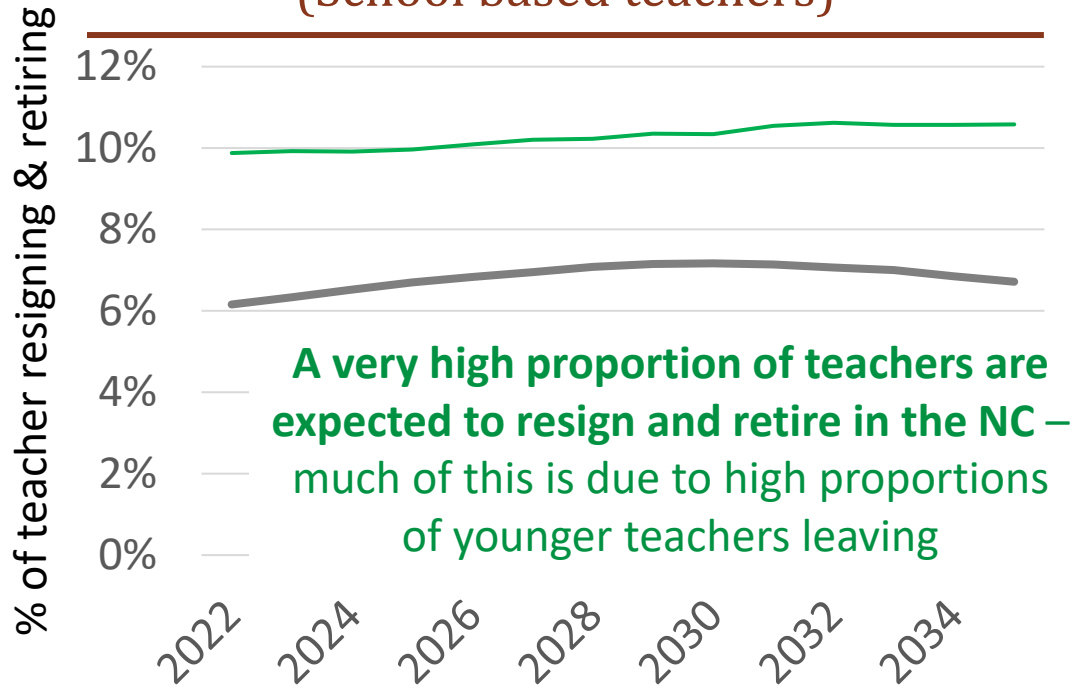
Source: Anonymised 2021 PERSAL data, only educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers and ABET teachers were removed. Estimates to 2035 derived from the National and provincial models – assumption of no growth in educator numbers.

Projected educators leaving



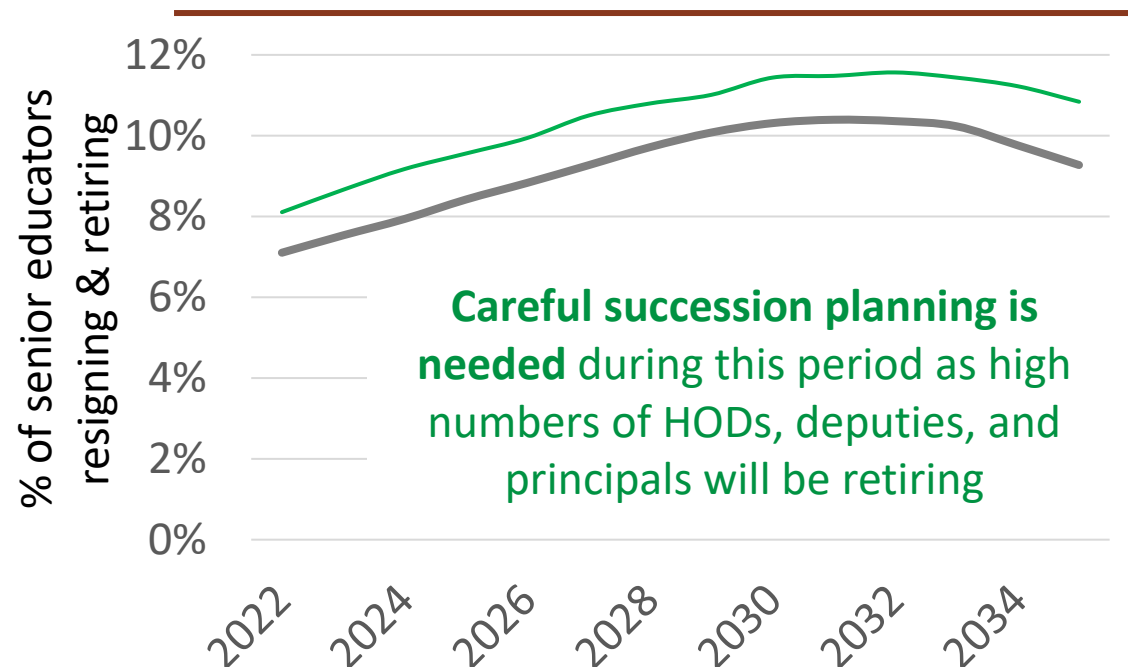
Assume constant 2021 educator numbers

Teachers (School based teachers)



A very high proportion of teachers are expected to resign and retire in the NC – much of this is due to high proportions of younger teachers leaving

Senior educators (HODs, Deputy's, Principals & Other)



Careful succession planning is needed during this period as high numbers of HODs, deputies, and principals will be retiring

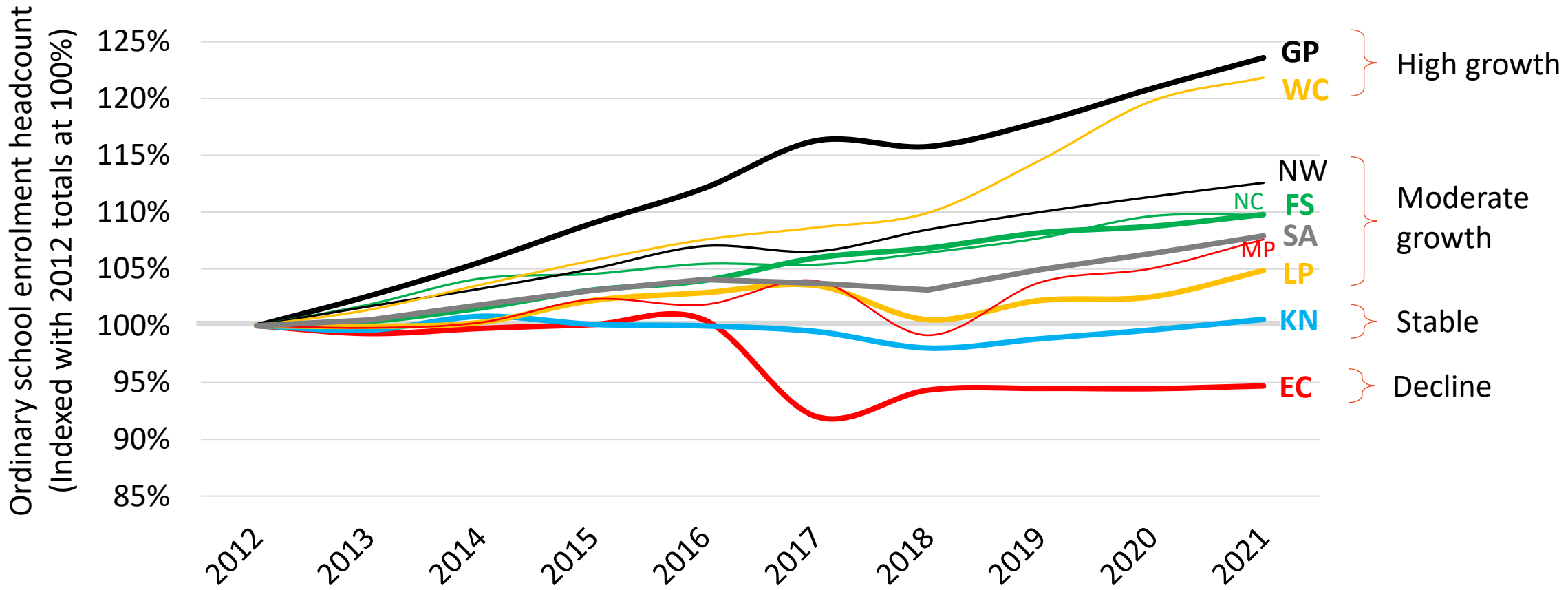
— NC — SA

Source: Anonymised 2021 PERSAL data, only educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers and ABET teachers were removed. Estimates to 2035 derived from the National and provincial models – assumption of no growth in educator numbers.



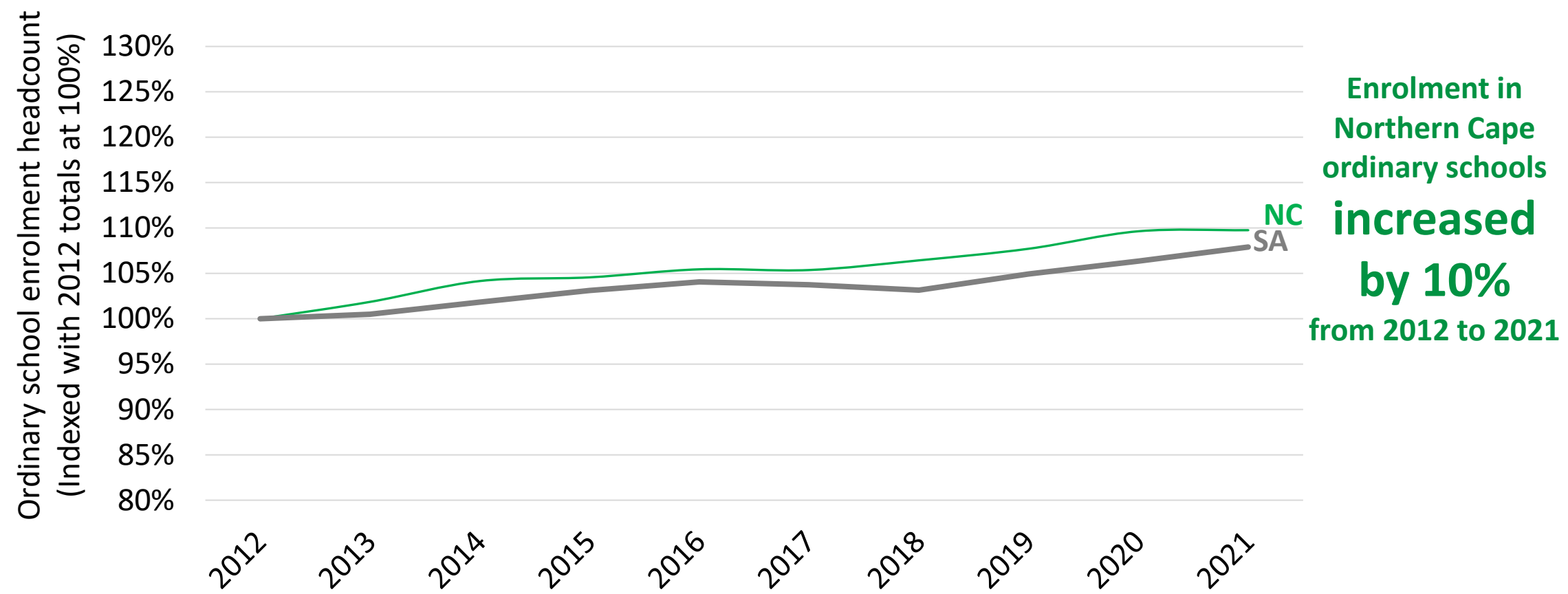
Provincial population and enrolment trends

Provincial enrolment trends (2012-2021)



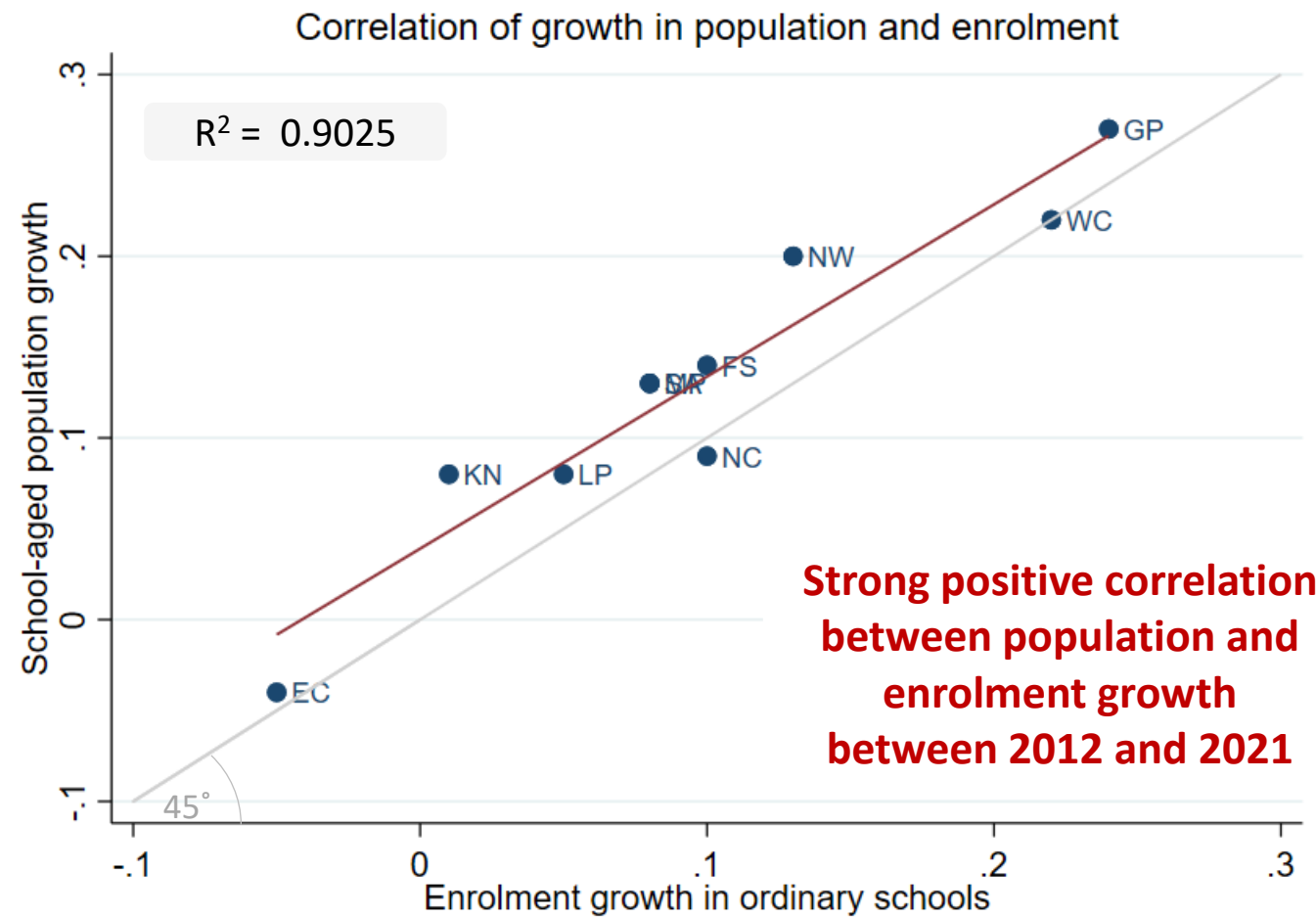
Source: Enrolment numbers taken from School Realities-EMIS (2012 – 2021) released by the DBE, using total numbers for ordinary public and independent schools.

Provincial enrolment trends (2012-2021)



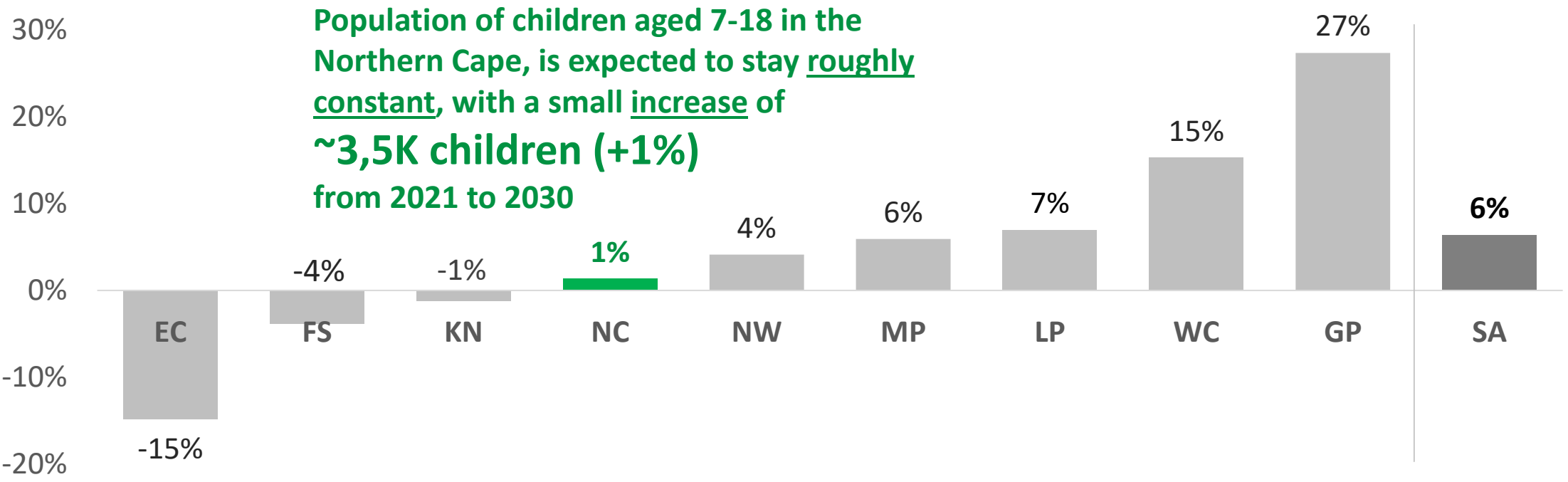
Source: Enrolment numbers taken from School Realities-EMIS (2012 – 2021) released by the DBE, using total numbers for ordinary public and independent schools.

Correlation between population and enrolment growth (2012-2021)



Source: Thembisa age specific data V4.5 for school-aged population (Ages 7-18) estimates and enrolment taken from School Realities-EMIS (2012 – 2021) released by the DBE, for numbers on ordinary public and independent schools ([Statistical Publications \(education.gov.za\)](http://StatisticalPublications.education.gov.za))

Projected growth in school-aged population

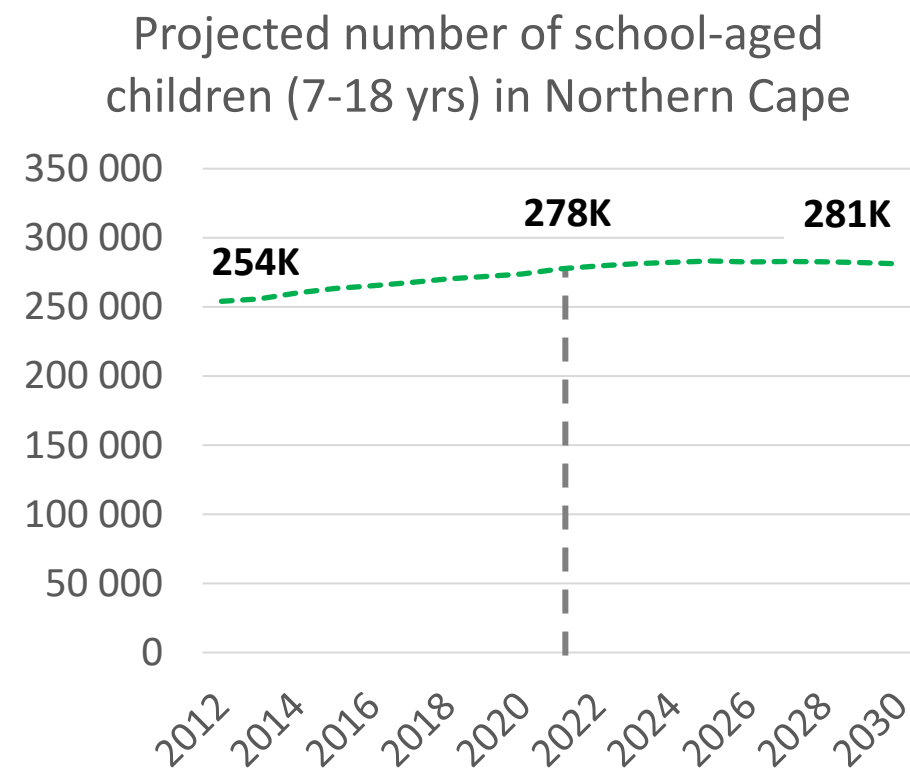


Note: Period 2021 – 2030 is the same timeframe, nine years, as 2012 – 2021.

Source: Thembeisa age-specific estimates from the model V4.5 for children aged 7-18 by province

School aged-population estimates to 2030

Province	Number of children Aged 7-18			Growth '12-21	Growth '21-30
	2012	2021	2030E		
EC	1 657 202	1 598 475	1 361 637	-4%	-15%
FS	592 445	676 489	650 820	14%	-4%
GP	1 962 793	2 498 533	3 180 884	27%	27%
KN	2 485 822	2 690 378	2 657 716	8%	-1%
LP	1 395 864	1 507 386	1 612 125	8%	7%
MP	977 749	1 100 594	1 165 728	13%	6%
NC	254 075	277 560	281 208	9%	1%
NW	742 943	893 530	930 323	20%	4%
WC	1 068 009	1 298 801	1 496 731	22%	15%
Total	11 136 902	12 541 746	13 337 172	13%	6%



Note: Period 2021 – 2030 is the same timeframe, nine years, as 2012 – 2021.

Source: Thembisa age-specific estimates from the model V4.5 for children aged 7-18 by province



Public and independent school & educator growth

Educator, school and enrolment growth

% growth from 2012 - 2021

Province	Number of educators	Number of teachers	Number of public ordinary schools	Enrolment in public ordinary schools	Enrolment in ordinary schools	Est. school-aged population
EC	-17%	-20%	-8%	-6%	-5%	-4%
FS	-13%	-13%	-27%	9%	10%	14%
GP	21%	28%	1%	20%	24%	27%
KN	-5%	-3%	-3%	1%	1%	8%
LP	-8%	-2%	-7%	4%	5%	8%
MP	3%	7%	-8%	7%	8%	13%
NC	6%	9%	-3%	9%	10%	9%
NW	2%	4%	-9%	12%	13%	20%
WC	12%	22%	0%	21%	22%	22%
SA	-1%	2%	-6%	7%	8%	13%

Source: Educator numbers from anonymised PERSAL data from 2012 and 2021, only educators (Rank 60 000 – 69 999) are considered. Thembisa age specific data V4.5 for school-aged population (Ages 7-18) estimates and enrolment and school numbers taken from School Realities-EMIS (2012 – 2021) released by the DBE, for numbers on ordinary public and independent schools ([Statistical Publications \(education.gov.za\)](https://www.education.gov.za))

Educator, school and enrolment growth



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	Number of educators	Number of teachers	Number of public ordinary schools	Enrolment in public ordinary schools	Enrolment in ordinary schools	Est. school-aged population
EC	-17%	-20%	-8%	-6%	-5%	-4%
FS	-13%					14%
GP	21%					27%
KN	-5%					8%
LP	-8%					8%
MP	3%	7%	-8%	7%	8%	13%
NC	6%	9%	-3%	9%	10%	9%
NW	2%	4%	-9%	12%	13%	20%
WC	12%	22%	0%	21%	22%	22%
SA	-1%	2%	-6%	7%	8%	13%

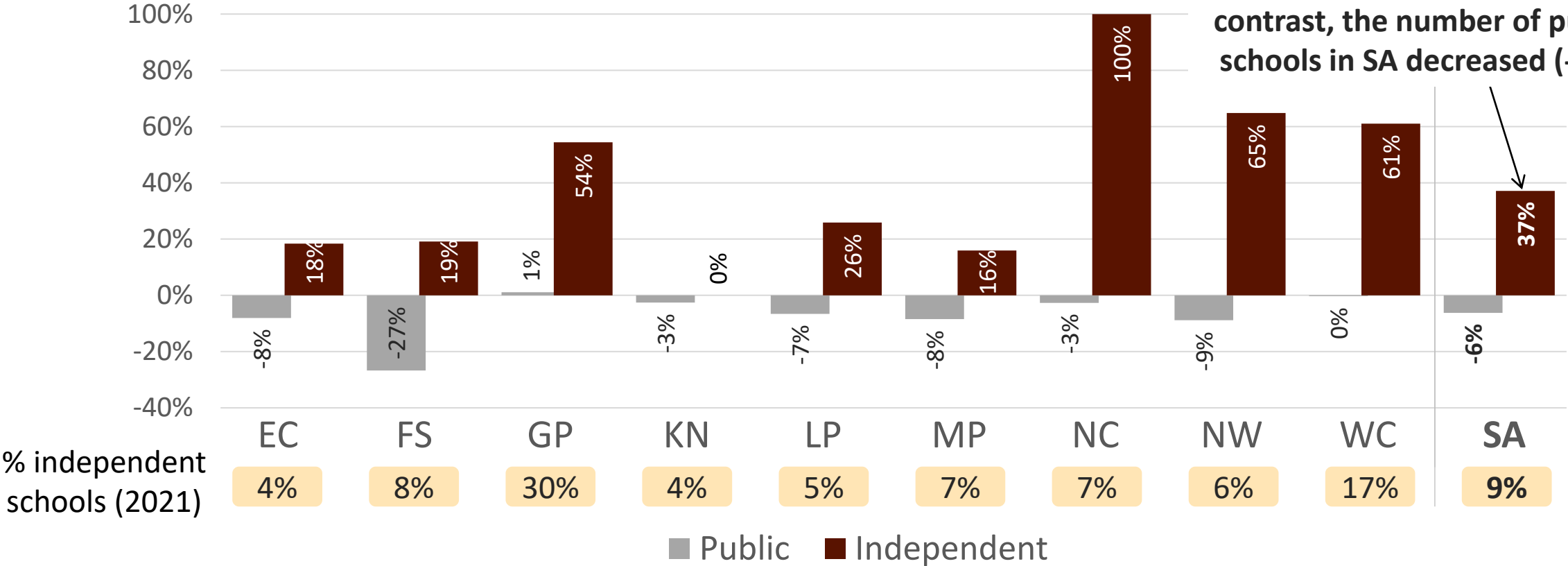
Enrolment and educator numbers increased somewhat in line with each other in the Northern Cape, however, the number of public ordinary schools declined slightly

Source: Educator numbers from anonymised PERSAL data from 2012 and 2021, only educators (Rank 60 000 – 69 999) are considered. Thembisa age specific data V4.5 for school-aged population (Ages 7-18) estimates and enrolment and school numbers taken from School Realities-EMIS (2012 – 2021) released by the DBE, for numbers on ordinary public and independent schools ([Statistical Publications \(education.gov.za\)](https://www.education.gov.za))

School growth from 2012 to 2021



School growth was driven by independent school growth (+37%) from 2012 to 2021. In contrast, the number of public schools in SA decreased (-6%)

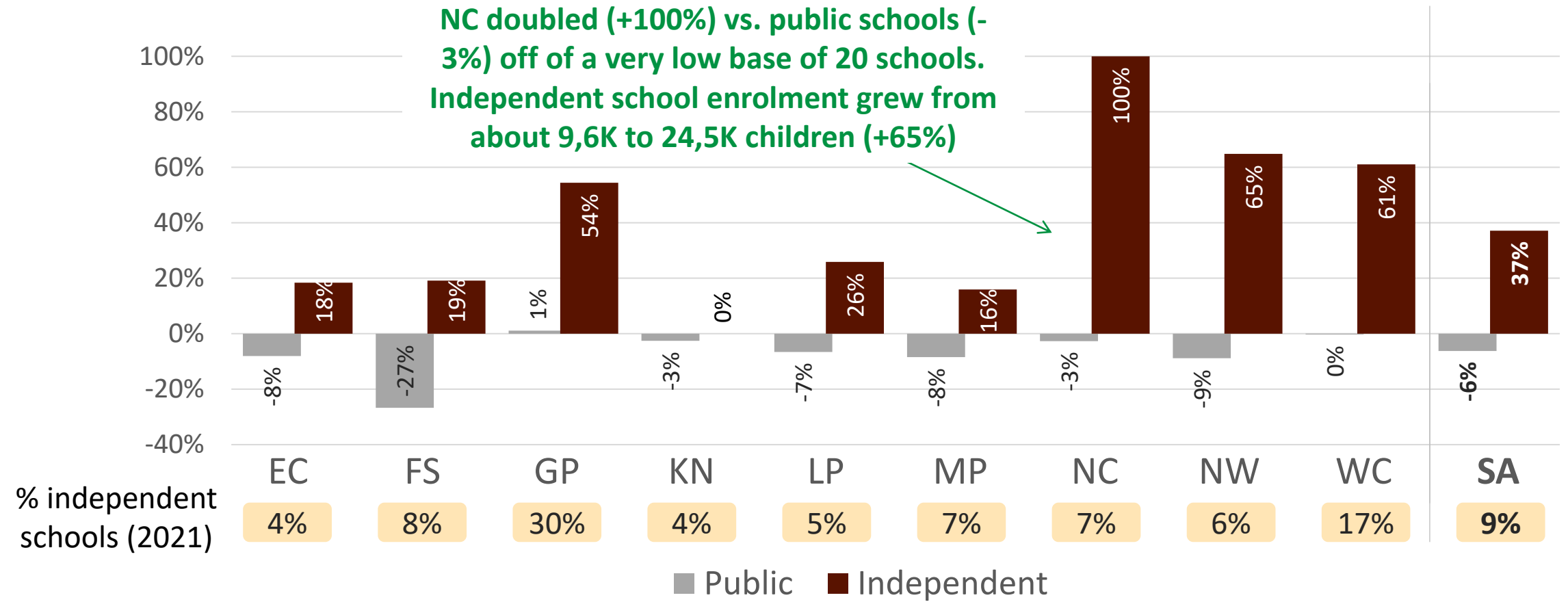


Source: School numbers taken from School Realities-EMIS (2012 – 2021) released by the DBE, for numbers on ordinary public and independent schools ([Statistical Publications \(education.gov.za\)](https://www.education.gov.za))

School growth from 2012 to 2021



The number of independent schools in the NC doubled (+100%) vs. public schools (-3%) off of a very low base of 20 schools. Independent school enrolment grew from about 9,6K to 24,5K children (+65%)



Source: School numbers taken from School Realities-EMIS (2012 – 2021) released by the DBE, for numbers on ordinary public and independent schools ([Statistical Publications \(education.gov.za\)](https://www.education.gov.za))



Educator growth by teachers and senior educators

Changes in teacher and SMT numbers

Province	Teacher				HOD				Deputy-Principal				Principal			
	2012	2021	Diff	% change	2012	2021	Diff	% change	2012	2021	Diff	% change	2012	2021	Diff	% change
EC	50 295	40 115	-10 180	-20%	5 870	6 196	326	6%	1 342	1 453	111	8%	5 294	4 755	- 539	-10%
FS	20 148	17 561	-2 587	-13%	2 685	2 470	- 215	-8%	852	768	- 84	-10%	1 224	892	- 332	-27%
GP	47 233	60 677	13 444	28%	8 708	9 209	501	6%	2 565	2 850	285	11%	2 162	1 959	- 203	-9%
KN	73 050	71 000	-2 050	-3%	11 289	10 330	- 959	-8%	2 642	2 342	- 300	-11%	5 584	5 055	- 529	-9%
LP	44 998	44 317	- 681	-2%	6 090	3 762	-2 328	-38%	1 562	778	- 784	-50%	3 510	3 316	- 194	-6%
MP	26 127	27 857	1 730	7%	4 047	4 055	8	0%	1 108	1 114	6	1%	1 790	1 450	- 340	-19%
NC	7 257	7 929	672	9%	1 034	1 094	60	6%	294	365	71	24%	587	488	- 99	-17%
NW	21 305	22 261	956	4%	2 994	3 023	29	1%	902	1 041	139	15%	1 698	1 338	- 360	-21%
WC	23 579	28 665	5 086	22%	4 065	3 700	- 365	-9%	1 334	1 297	- 37	-3%	1 531	1 339	- 192	-13%
SA	313 992	320 382	6 390	2%	46 782	43 839	-2 943	-6%	12 601	12 008	- 593	-5%	23 380	20 592	-2 788	-12%

Source: Anonymised PERSAL data from 2012 and 2021, only educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers, and ABET teachers were removed. The 2021 rankclass file was expanded to include ranks found only in years prior to 2021.

Changes in teacher and SMT numbers

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GP	47 233	60 677	13 444	28%	8 768	9 009	241	3%	2 505	2 850	345	14%	2 102	1 959	-143	-7%
KN	73 050	71 000	-2 050	-3%	11 289	11 000	-289	-3%	1 000	1 000	0	0%	1 000	1 000	0	0%
LP	44 998	44 317	-681	-2%	6 090	3 762	-2 328	-38%	1 000	1 000	0	0%	1 000	1 000	0	0%
MP	26 127	27 857	1 730	7%	4 047	4 055	8	0%	1 108	1 114	6	1%	1 790	1 450	-340	-19%
NC	7 257	7 929	672	9%	1 034	1 094	60	6%	294	365	71	24%	587	488	-99	-17%
NW	21 305	22 261	956	4%	2 994	3 023	29	1%	902	1 041	139	15%	1 698	1 338	-360	-21%
WC	23 579	28 665	5 086	22%	4 065	3 700	-365	-9%	1 334	1 297	-37	-3%	1 531	1 339	-192	-13%
SA	313 992	320 382	6 390	2%	46 782	43 839	-2 943	-6%	12 601	12 008	-593	-5%	23 380	20 592	-2 788	-12%

Large decline in principal numbers between 2012 and 2021, relative to the decrease in public schools of -3%, and even larger increase in deputy principal numbers (+24%) (principal appointments potentially delayed by COVID)

Proportional split by educator rank

	All Educators		Teacher		HOD		Dep.-Principal		Principal		Other	
	2012	2021	2012	2021	2012	2021	2012	2021	2012	2021	2012	2021
EC	100%	100%	78% ↓ 75%		9% ↑ 12%		2.1% ↑ 2.7%		8.2% ↑ 8.8%		2.5%	2.4%
FS	100%	100%	78%	78%	10%	11%	3.3%	3.4%	4.7%	4.0%	3.7%	3.3%
GP	100%	100%	74% ↑ 79%		14%	12%	4.0%	3.7%	3.4% ↓ 2.6%		4.4%	2.7%
KN	100%	100%	77%	79%	12%	11%	2.8%	2.6%	5.9%	5.6%	2.1%	1.3%
LP	100%	100%	78% ↑ 84%		11% ↓ 7%		2.7% ↓ 1.5%		6.1%	6.3%	2.1%	1.5%
MP	100%	100%	76% ↑ 79%		12%	12%	3.2%	3.2%	5.2% ↓ 4.1%		3.2%	1.8%
NC	100%	100%	75%	77%	11%	11%	3.0% ↑ 3.6%		6.1% ↓ 4.8%		5.1%	3.9%
NW	100%	100%	76%	78%	11%	11%	3.2%	3.7%	6.1% ↓ 4.7%		3.7%	2.6%
WC	100%	100%	74% ↑ 80%		13% ↓ 10%		4.2% ↓ 3.6%		4.8% ↓ 3.7%		4.1%	2.1%
SA	100%	100%	77%	79%	11%	11%	3.1%	3.0%	5.7%	5.1%	3.1%	2.1%

Source: Anonymised PERSAL data from 2012 and 2021. Only educators are considered. ECD practitioners, examination reviewers, ABET teachers and TVET lecturers were removed. Arrow shown for teachers and HODs if difference is at least 3 percentage points, for deputy principals if the difference is at least 0.6 percentage points and for principals a difference of at least 0.8 percentage points.

Proportional split by educator rank



	All Educators		Teacher		HOD		Dep.-Principal		Principal		Other	
	2012	2021	2012	2021	2012	2021	2012	2021	2012	2021	2012	2021
EC												
FS												
GP												
KN												
LP												
MP												
NC	100%	100%	75%	77%	11%	11%	3.0%	↑ 3.6%	6.1%	↓ 4.8%	5.1%	3.9%
NW	100%	100%	76%	78%	11%	11%	3.2%	3.7%	6.1%	↓ 4.7%	3.7%	2.6%
WC	100%	100%	74%	↑ 80%	13%	↓ 10%	4.2%	↓ 3.6%	4.8%	↓ 3.7%	4.1%	2.1%
SA	100%	100%	77%	79%	11%	11%	3.1%	3.0%	5.7%	5.1%	3.1%	2.1%

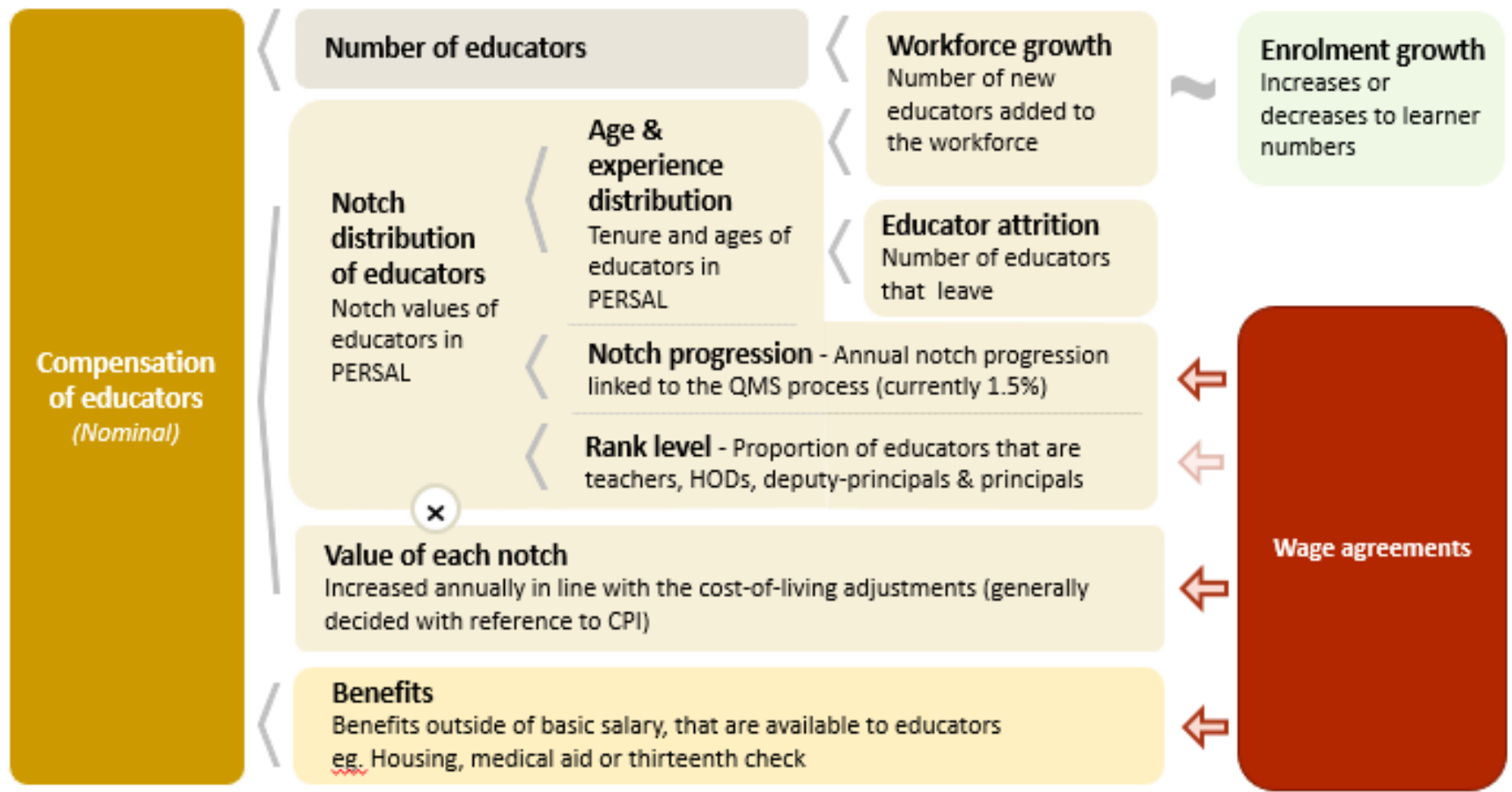
There was a significant decline in the proportion of principals and the opposite for deputy principals, Teacher and HOD proportions are similar to the national averages

Source: Anonymised PERSAL data from 2012 and 2021. Only educators are considered. ECD practitioners, examination reviewers, ABET teachers and TVET lecturers were removed. Arrow shown for teachers and HODs if difference is at least 3 percentage points, for deputy principals if the difference is at least 0.6 percentage points and for principals a difference of at least 0.8 percentage points.



Expected financial implications to 2030

Unit cost drivers



Real and nominal costs

*A real increase in wages takes place when wages increase **above** the rate of inflation*

*Changes to real wages are an indicator of **purchasing power***

Examples:

In 2022 CPI was **7.2%**

If **nominal wages** increase by **7.2%**, then **real wages** increase by **0%**

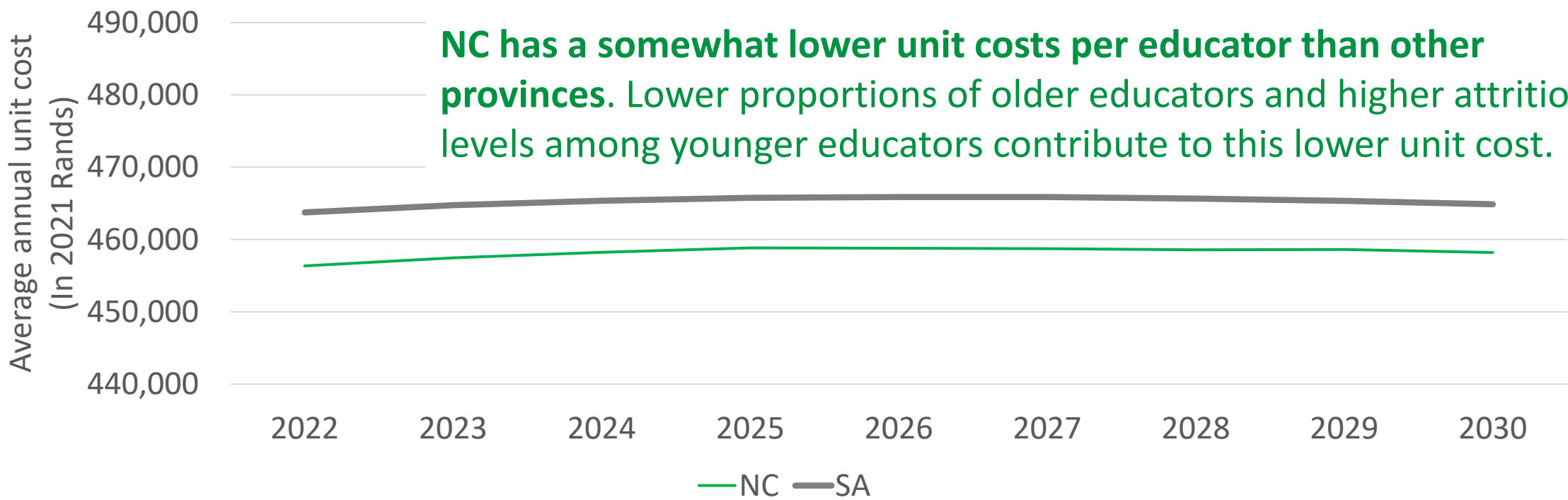
If **nominal wages** increase by **9%**, then **real wages** increase by **1.8%**

If **nominal wages** increase by **5%**, then real wages decrease by **2.2%**

Projected unit costs trends| All educators



In constant 2021 rands



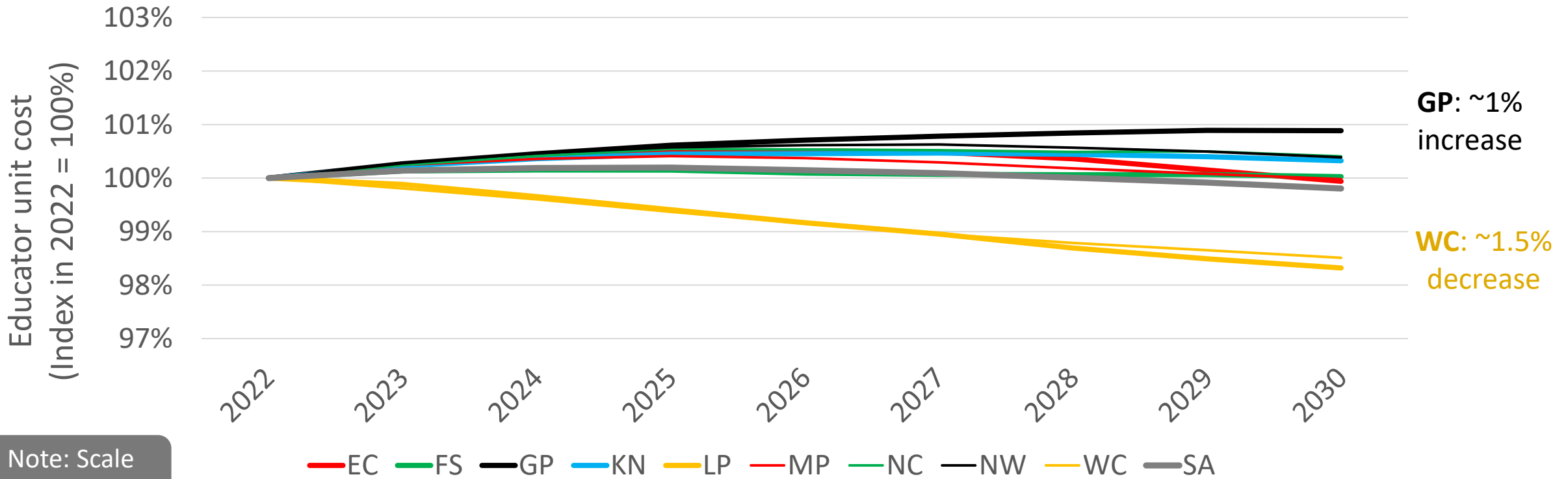
Note: Scale not from zero

Source: Own calculations, using the anonymised PERSAL data from 2021, only educators are considered. ECD practitioners and examination reviewers removed. Estimates to 2030 derived from the national and provincial TSD models. Assumption of no growth in educator numbers.

Indexed unit costs trends| All educators



In constant 2021 rands



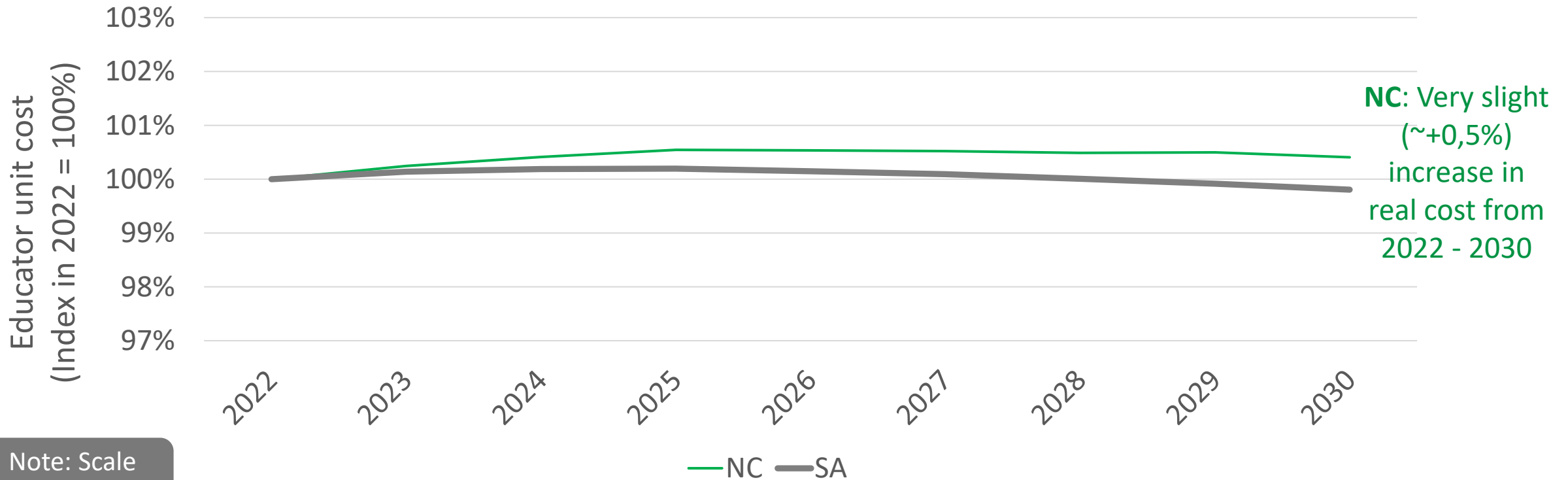
Note: Scale not from zero

Source: Own calculations, using the anonymised PERSAL data from 2021, only educators are considered. ECD practitioners and examination reviewers removed. Estimates to 2030 derived from the national and provincial TSD models. Assumption of no growth in educator numbers for FS, KN, LP, MP, NC, NW and SA. Assume 20% educator growth for GP, 10% for WC and a decline in 10% of educators in the EC. In LP assume that the proportion of senior educators grows from 16% in 2021 to 21% in 2030.

Indexed unit costs trends| All educators



In constant 2021 rands



Note: Scale not from zero

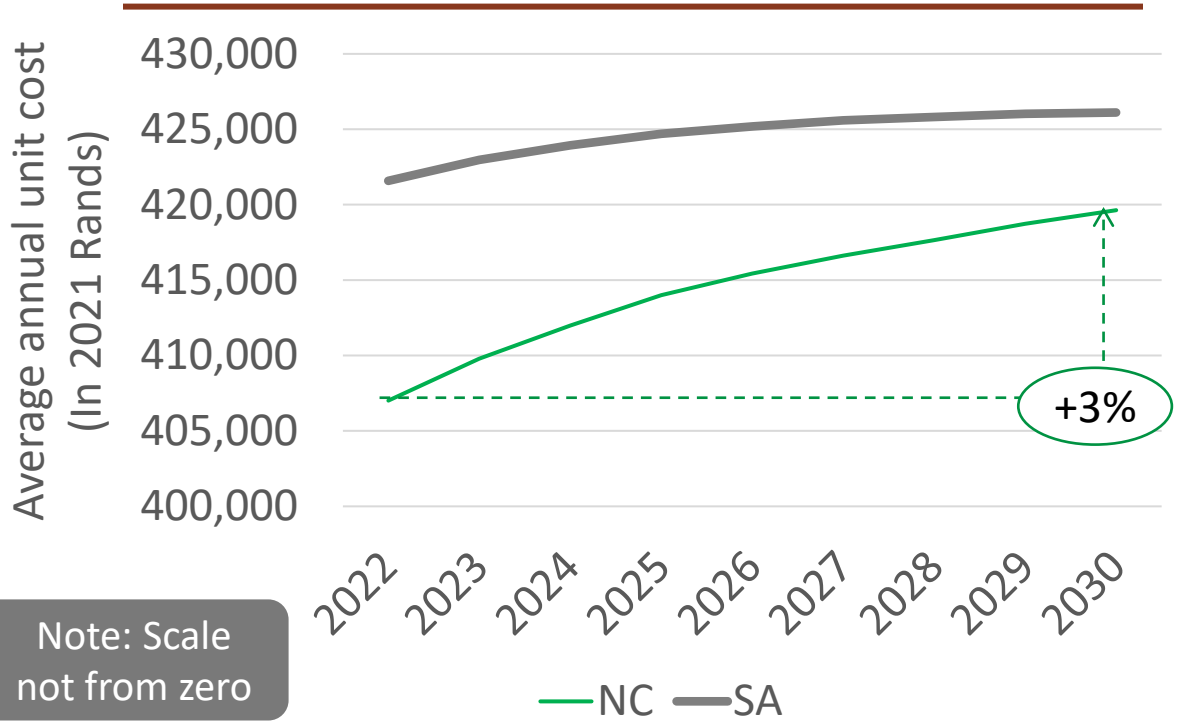
Source: Own calculations, using the anonymised PERSAL data from 2021, only educators are considered. ECD practitioners and examination reviewers removed. Estimates to 2030 derived from the national and provincial TSD models. Assumption of no growth in educator numbers for FS, KN, LP, MP, NC, NW and SA. Assume 20% educator growth for GP, 10% for WC and a decline in 10% of educators in the EC. In LP assume that the proportion of senior educators grows from 16% in 2021 to 21% in 2030.

Projected unit costs trends| All educators

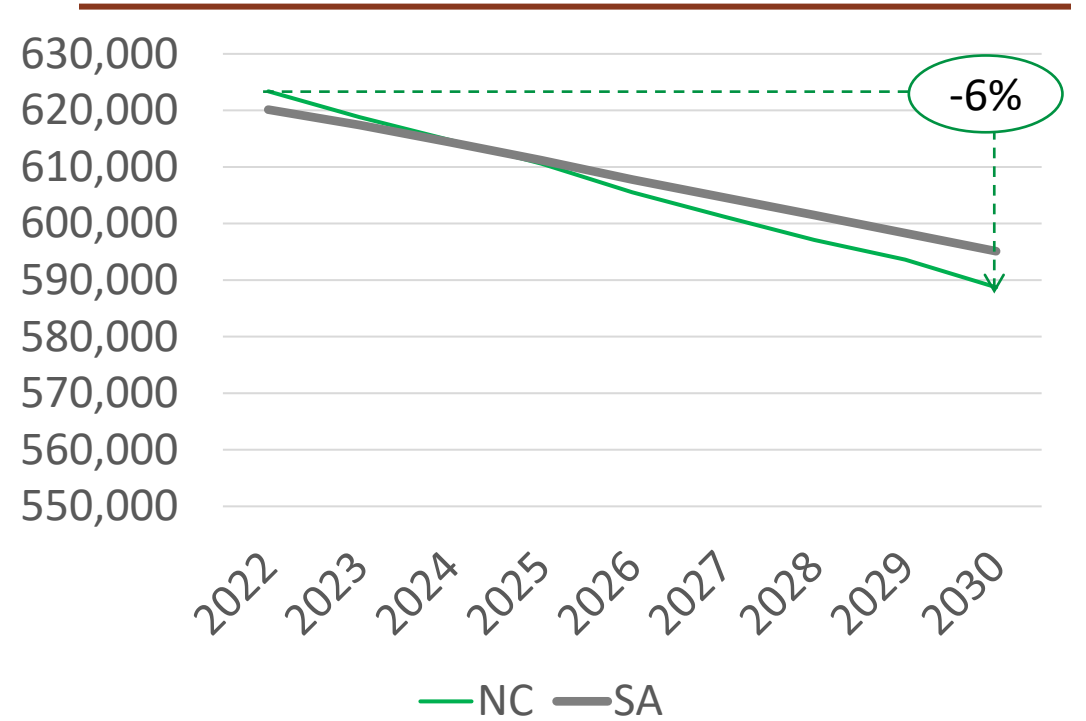


In constant 2021 rands

Teachers (School based teachers)



Senior educators (HODs, Deputy's, Principals & Other)



Note: Scale not from zero

Source: Own calculations, using the anonymised PERSAL data from 2021, only educators are considered. ECD practitioners and examination reviewers removed. Estimates to 2030 derived from the national and provincial TSD models. Assumption of no growth in educator numbers for FS, KN, LP, MP, NC, NW and SA. Assume 20% educator growth for GP, 10% for WC and a decline in 10% of educators in the EC. In LP assume that the proportion of senior educators grows from 16% in 2021 to 21% in 2030.



Between and within province movement

Inter-provincial educator movement (7-yr)



	Province in 2019										Movement out of province	
	EC	FS	GP	KN	LP	MP	NC	NW	WC	Total		
Province in 2012	EC	97.79	0.10	0.86	0.22	0.01	0.04	0.11	0.19	0.70	100	2.23%
	FS	0.35	94.25	2.76	0.10	0.07	0.23	0.41	1.56	0.26	100	5.74%
	GP	0.15	0.26	96.86	0.27	0.81	0.42	0.05	0.93	0.24	100	3.13%
	KN	0.22	0.10	1.14	97.95	0.10	0.37	0.01	0.06	0.04	100	2.04%
	LP	0.02	0.02	1.72	0.02	96.80	0.80	0.05	0.56	0.02	100	3.21%
	MP	0.03	0.14	2.48	0.37	1.54	94.86	0.03	0.49	0.07	100	5.15%
	NC	0.47	0.50	0.47	0.06	0.59	0.03	94.35	2.37	1.15	100	5.64%
	NW	0.06	0.59	3.84	0.03	0.65	0.34	0.75	93.60	0.14	100	6.40%
	WC	0.72	0.03	0.17	0.05	0.00	0.02	0.35	0.03	98.61	100	1.37%

Source: PERSAL 10-year anonymised dataset, only educators that were in the dataset for 2012 and 2019 are considered here

Inter-provincial educator movement (7-yr)



	Province in 2019										Movement out of province	
	EC	FS	GP	KN	LP	MP	NC	NW	WC	Total		
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	FS	94.25	2.76	0.10	0.07	0.23	0.41	1.56	0.26	100	5.74%	
	GP	0.15	0.26	96.86	0.27	0.81	0.05	0.93	0.24	100	3.13%	
	KN	0.22	0.10	1.14	97.95	0.37	0.01	0.06	0.04	100	2.04%	
	LP	0.02	0.02	1.72	0.02	96.80	0.05	0.56	0.02	100	3.21%	
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	WC	0.72	0.03	0.17	0.05	0.00	0.02	0.35	0.03	98.61	100	1.37%

- High level of movement between provinces – about 5.6% of Northern Cape teachers in 2012 are teaching in a different province in 2019
- Educators are most likely to move to the North West or Western Cape

Inter-provincial educator movement (7-yr)

		Province in 2019								
		EC	FS	GP	KN	LP	MP	NC	NW	WC
Province in 2012	EC	42 645	42	373	95	5	16	46	82	304
	FS	57	15 267	447	17	11	38	67	252	42
	GP	67	117	42 770	121	356	187	20	409	108
	KN	146	67	755	64 723	64	247	9	37	26
	LP	10	10	709	7	39 899	328	20	230	7
	MP	7	34	618	94	385	23 644	7	121	17
	NC	31	33	31	4	39	2	6 214	156	76
	NW	12	111	726	5	123	65	141	17 690	27
	WC	152	7	37	11	0	5	75	6	20 858
	Total 2019	43 127	15 688	46 466	65 077	40 882	24 532	6 599	18 983	21 465
Movement into province	482	421	3 696	354	983	888	385	1 293	607	
% movement into province	1.1%	2.7%	8.0%	0.5%	2.4%	3.6%	5.8%	6.8%	2.8%	

Source: PERSAL 10-year anonymised dataset, only educators that were in the dataset for 2012 and 2019 are considered here

Inter-provincial educator movement (7-yr)

	Province in 2019									
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% movement into province	1.1%	2.7%	8.0%	0.5%	2.4%	3.6%	5.8%	6.8%	2.8%	

- High movement into the NC, a total of 5.8% of educators in 2019 that were teaching in 2012, had come from another province since 2012
- The province that sent the highest number of educators to the NC was the NW

Educator movement between schools



Province	Pay point in 2019 (Ordinary schools only)			Total (%)
	Same as in 2018 (%)	Different to 2018 (%)	None - left system (%)	
EC	93.25	4.61	2.14	100
FS	90.54	5.54	3.93	100
GP	91.08	3.95	4.97	100
KN	91.99	4.31	3.70	100
LP	91.04	6.95	2.00	100
MP	92.02	4.66	3.32	100
NC	85.44	8.39	6.18	100
NW	89.42	6.30	4.28	100
WC	87.27	6.09	6.64	100
Total	91.11	5.05	3.83	100

- Large amount of movement between schools, about 8.4% of NC educators (vs 5% nationally) move to a different pay point but stay within PERSAL from 2018-2019
- Rate at which NC educators aged 50 and below (6.2%) leave the system is much higher than the national average (3.8%)

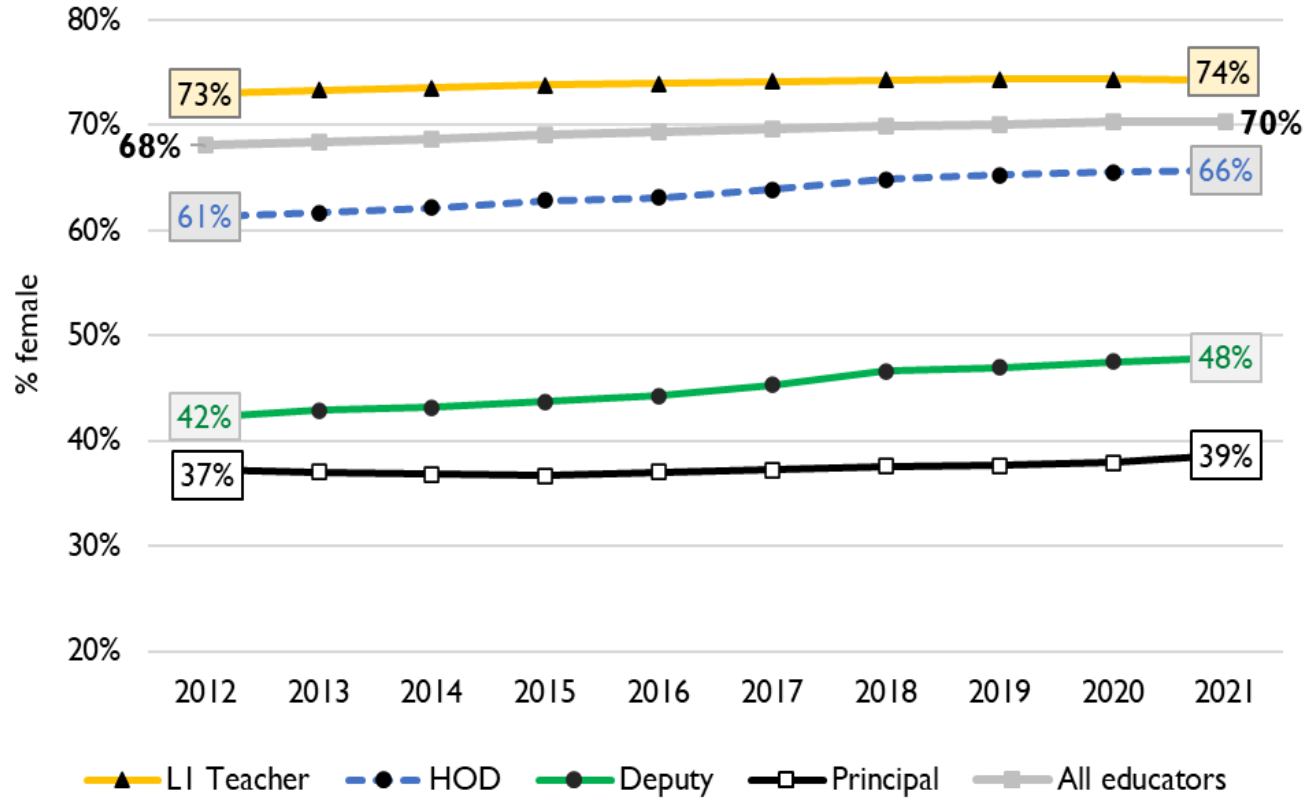
Source: PERSAL 10-year anonymised dataset. Only included educators aged 50 years and below, that were in ordinary schools in 2018 (Primary, Secondary, Combined and Intermediate)—excluded all paypoints that did not appear in both years after identifying 103 paypoints where the paypoint number changed.



Gender imbalances in management

Percentage of educators that are female

Percentage of public educators in South Africa that are female, PERSAL (2012-2021)

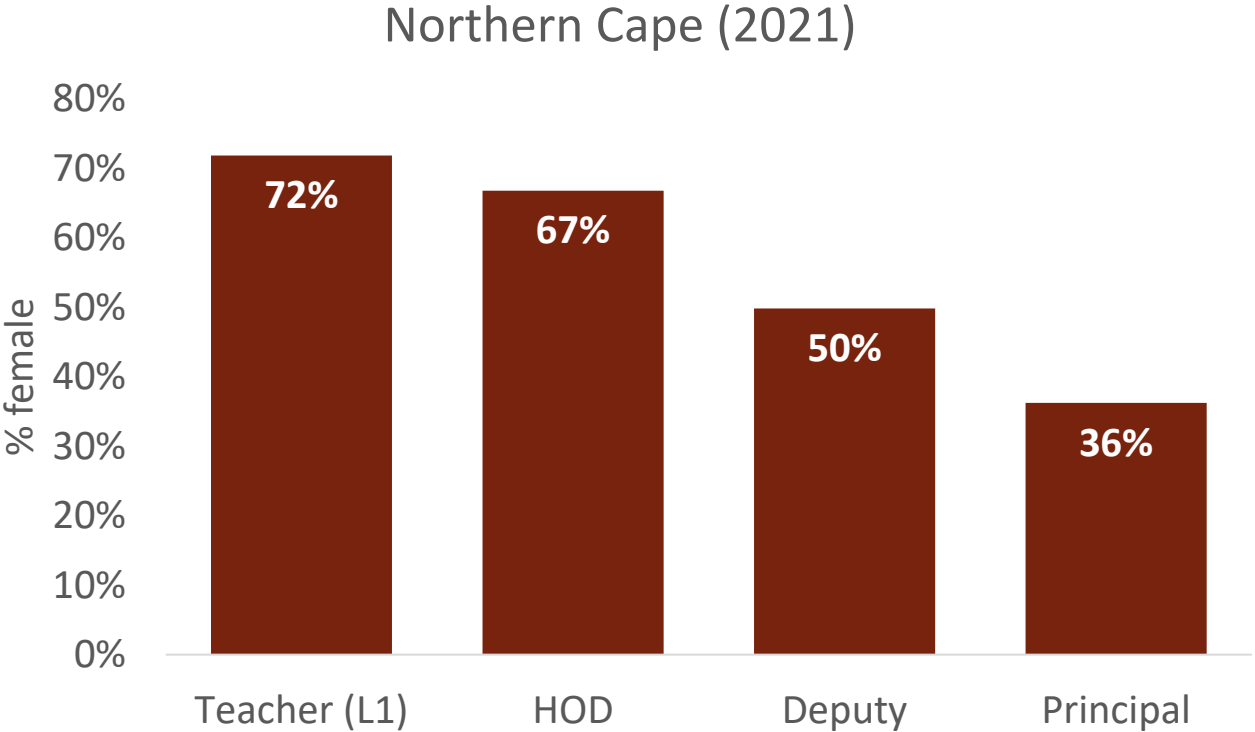


Nationally, there has been very little transformation in senior school leadership in terms of gender since 2012 and even since 2004 (just 34% of principals were female).

There is better representation at middle-management (HOD) level.

Source: Using anonymised 10-year PERSAL data from 2012 to 2021, only educators of the ranks: level 1 teacher, HOD, deputy principal and principal are considered.

Percentage of educators that are female



In the Northern Cape in 2021, 69% of all educators were women. Women were well represented at the HOD level at 67% of HODs.

Yet only 50% of deputy principals and 36% of principals were women.

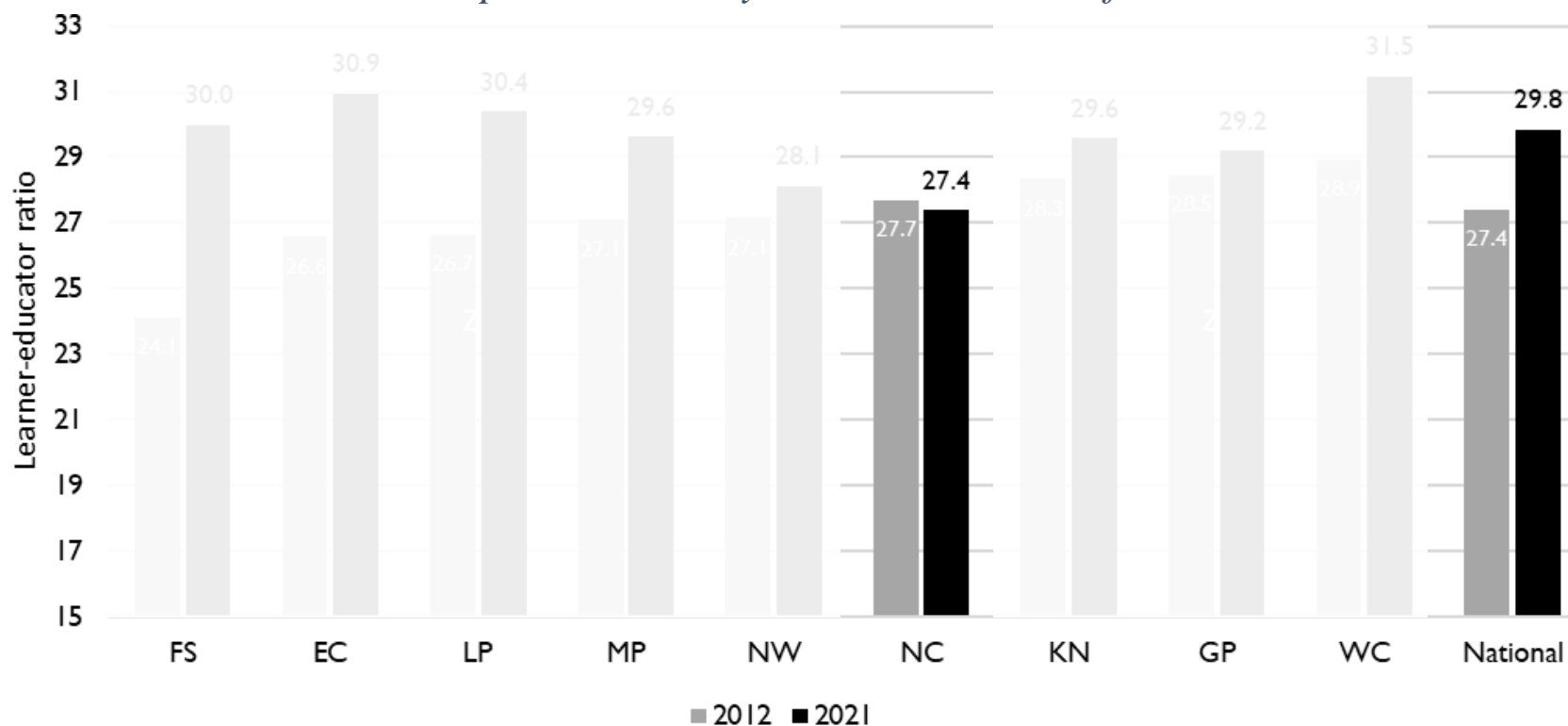
Source: Using anonymised 10-year PERSAL data from 2012 to 2021, only educators of the ranks: level 1 teacher, HOD, deputy principal and principal are considered.



Implications on appointments, class sizes and small schools

Learner-public educator ratios ('12 & '21)

National and provincial learner-to-public-educator ratios in 2012 and 2021, grades 1 to 12 in public ordinary schools in South Africa



- Learner-public educator ratio decreased from 27.7 learners per educator to 27.4 learners per educator in the NC between 2012 & 2021.
- NC was the only province that experienced an improvement

Grade 3 class sizes (2017/18 School Monitoring Survey)

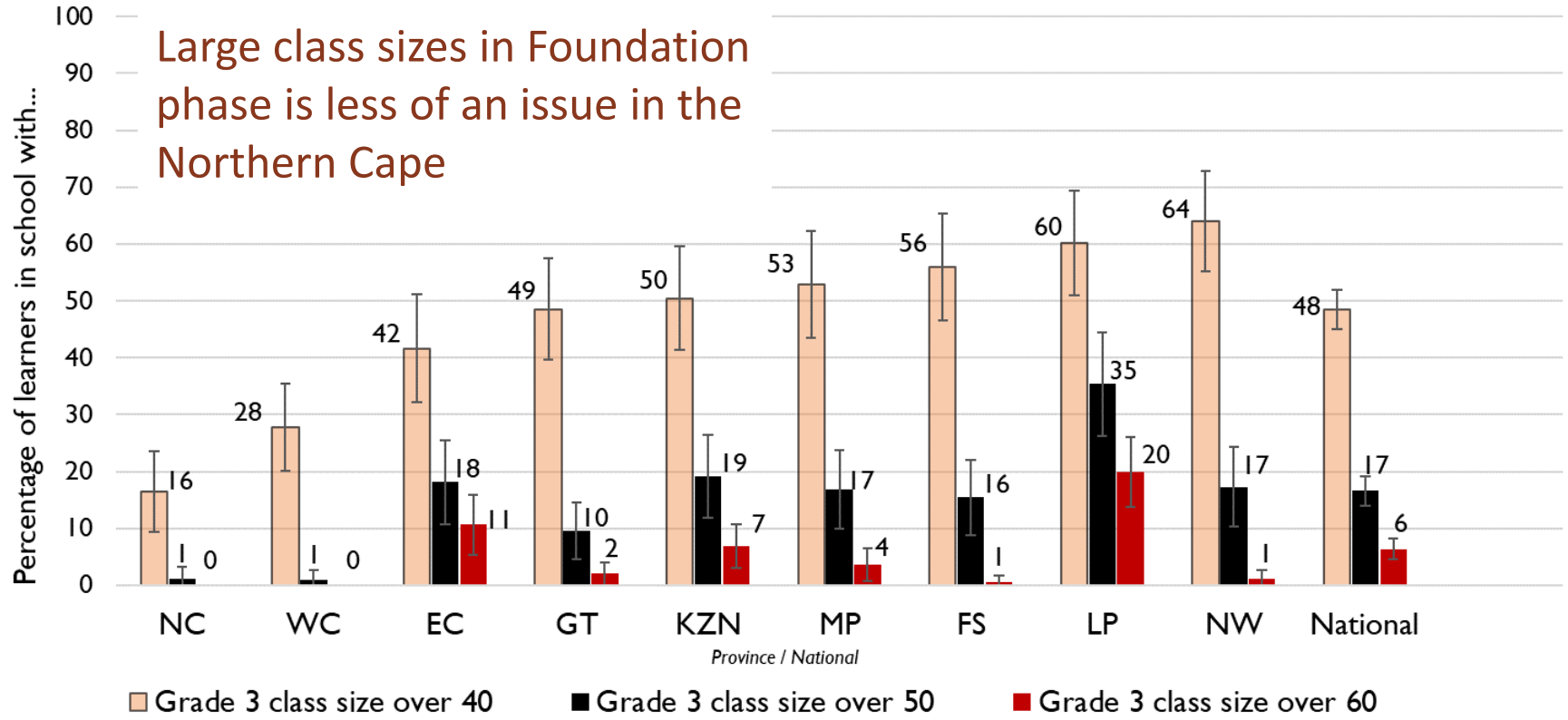
Post-provisioning guidelines - Class sizes should not exceed 35 in Grade 3.

% of learners in grade 3 classes > 40:
48% in SA, 16% in NC

% of learners in grade 3 classes > 50:
17% in SA, ~1% in NC

% of learners in grade 3 classes > 60:
6% in SA, ~0% in NC

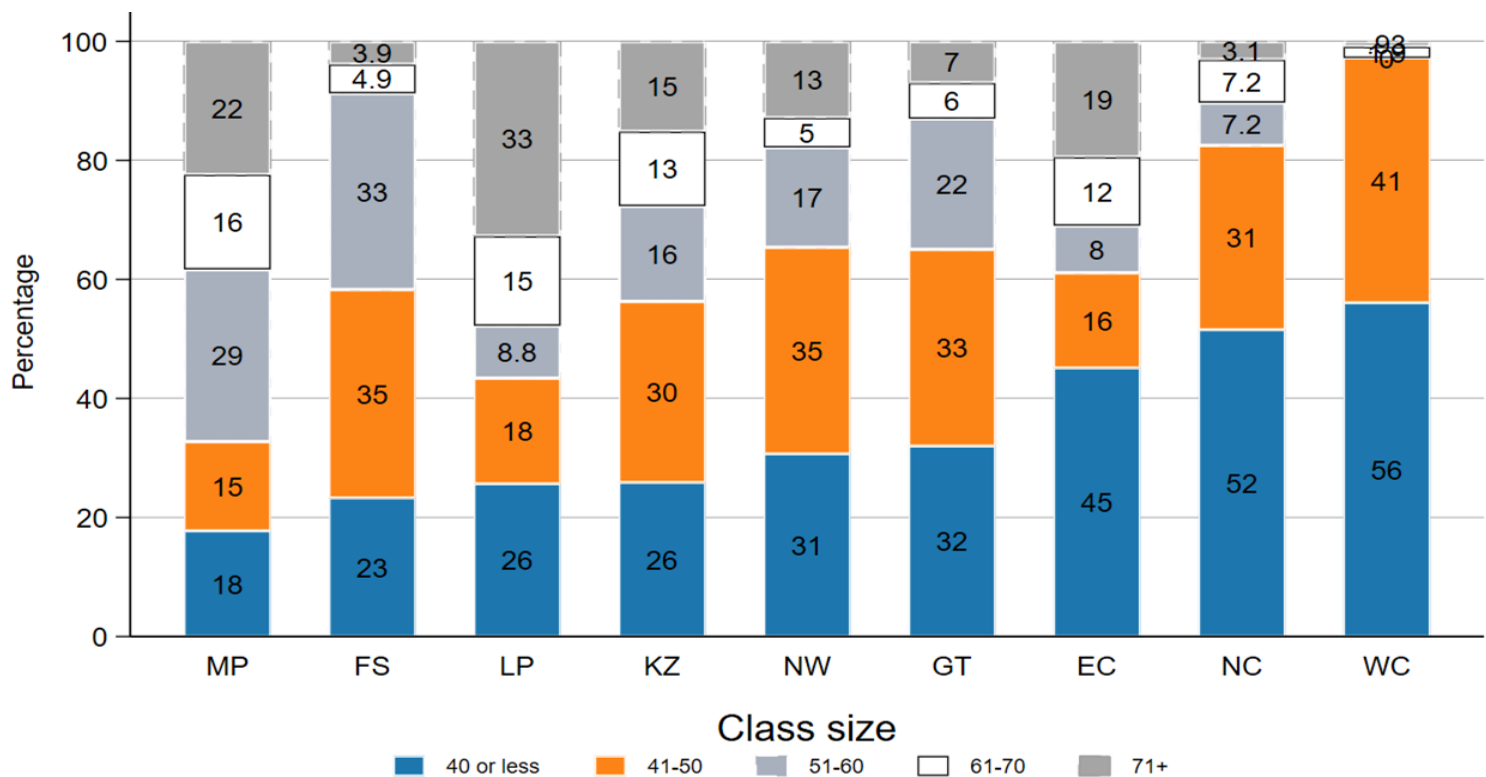
Note: Nationally, grade 3 enrolment numbers had been rising from about 2011 and peaked in 2017 before starting to decline slightly, stabilising at about 1,1 million in 2021 (Gustafsson 2022a, p10-11). Holding other things constant, grade 3 class sizes will be similar or slightly smaller in 2022 than what is seen in these 2017/18 SMS estimates.



Data source: SMS 2017/18. Learner weights applied. Educator responses averaged at school level. Technically estimates should be interpreted in relation to grade 6 learners. FS = Free State, EC = Eastern Cape, LP = Limpopo Province, MP = Mpumalanga Province, NC = Northern Cape, KN = KwaZulu-Natal, GP = Gauteng, WC = Western Cape.

Largest classes - School Monitoring Survey 2017/18

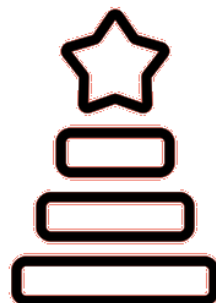
Percentage of grade 6 learners in schools with an educator reporting that their **largest** class is in the following class size category, disaggregated by province (SMS 2017/18)



- In 2017/18, the Northern Cape had less than 20% of Gr6 learners in schools with **large** classes (>50 learners)
- A further deterioration of the LE ratio will drive up class size and the number of excessively large classes, negatively impacting quality and teacher motivation

Source: Figure 1 in South African teacher shortages as revealed through class sizes and learner-educator ratios: An exploratory analysis by Gabrielle Wills (2023) using School Monitoring Survey 2017/18 (953 schools, learner weighted).

Projections of promotions and appointments



Promotions

High proportions of promotions expected rising from ~8% to 12% of senior educators between 2022 and 2030). Deliberate, careful succession planning will be needed along with resources and processes to make and implement promotion decisions



Appointments

Limited increase to already high new appointments in NC (~10% of teachers). Movement into and out of province is high? Depending on the nature of the movement this might be a sign of efficiency or cause for concern? Needs to be monitored.

Conclusion

- In the NC, retirements are not expected to increase leaver numbers significantly – about 42% of educators were 50 years or older in 2021, however, a high proportion of senior educators (69%) were over 50. Will need to manage succession well.
- School-aged population and enrolment projected to stay roughly constant to 2030
- The unit cost of educators is predicted to stay roughly constant.
- The NC faces high levels of movement of educators
 - Year-to-year movement between schools and out of PERSAL is much higher than the national average
 - The movement out of the NC to other provinces and into the Northern Cape from other provinces is high – mostly to neighbouring provinces North West and the Western Cape

General questions and discussion

- What is the process for principals and senior educator mentorship, selection and induction?
- Is the retention of younger educators a concern in the Northern Cape?
- How did the NC manage the need for new appointments in 2015?
- What caused the spike in resignations in 2021?
- How much of a concern is gender equity in senior management in NC?
- Do you track what subjects and phases teachers are needed:
 - Is there a list of the positions requested by principals or positions filled?
Or of educators that have left?