

KwaZulu-Natal Province

23 July 2023

Educator Demand Projections 2021-2030



Introduction (1)



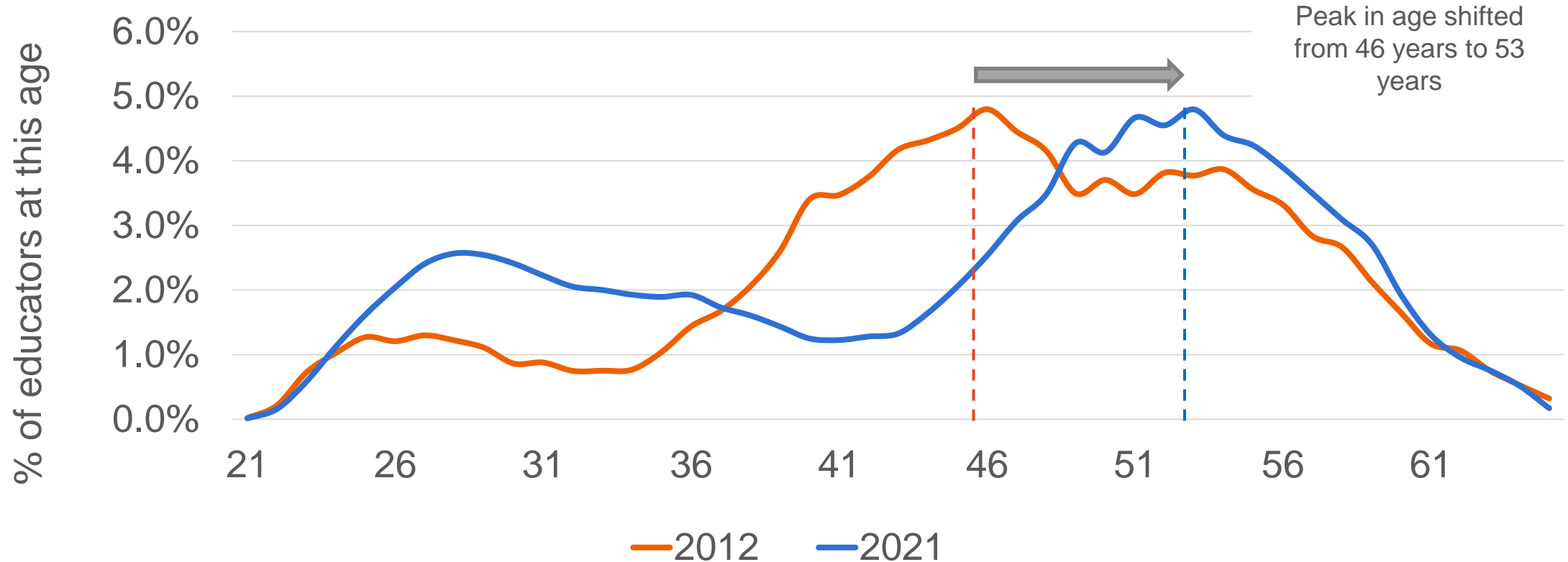
The proportion of educators that are 50 years or older has steadily risen between 2012 to 2021 in South Africa.

⇒ Nationally a **wave of educator retirements is expected** as older educators reach the standard retirement age of between 60 and 65.

Introduction (2)



National educator age distribution in 2012 & 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.

Introduction (3)



Implications of retirement wave:

- **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.

Introduction (4)



- 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 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 KwaZulu-Natal to inform province specific post-provisioning planning.



Projections of Educators by Age and Average Cost to 2070

Final Report

Martin Gustafsson (23 June 2023)

Teacher **D**emographic **D**ividend.



Provincial Educator Demand Projections for South Africa

2021-2030

Bianca Böhmer & Martin Gustafsson (27 June 2023)

Teacher **D**emographic **D**ividend.

Overview

1. Age distributions
2. Projected retirements & resignations
3. Provincial population & enrolment trends
4. Public and independent school growth
5. Educator growth: Teachers & SMT positions
6. Appointments in context: LE ratios & class sizes
7. Expected financial implications to 2030
8. Movement of educators: Between & within provinces
9. Gender imbalance
10. Small schools
11. Discussion & conclusion

KwaZulu-Natal educator demand summary

- 1 Age distribution:** The age distribution in KN had a peak at around 49 years of age in 2021
- 2 Projected resignations and retirements:** From 2018 onwards, the majority of educators that exit PERSAL are age-related retirements as opposed to resignations; the number of senior educators (SMT positions and other specialists) that are retiring is expected to increase (65% were 50+ years old in 2021)
- 3 Enrolment and population growth:** Enrolment in KN ordinary schools grew by 1% from 2012-2021 (~16K learners), and the school-aged population is forecast to decline by 1% (~33K learners) to 2030
- 4 School and educator growth:** Between 2012 and 2021, the educator number has fallen (-5%), and the number of public schools has also decreased (-3%)
- 5 SMT position changes:** Alongside falling teacher numbers (-3%), there has been a decline in the number of HODs (-8%) , Deputy Principals (-11%) and Principals (-9%) between 2012 and 2021
- 6 Appointments and LE Ratio:** Between 2012 and 2021, the LE ratio increased from 28.3 to 29.6. A further deterioration of the LE ratio will drive up class sizes and the number of excessively large classes
- 7 Projected educator cost trends:** The unit cost of KN's educators is expected to remain constant (the unit cost of teachers is expected to increase by +1% and decline for senior educators (-3%).
- 8 Educator movements:** Low movements into (<1%) and out (~2%) of KZN, educators are as likely to move to a different school(~4%) as they are to leave the system (~4%).

Age distributions and projected retirements and resignations

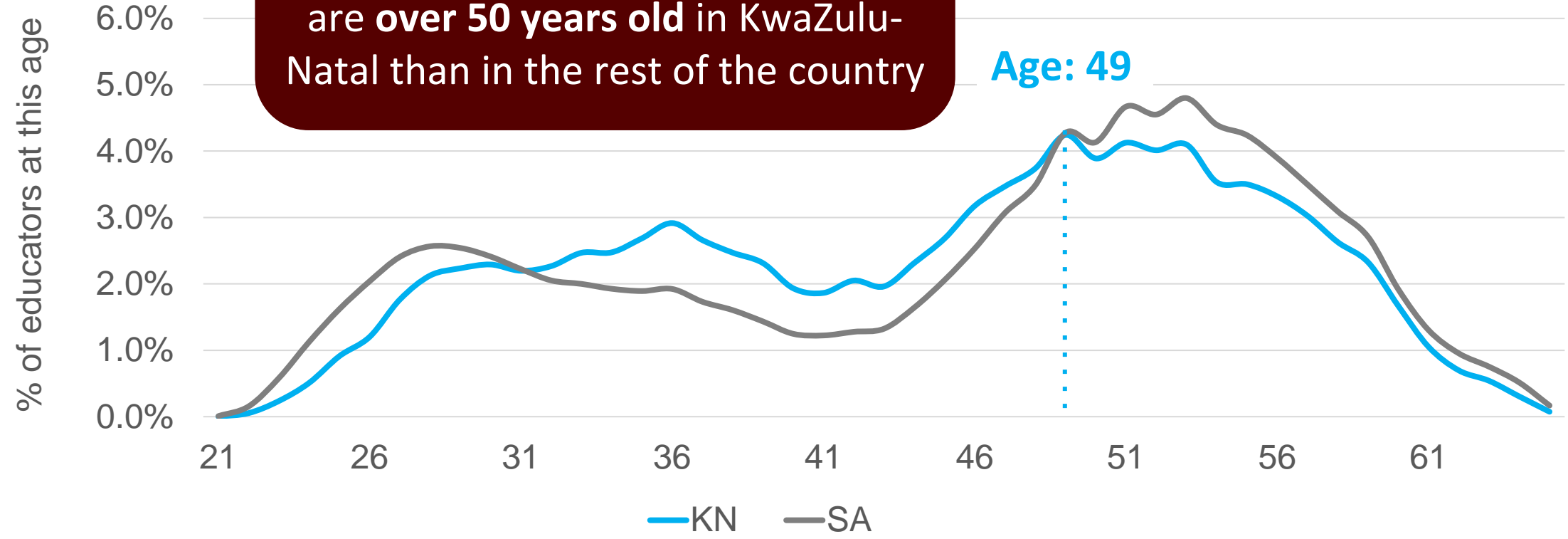
Main highlights:

- The age distribution in KZN had a peak at around 49 years of age in 2021 (lower than national peak of 53)
- From 2018 onwards, the majority of educators that exit PERSAL are for age-related retirement as opposed to resignations.
- The number of senior educators (SMT positions and other specialists) that are retiring is expected to increase (65% were 50+ years old in 2021)

Educator age distribution (2021)



A lower proportion of educators are over 50 years old in KwaZulu-Natal than in the rest of the country



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

Percentage of educators aged 50+ in 2021

KZN has *relatively* fewer older educators, aged 50 years and older in 2021 than the rest of the country, however, retirement and promotion numbers will still rise noticeably

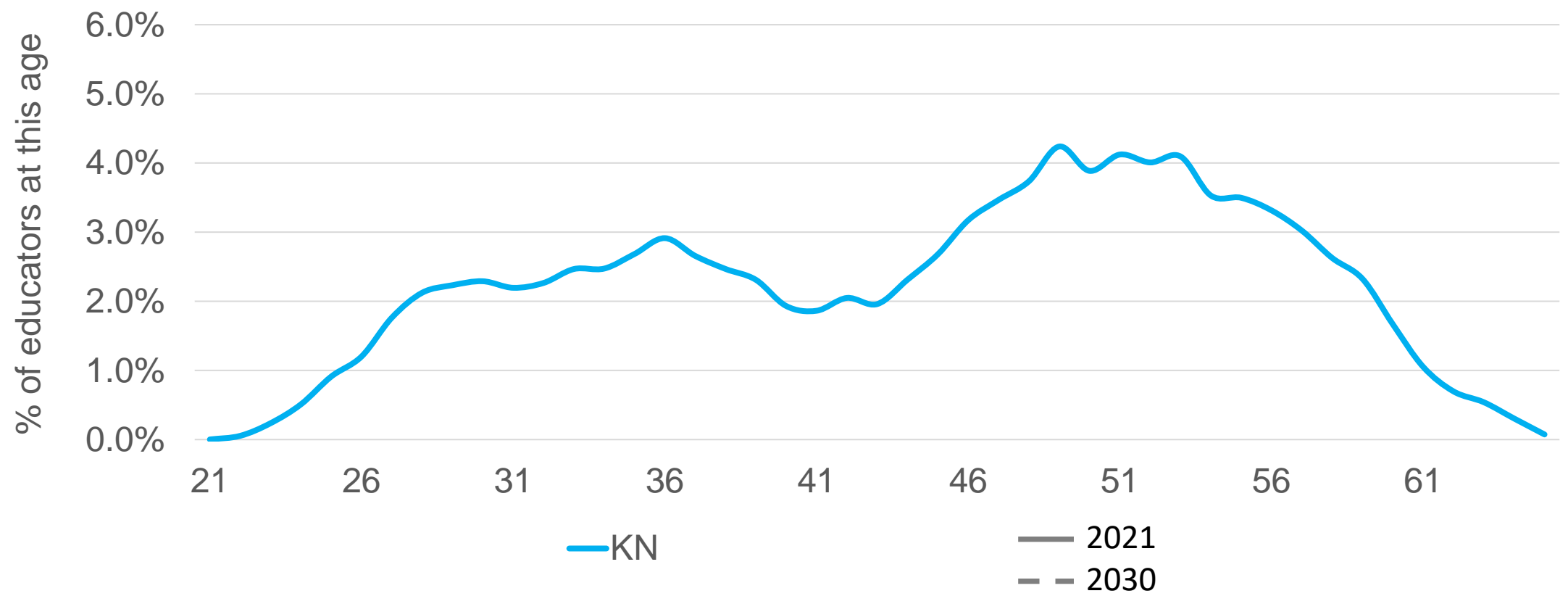
Percentage of educators aged 50+ in 2021

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.

Educator age distribution in 2021 & 2030

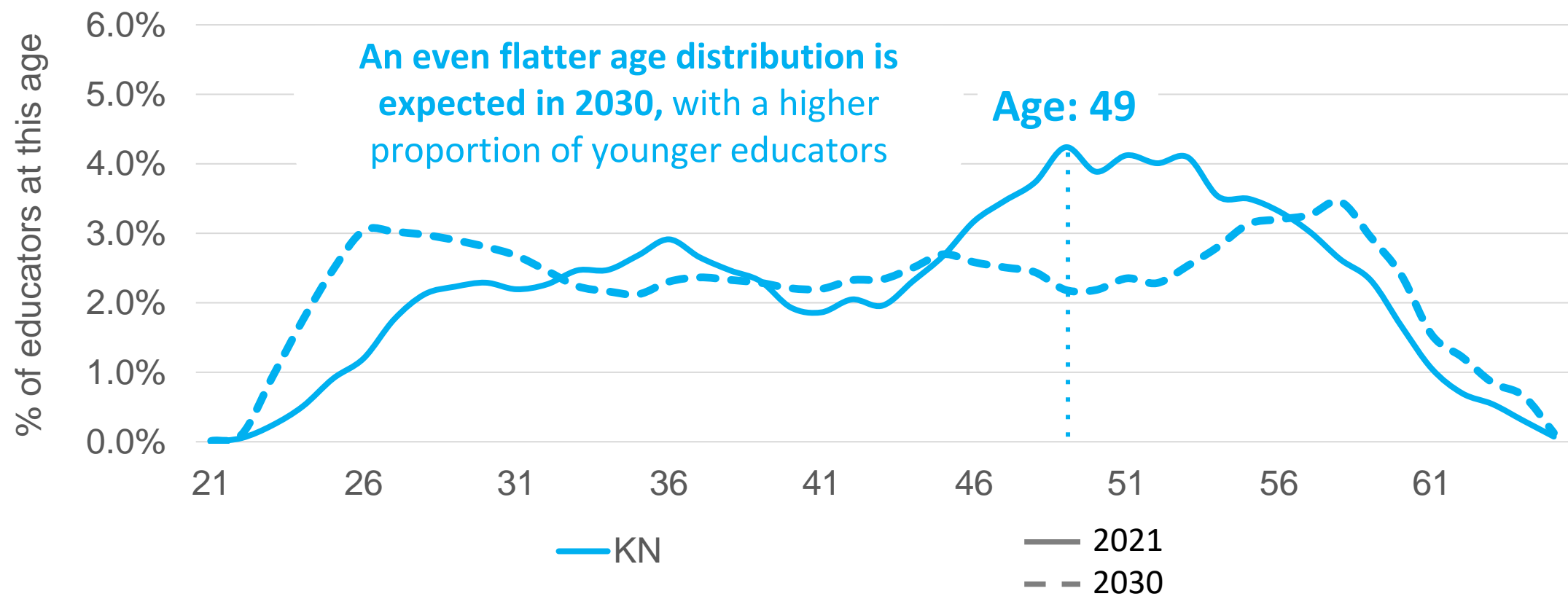
Assume constant 2021 educator numbers



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

Educator age distribution in 2021 & 2030

Assume constant 2021 educator numbers

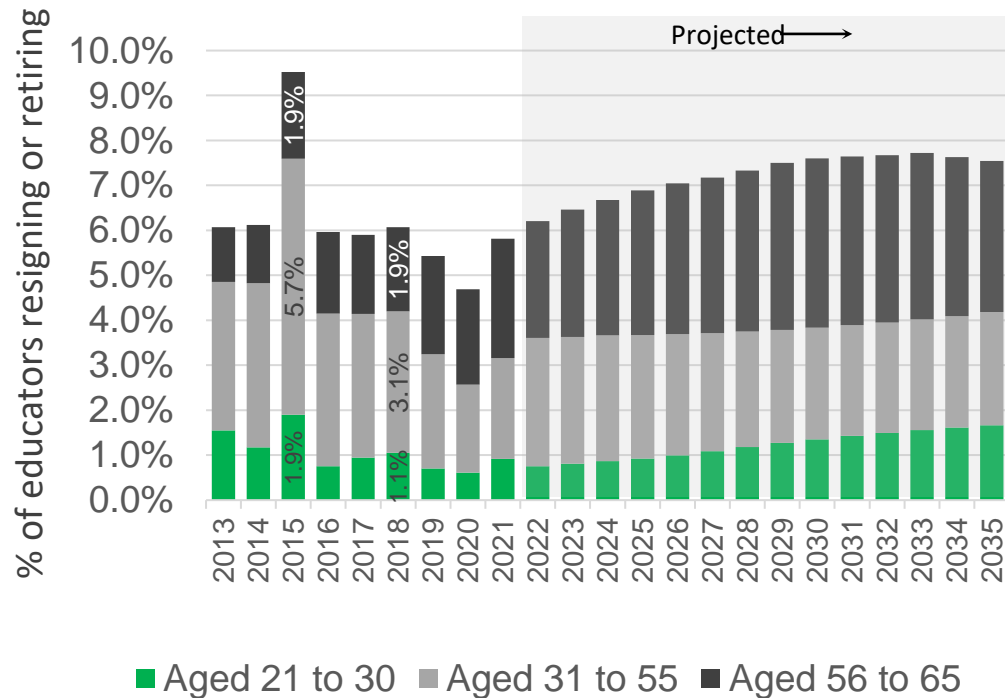


Source: Anonymised PERSAL data from 2021, only educators (Rank 60 000 – 69 999) are considered. ECD practitioners, TVET lecturers and ABET teachers were removed.

Projected resignation & retirements (KN)

Assume constant 2021 educator numbers

Percentage of educators resigning or retiring



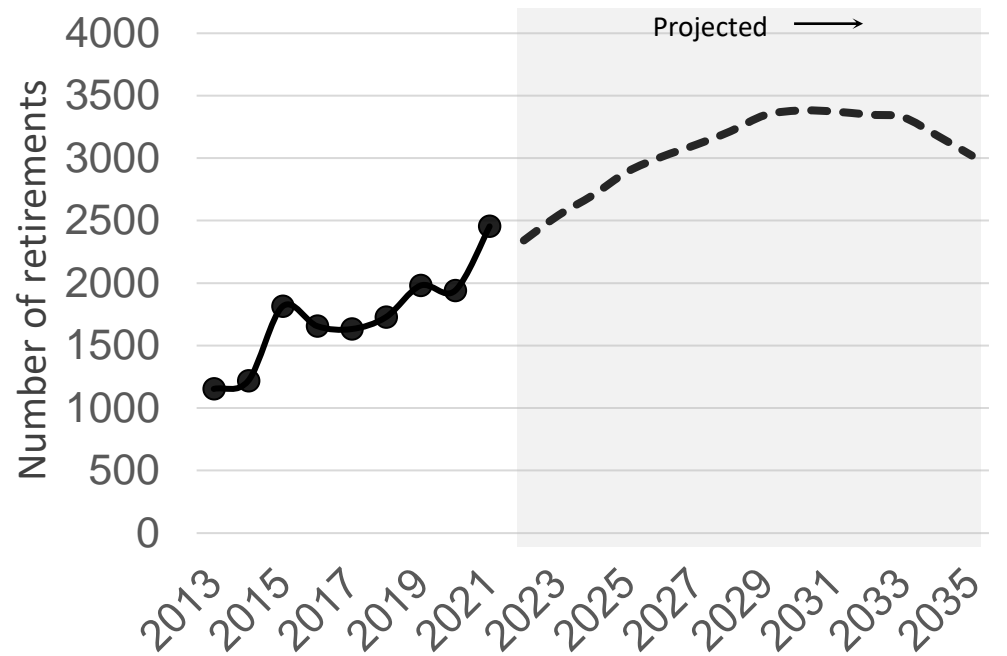
- Number of retirees (ages 56 to 65) projected to exit PERSAL in KZN is increasing but is similar to the proportion of educators that resign
- Large spike in resignations due to the pension reform rumours in 2015
- The number of young teachers (ages 21-30) resigning is projected to increase as the number of newly hired young teachers increases.

Source: Anonymised 10-year 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 resignation & retirements (KN)

Assume constant 2021 educator numbers

Retirement headcount

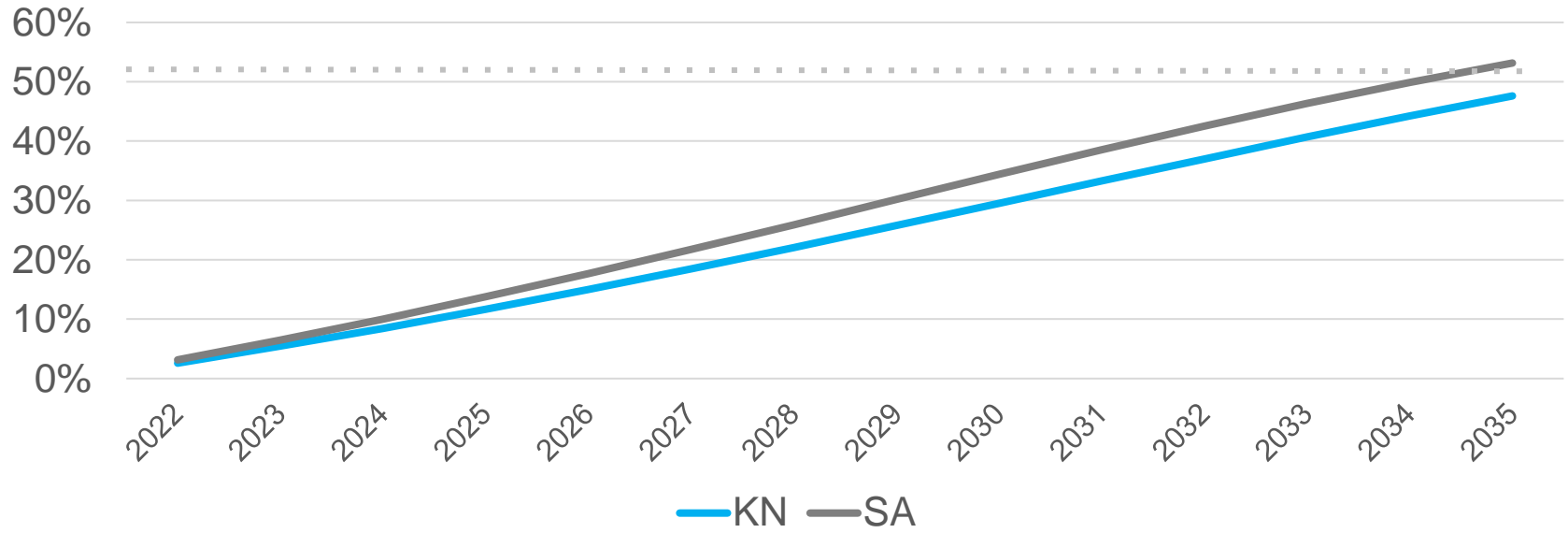


- The number of retirements is projected to increase, peaking in ~2030-31 and then declining again
- The number of retirements is projected to increase from about 2,350 in 2022 to about 3,400 in 2030, an increase of about 1,050 retirements annually

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.

Older leaver trend projections to 2035

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



Assume constant 2021 educator numbers

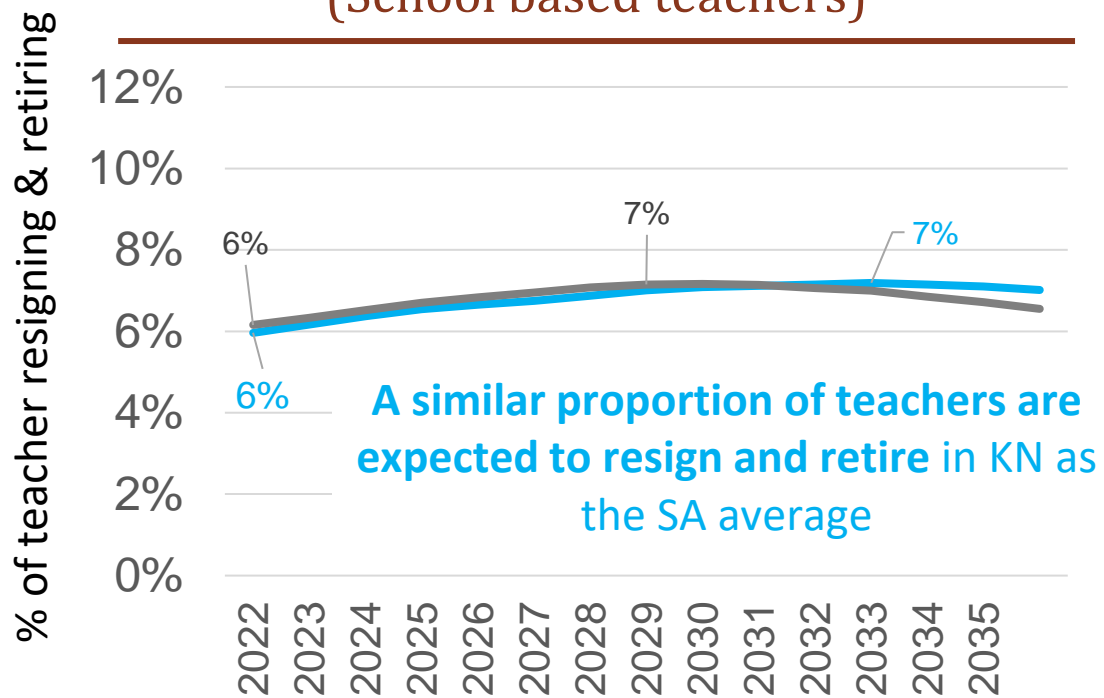
About 43,000 educators estimated to retire by 2035 in KZN (48% of total educators in 2022)

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.

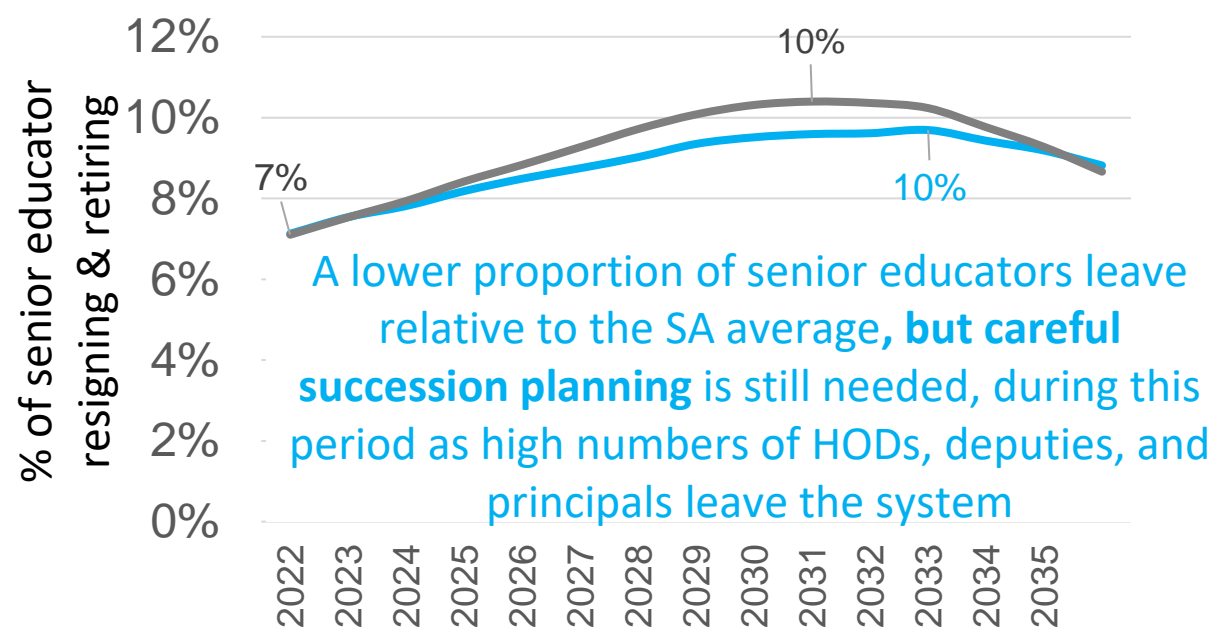
Projected educators leaving

Assume constant 2021 educator numbers

Teachers (School based teachers)



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



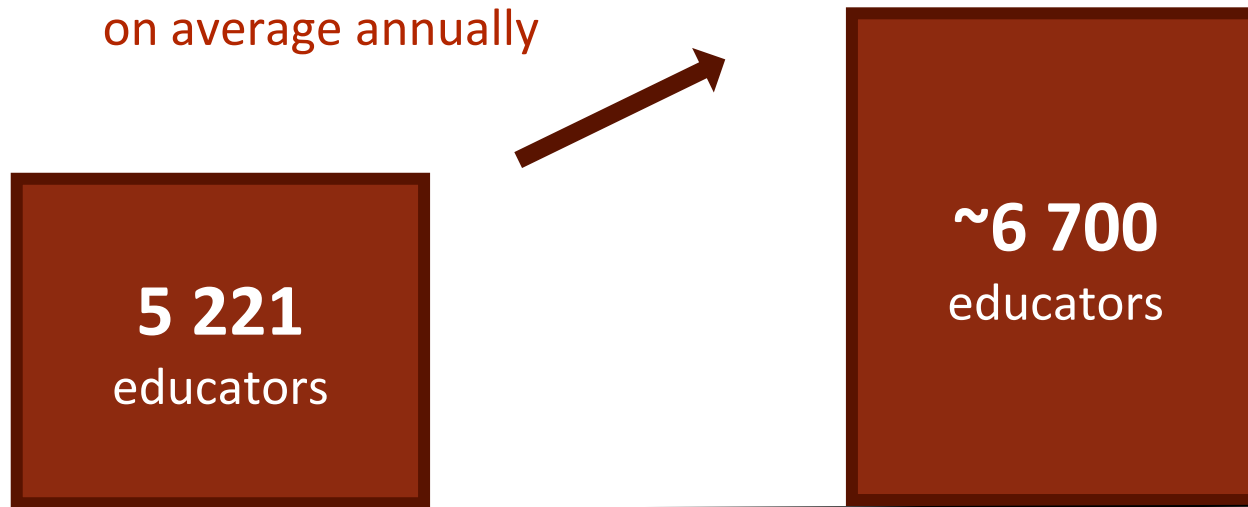
—KN —SA

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.

Projected increase in appointments

~1 500

Additional educators will need to be appointed on average annually



Average number of annual joiners over the period 2012 - 2021

Projected average number of annual joiners needed from 2028 - 2030*

*Assumes that total educator numbers stays constant between 2022 - 2030

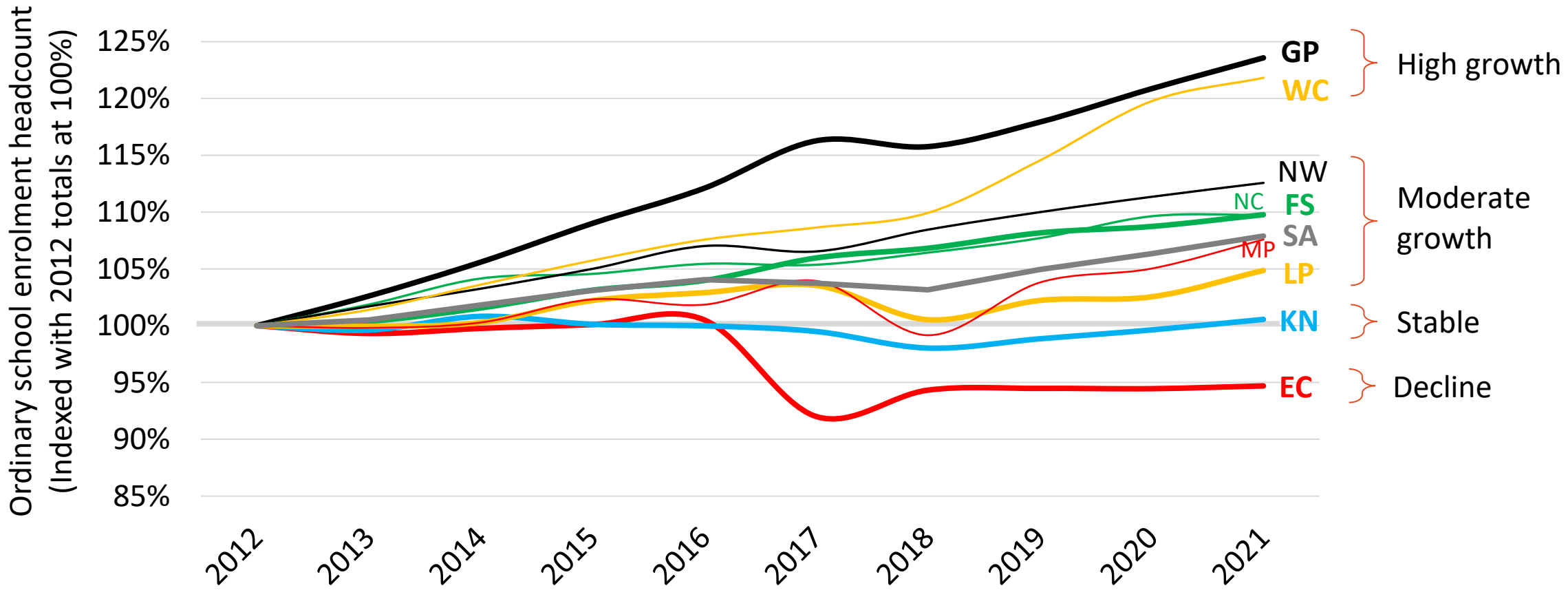
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- Large increase in expected annual appointments from ~2028 - 2030, mostly due to age-related retirement.
- Higher proportions of very young teachers (≤ 30 years of age)
- Must strengthen sourcing & appointment processes
- If the province does not keep up with appointments, LE ratios will rise

Provincial population and enrolment trends

Main finding: Enrolment in KZN ordinary schools grew by 1% from 2012-2021 (~16K learners), and the school-aged population is forecast to **decline** by 1% (~33K learners) to 2030

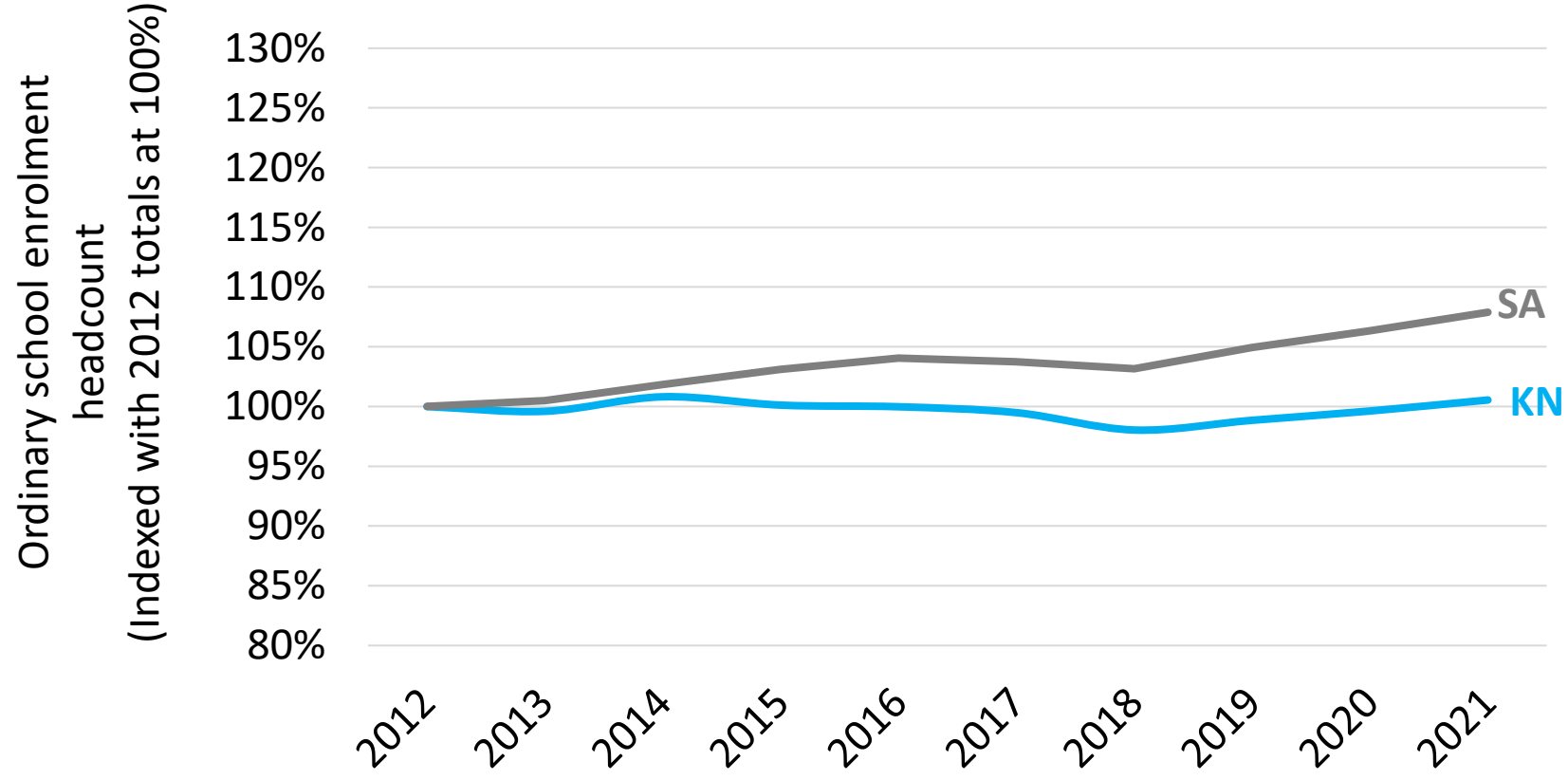
Actual provincial enrolment trends (2012-2021)



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

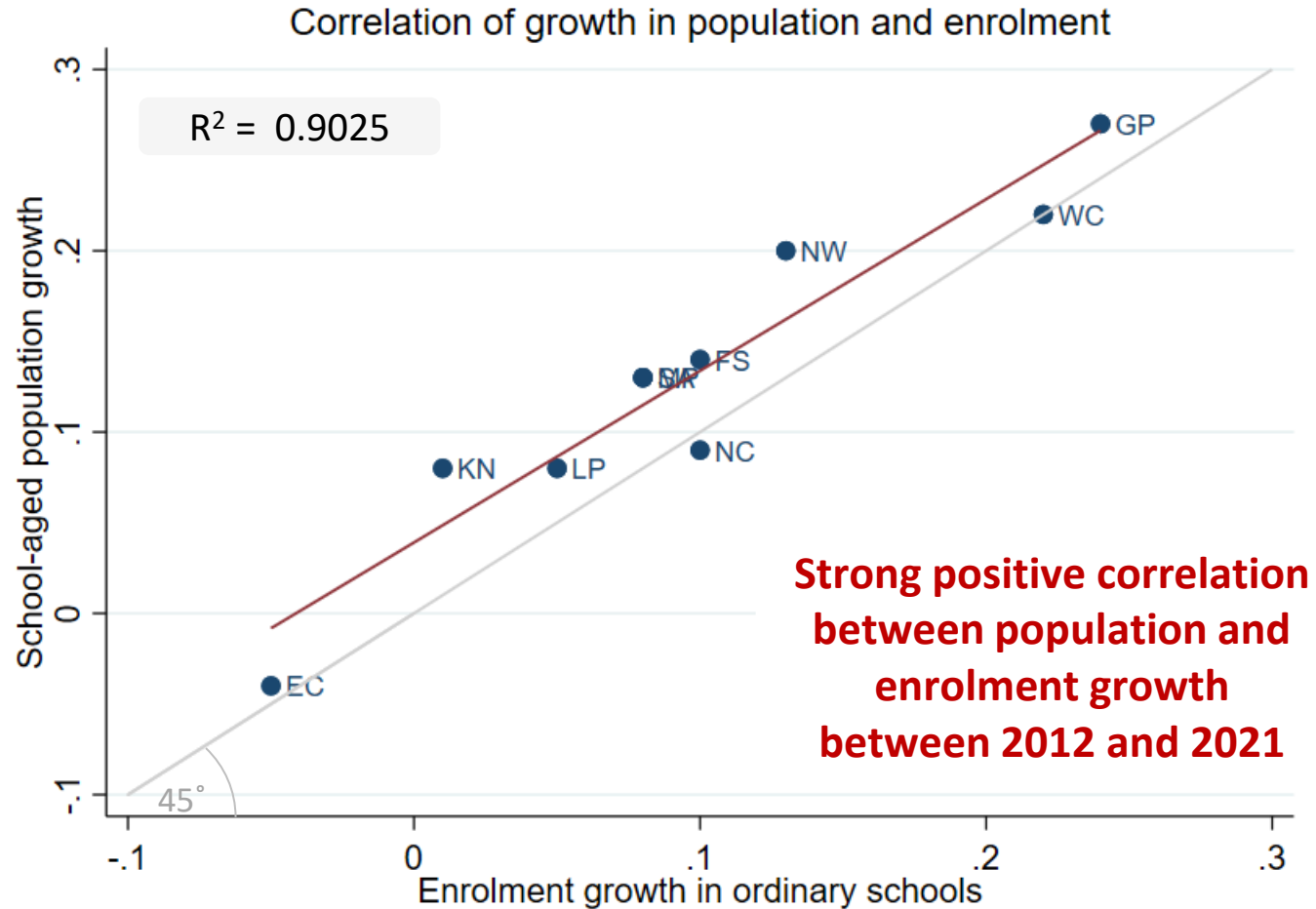
Actual provincial enrolment trends (2012-2021)

Enrolment in KZN ordinary schools grew by 1% from 2012 to 2021 ... lower growth than national average



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 & enrolment growth (2012-2021)

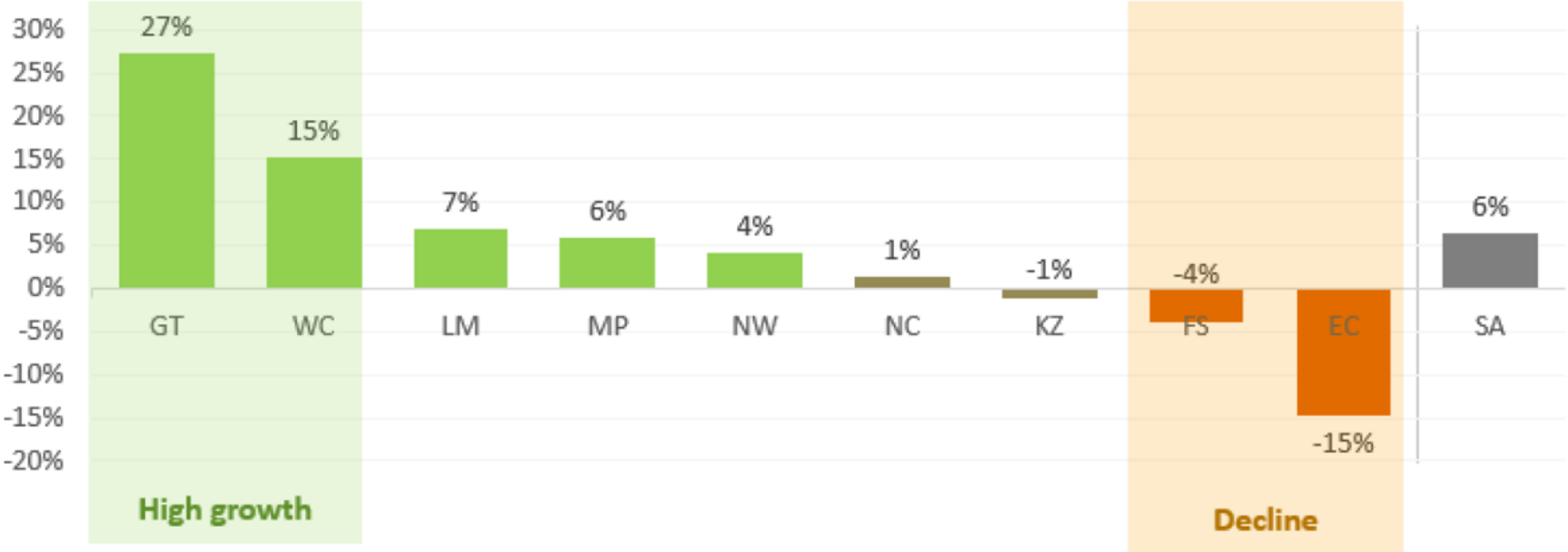


Source: Thembisa age specific data V4.5 for school-aged population (Ages 7-18) estimates and enrolment taken from School Realities-EMIS (2012 – 2021) released by the DBE, for numbers on ordinary public and independent schools (Statistical Publications (education.gov.za))

Projected growth in school-aged population (2021-2030)

Population of children aged 7-18 in KZN is expected to decrease by ~33K children (-1%) from 2021 to 2030

Figure 25: Projected growth of the school-aged population from 2021 to 2030 by province



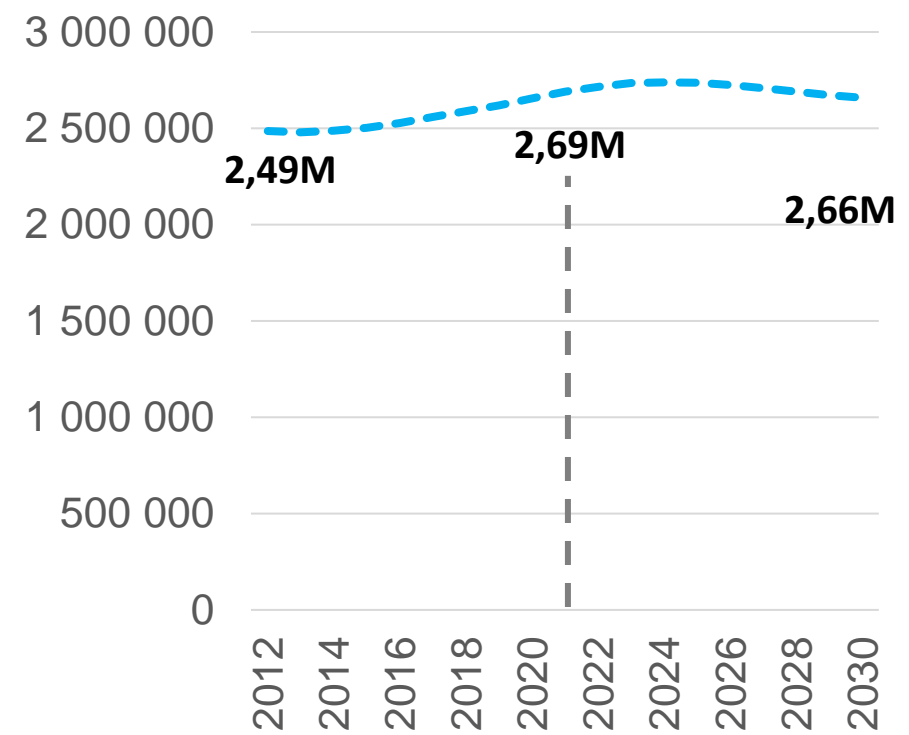
Source: Thembeisa age specific data V4.5 for school-aged population (ages 7-18) estimates

Projected school-aged population: 2021 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%



Projected number of school-aged children (7-18 yrs) in KZN



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

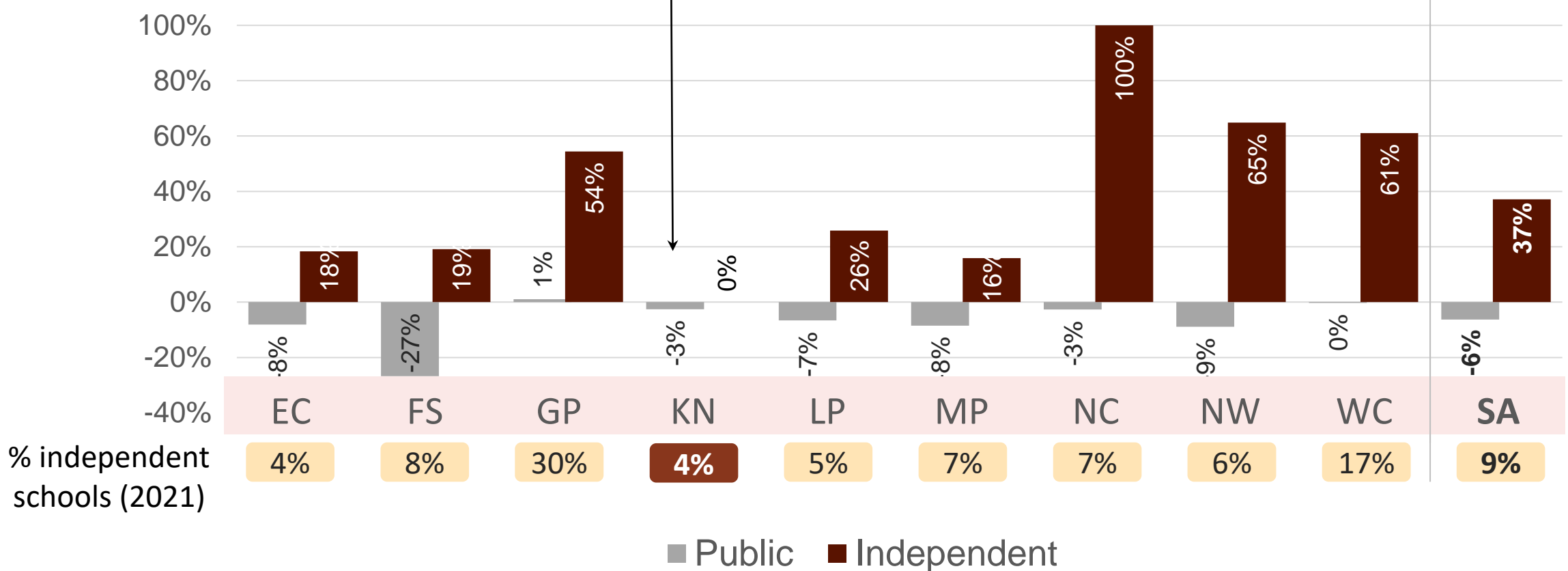
Source: Thembisa age-specific estimates from the model V4.5 for children aged 7-18 by province

Public & independent school growth (2012-2021)

Main highlights: Between 2012 and 2021, educator numbers in KZN fell (-5%), and the number of public schools also decreased (-3%)

Actual school growth from 2012 to 2021

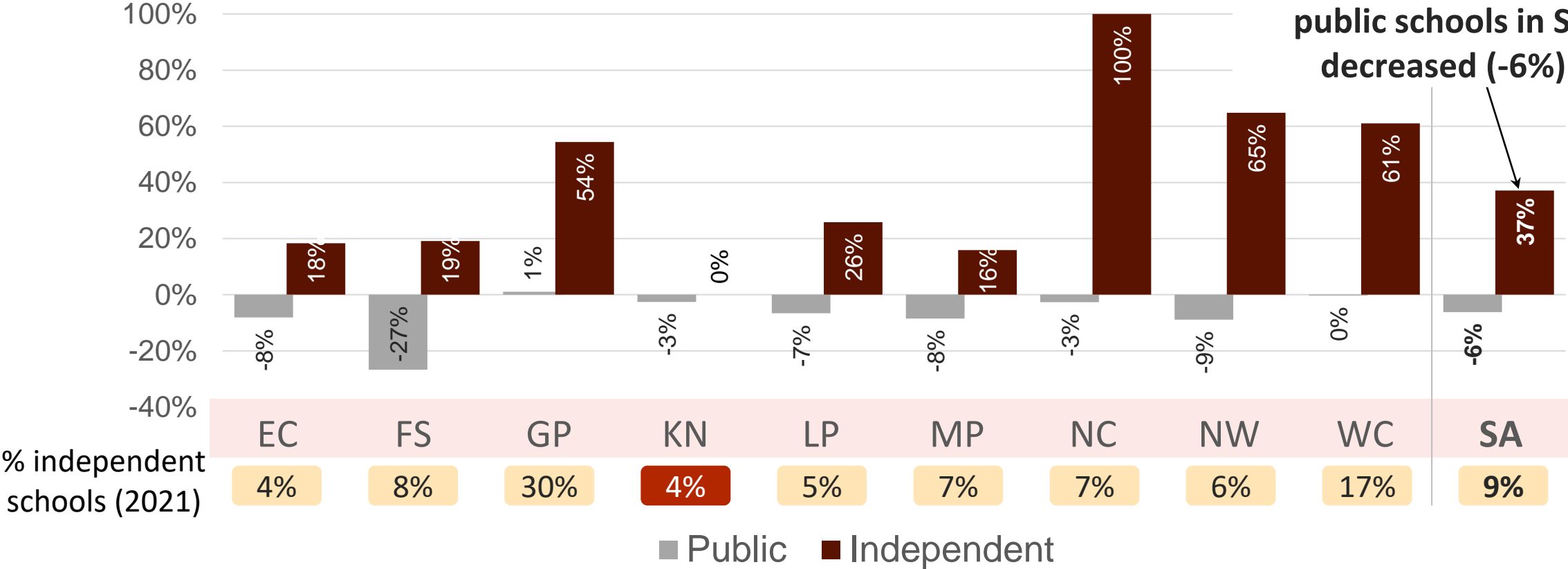
2012-2021 in KZN: Decline in public schools (-3%) despite 1% increase in enrolment. No growth in the number of independent schools in KZN (0%).



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

Actual 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 \(education.gov.za\)](http://www.education.gov.za))

Educator growth: Teachers & SMT positions

Main highlight: Declines in educator numbers in KZN from 2012-2021: Falling teacher numbers (-3%), declines in the number of HODs (-8%), Deputy Principals (-11%) and Principals (-9%).

Changes in teacher and SMT numbers in PERSAL (publicly employed educators)

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 in PERSAL – key highlights

In KZN between 2012-2021:

- Learner enrolment growth of 1% but in PERSAL...
 - Teacher numbers **decline** (-3%)
 - HODs numbers **decline** (-8%)
 - Deputy Principals numbers **decline** (-11%) AND
 - Principal numbers **decline** (-9%) > decline in public schools (-3%)

... Are principal posts being filled by “Acting principals”?

Proportional split by educator rank

In KZN proportional split remains similar: The proportions of the different educator ranks appear to be roughly in line with the national average in 2021

	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%

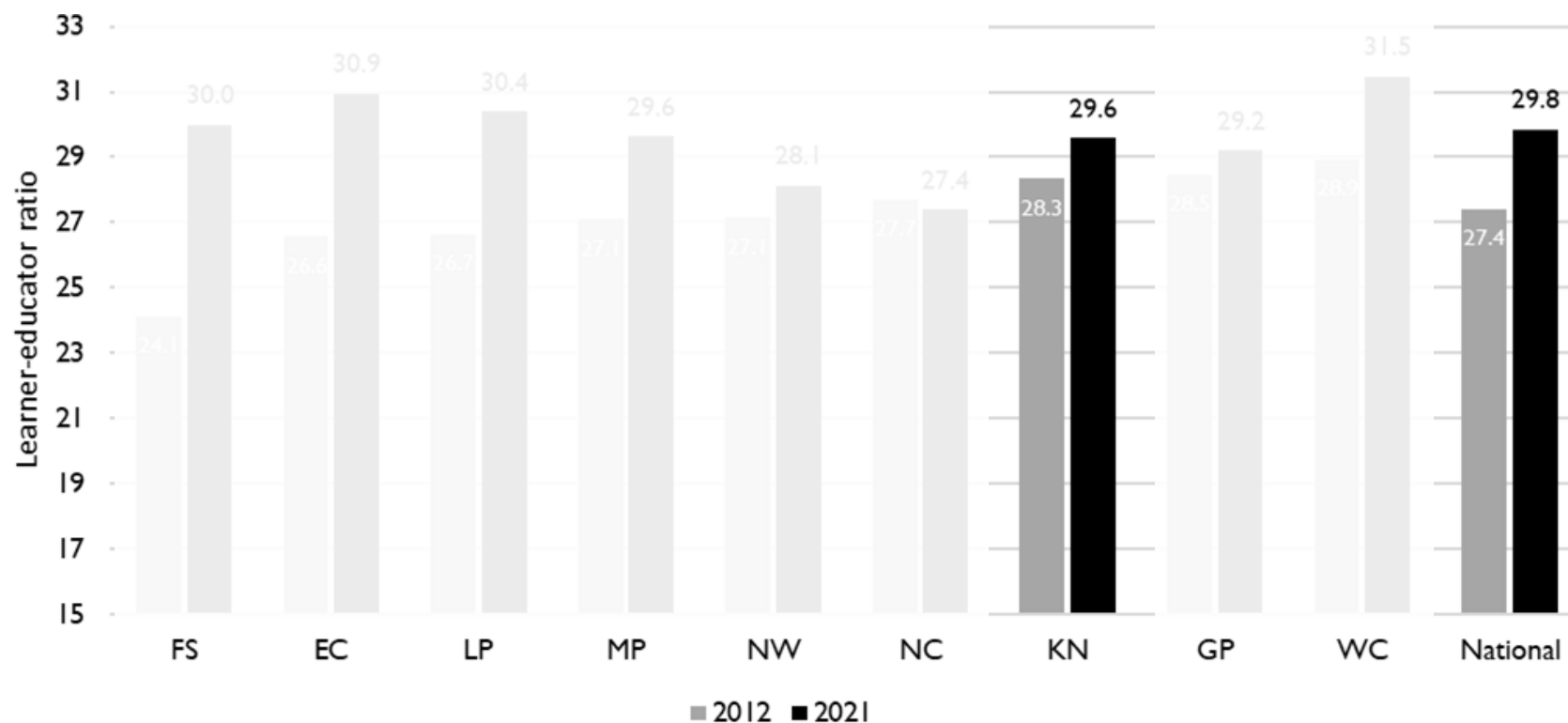
Source: Anonymised PERSAL data from 2012 and 2021, only educators (Rank 60 000 – 70 000) are considered. ECD practitioners TVET lecturers and ABET teachers were removed. The 2021 rankclass file was expanded to include ranks found only in years prior to 2021. The percentage within each rank is calculated taking the total number of educator in that year for that rank over the total number of educators in that year.

Implications for LE ratios and class sizes

Main finding: Between 2012 and 2021, the LE ratio increased from 28.3 to 29.6. A further deterioration of the LE ratio will drive up class sizes and the number of excessively large classes

LE ratios between 2012 and 2021

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



KZN:
LE ratio rose
from 28.3
learners per
educator to
29.6 learners
per educator
between
2012 and
2021

Source: Figure 1 in *South African teacher shortages as revealed through class sizes and learner-educator ratios: An exploratory analysis* by Gabrielle Wills (2023). Estimates from Gustafsson (2022).

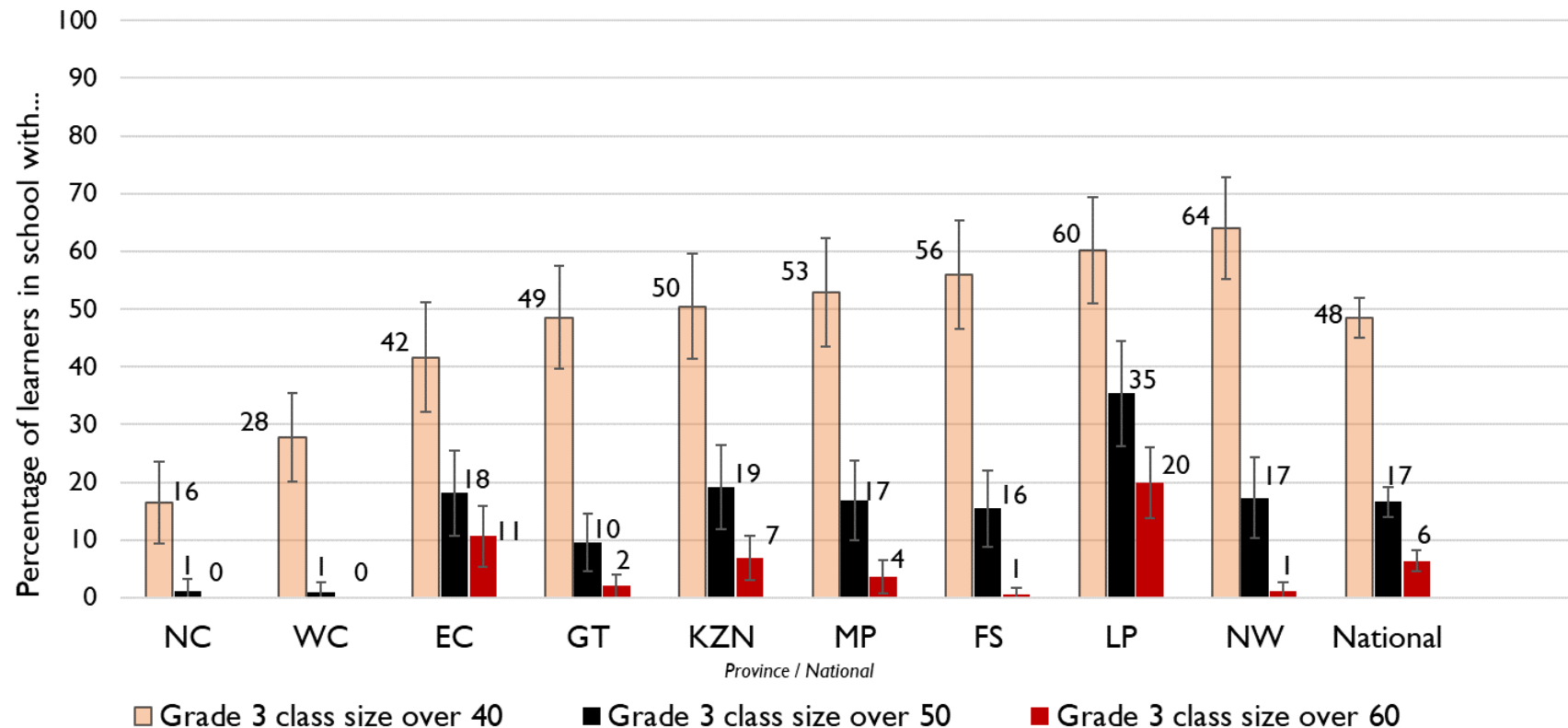
Grade 3 class sizes (2017/18 School Monitoring Survey)

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

% of learners in grade 3 classes > 40:
48% in SA, 50% in KZN

% of learners in grade 3 classes > 50:
17% in SA, 19% in KZN

% of learners in grade 3 classes > 60:
6% in SA, 7% in KZN

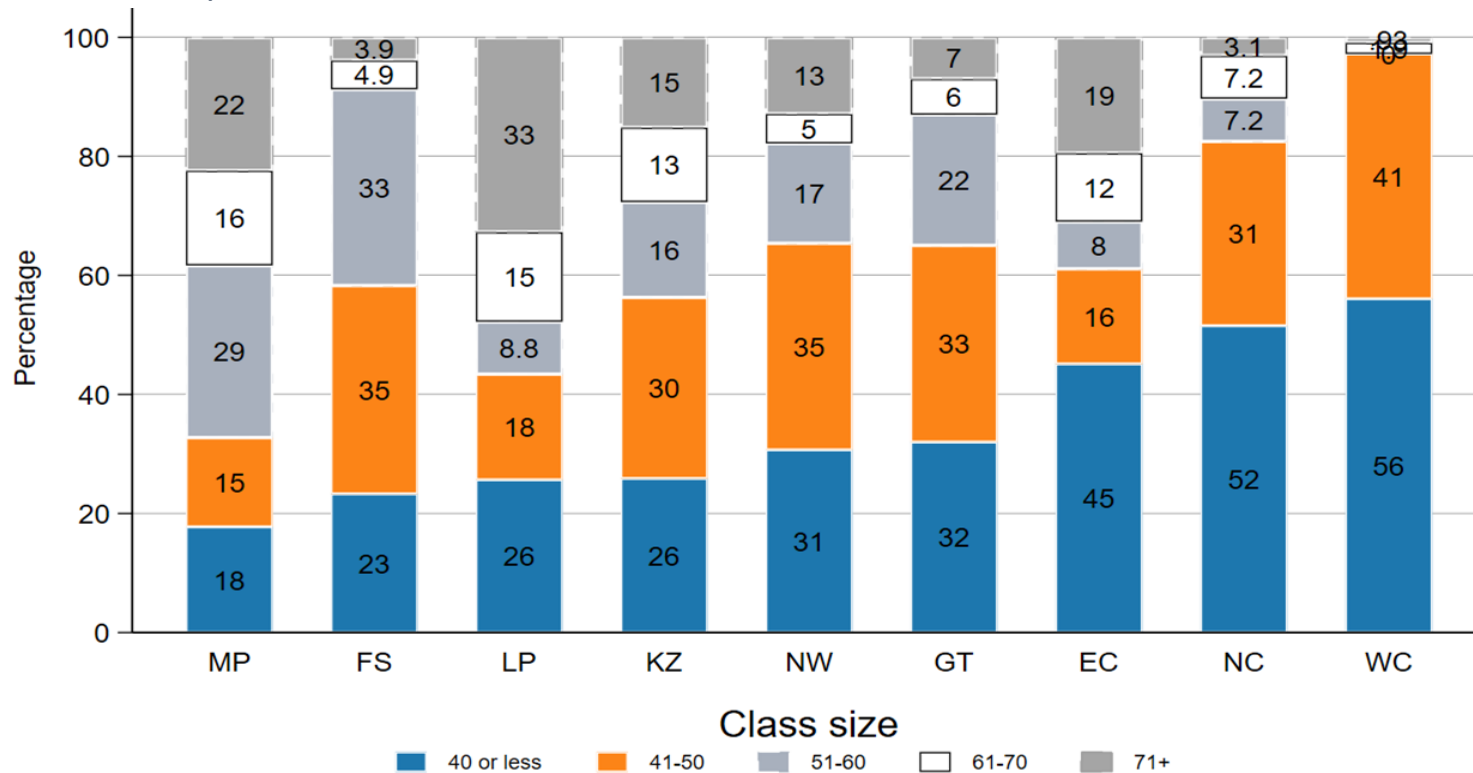


Data source: SMS 2017/18. Learner weights applied. Educator responses averaged at school level. Technically estimates should be interpreted in relation to grade 6 learners. FS = Free State, EC = Eastern Cape, LP = Limpopo Province, MP = Mpumalanga Province, NC = Northern Cape, KN = KwaZulu-Natal, GP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

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.

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)



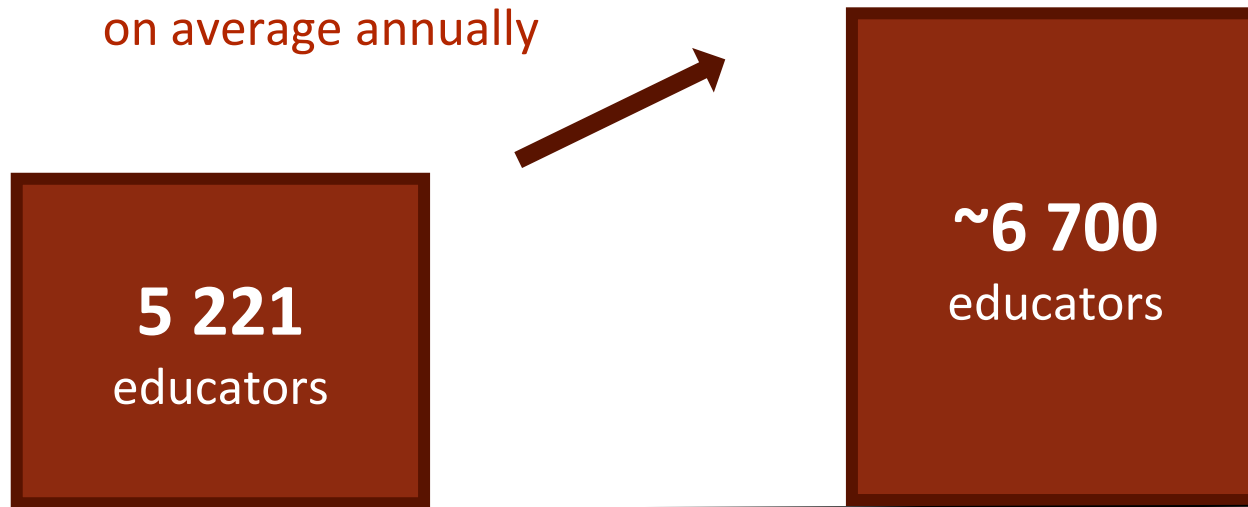
- In 2017/18, KZN was amongst the top four provinces with the highest percentage of **large** classes with more than 70 learners
- A further deterioration of the LE ratio will drive up class size and the number of excessively large classes, negatively impacting quality and teacher motivation

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).

Projected increase in appointments

~1 500

Additional educators will need to be appointed on average annually



Average number of annual joiners over the period 2012 - 2021

Projected average number of annual joiners needed from 2028 - 2030*

- Large increase in expected annual appointments from ~2028 - 2030, mostly due to age-related retirement.
- Higher proportions of very young teachers (≤ 30 years of age)
- Must strengthen sourcing & appointment processes
- If do not keep up with appointments, LE ratios will rise

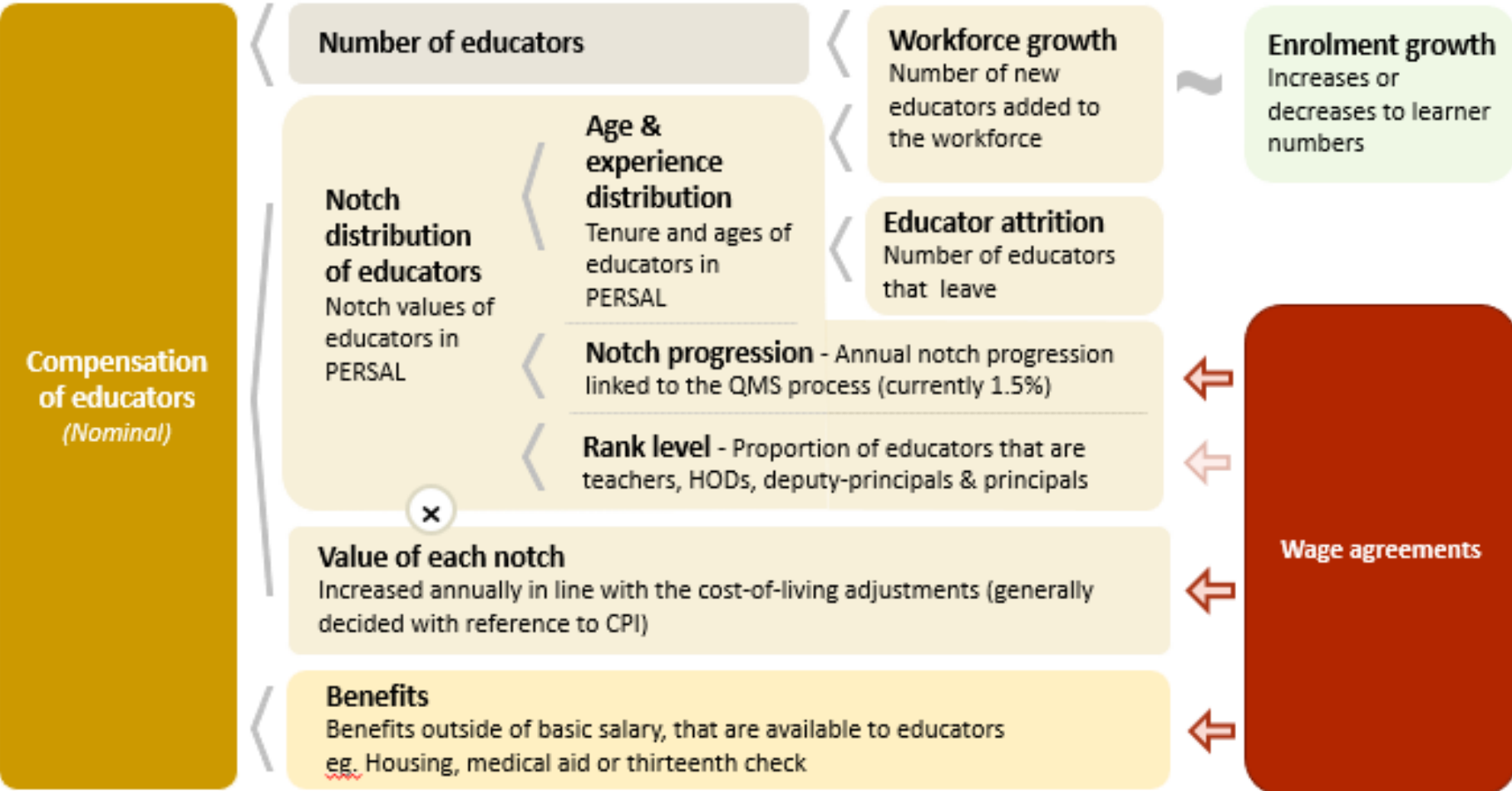
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*Assumes that total educator numbers stays constant between 2022 - 2030

Expected financial implications to 2030

Projected educator cost trends: The unit cost of KZN's educators is expected to remain constant (the unit cost of teachers is expected to increase by +1% and decline for senior educators by -3%).

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***

7

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%**

Assumptions for KZN unit cost projections



All of the estimations of unit costs use real 2021 rands.

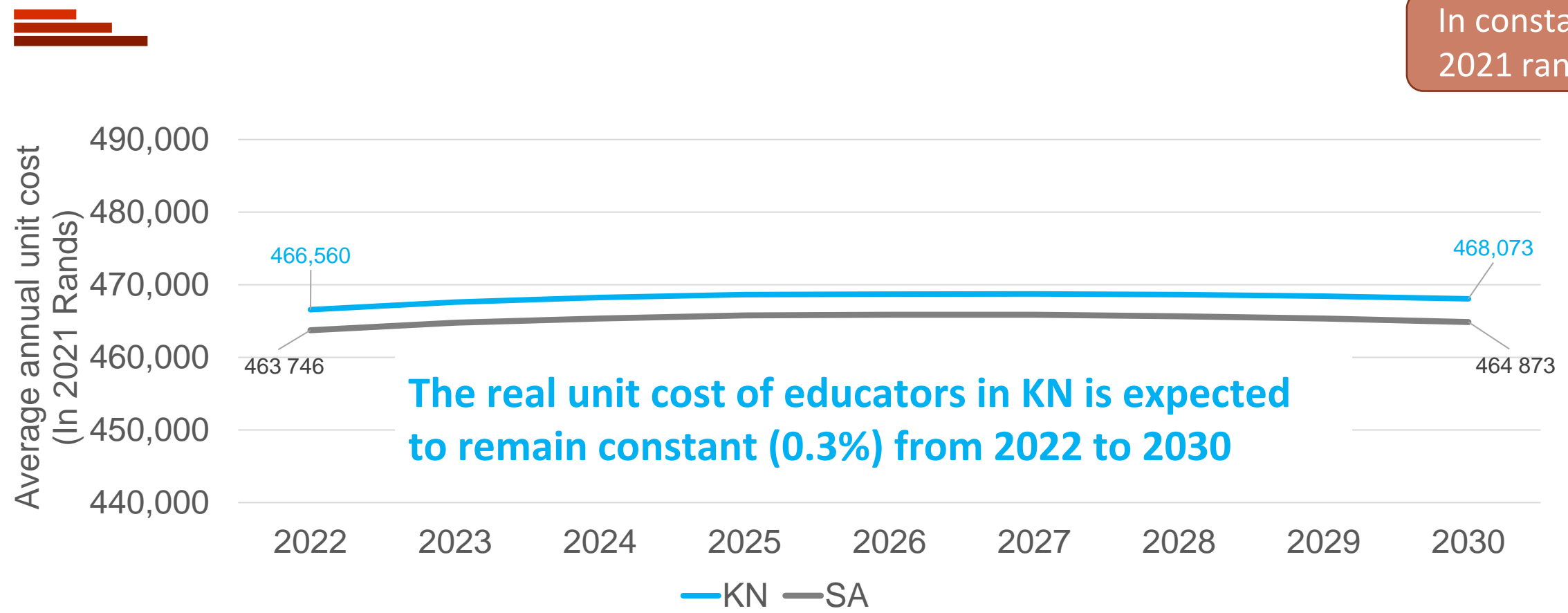
Two important assumptions:

- cost-of-living increases would be equal to, but not exceed consumer price inflation for the years 2022 – 2030
- Constant number educators from 2022-2030 → LE ratio unlikely to deteriorate given 1% decline expected in school-aged population in KZN
- Province-specific attrition considered

Educators in the model start at their 2021 notch values and these notch values are used to calculate their total compensation for the year. Educators are moved to a higher notch, with a value that is about 1.5% greater on an annual basis (notch progression).

Projected unit costs trends| All educators

In constant 2021 rands



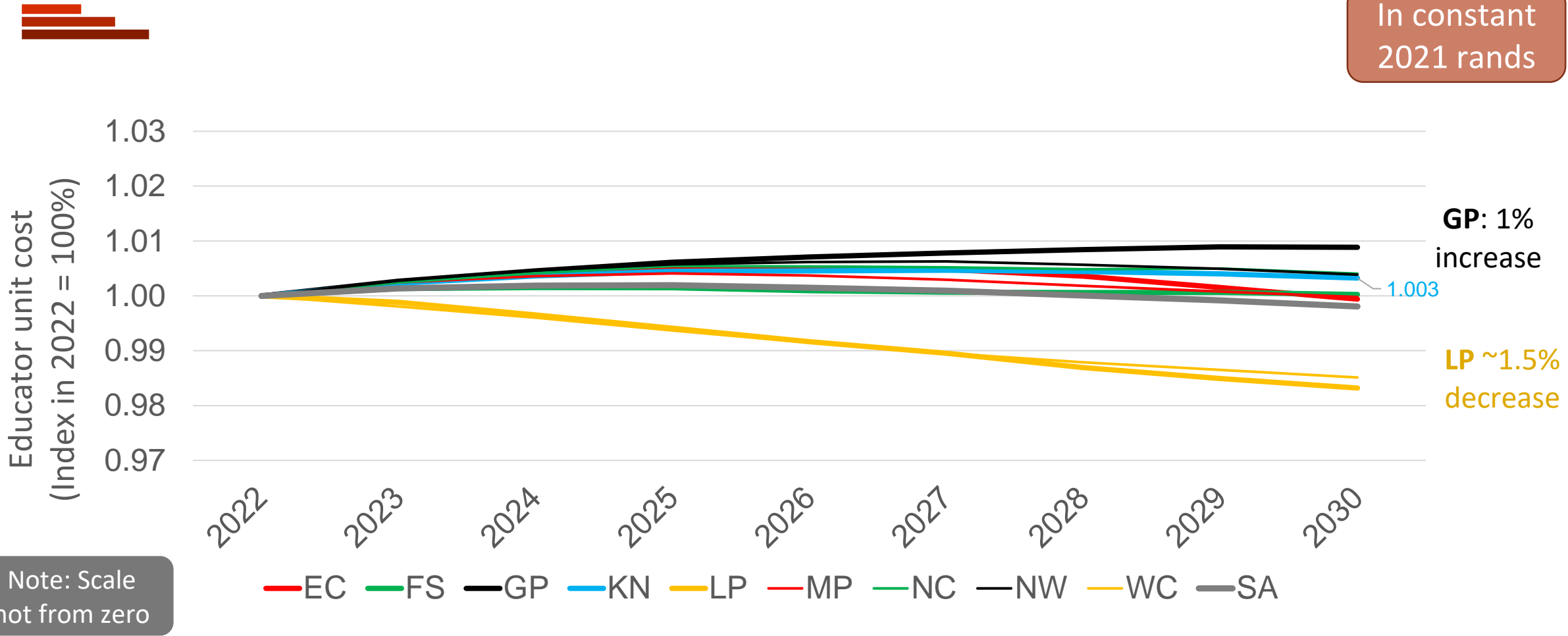
The real unit cost of educators in KN is expected to remain constant (0.3%) from 2022 to 2030

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

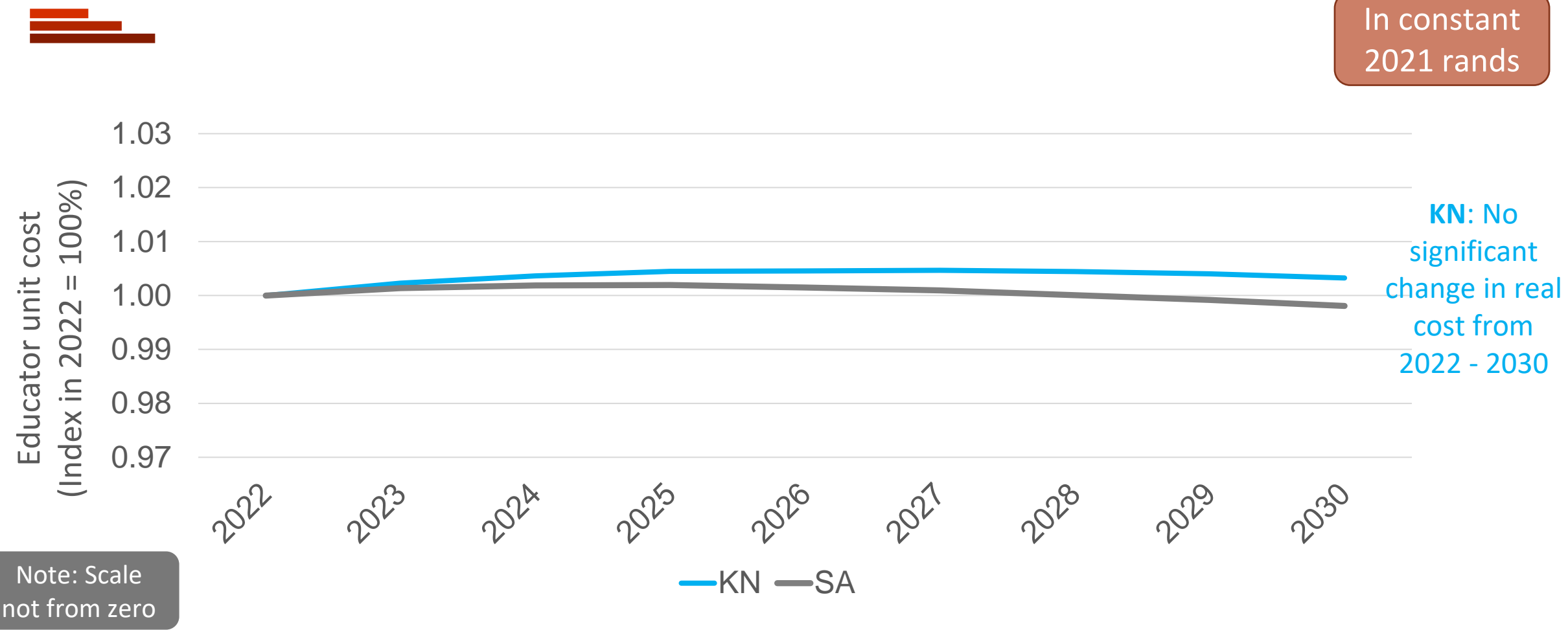


Note: Scale not from zero

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

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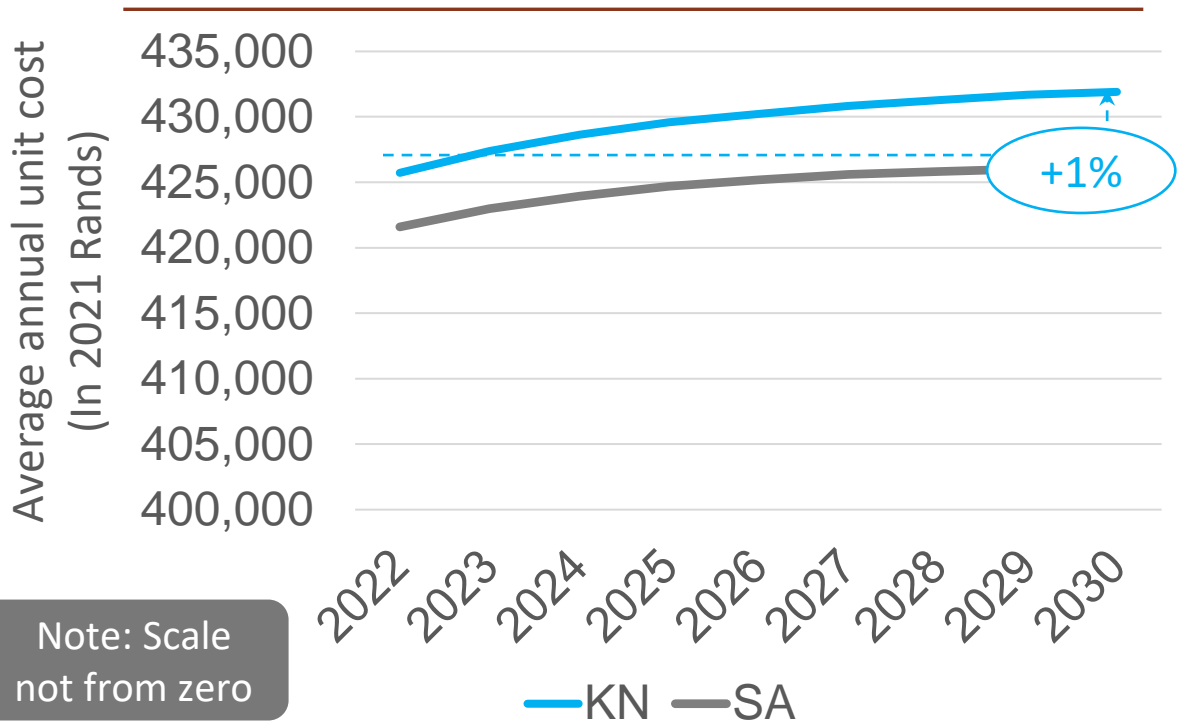
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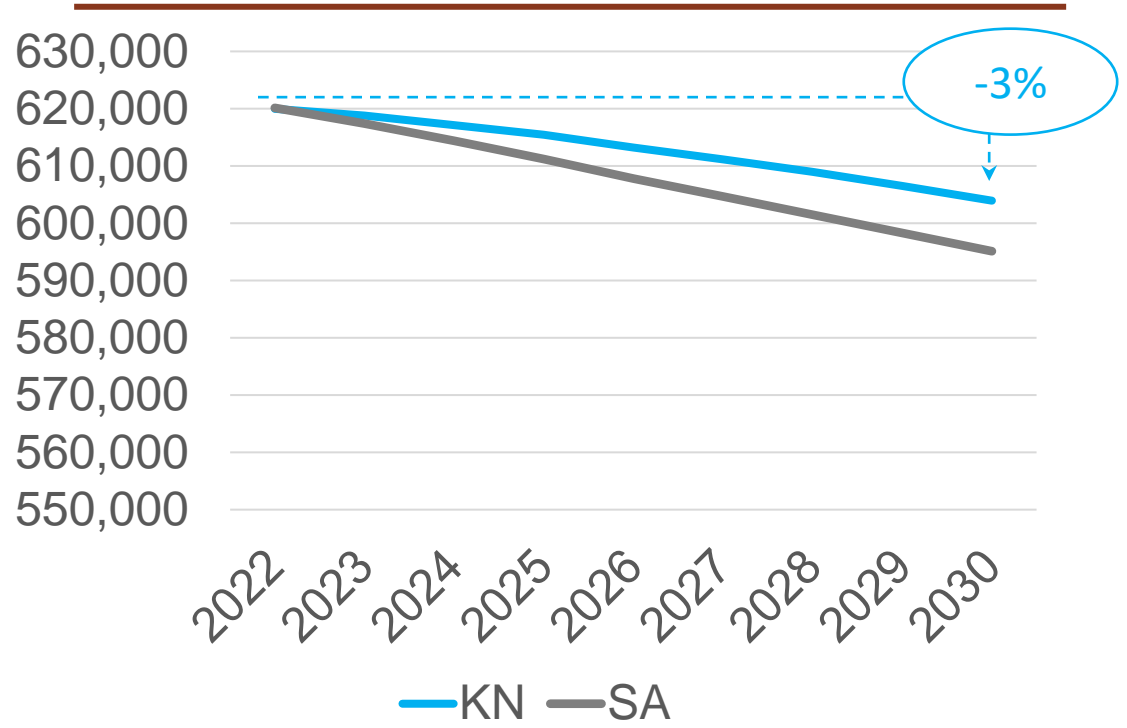
Projected unit costs trends| Teachers vs Senior educators

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.

Movement of educators: Between and within provinces

Main findings: Low movements into (<1%) and out (~2%) of KZN, educators are as likely to move to a different school (~4%) as they are to leave the system (~4%).

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 2018 and 2019 are considered here

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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%
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Low level of movement between provinces.

Few KZN teachers leave to go to another province: Only ~2% of KZN teachers in 2012 were teaching in a different province in 2019.

Educators are most likely to move to Gauteng.

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)

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KZN is not attracting many teachers from other provinces.

⇒ Hardly any educators moved to KZN (only 0.5% of educators in 2019 had come from another province)

The provinces that sent the highest number of educators were GP and the EC

Educator movement between schools over a year (2018-2019)

i.e. stay in same school

i.e. move schools

Exit public system

Pay point in 2019 (Ordinary schools only)

Province	Same as in 2018 (%)	Different to 2018 (%)	None - left system (%)	Total (%)
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

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.

Fair amount of educator movement **between** schools (within or across provinces):

⇒ about 4.3% of KZN educators (5.1% nationally) move to a different pay point but stay within PERSAL from 2018-2019

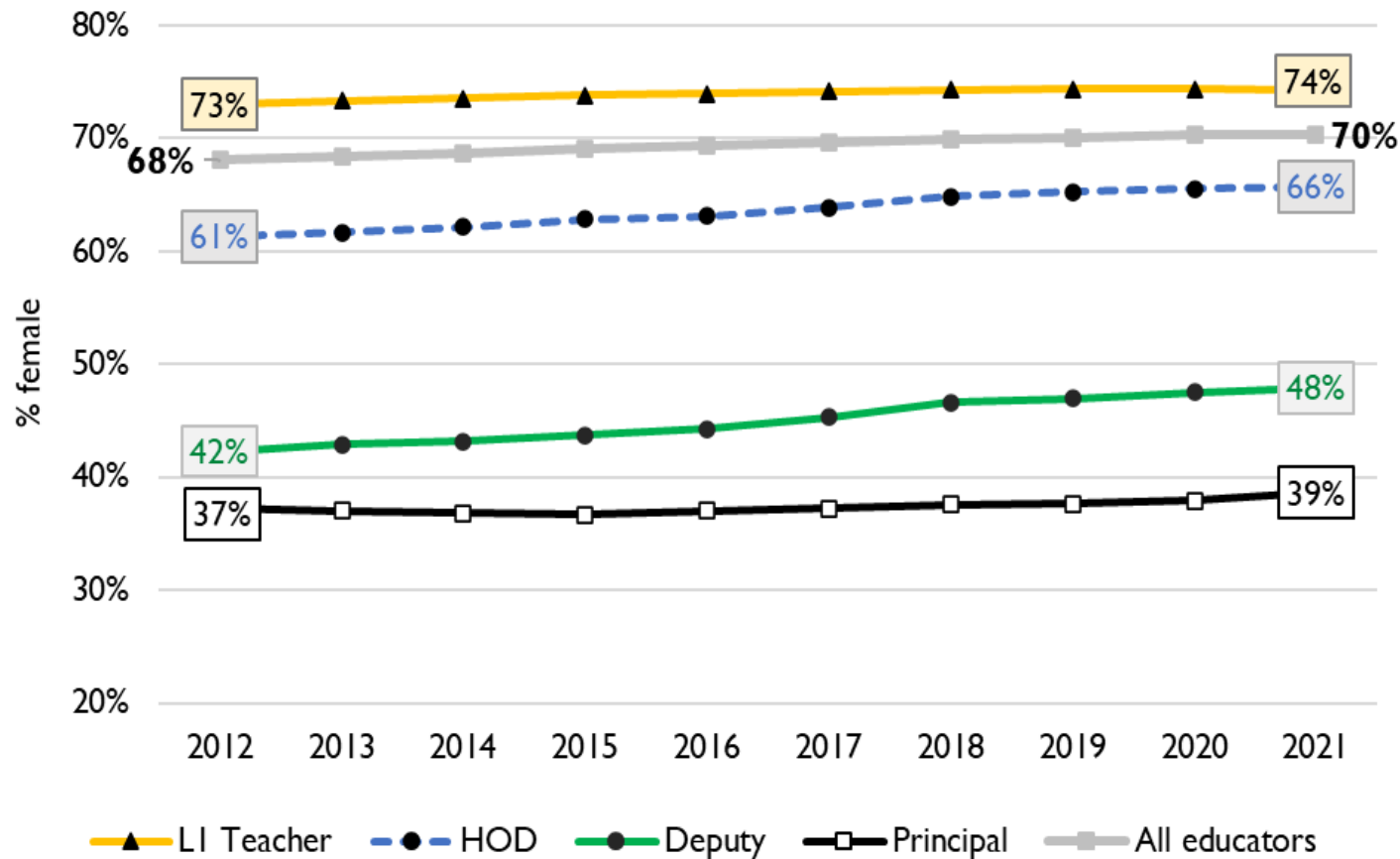
Rate at which KZN educators aged 50 and below (3.7%) leave the system is comparable to the national average (3.8%)

Gender and promotions

Main findings: Significant gender imbalance nationally and in KZN in promotion posts. Very little transformation in senior school leadership positions in more than a decade but improvements at middle-management level.

Percentage of educators that are female

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

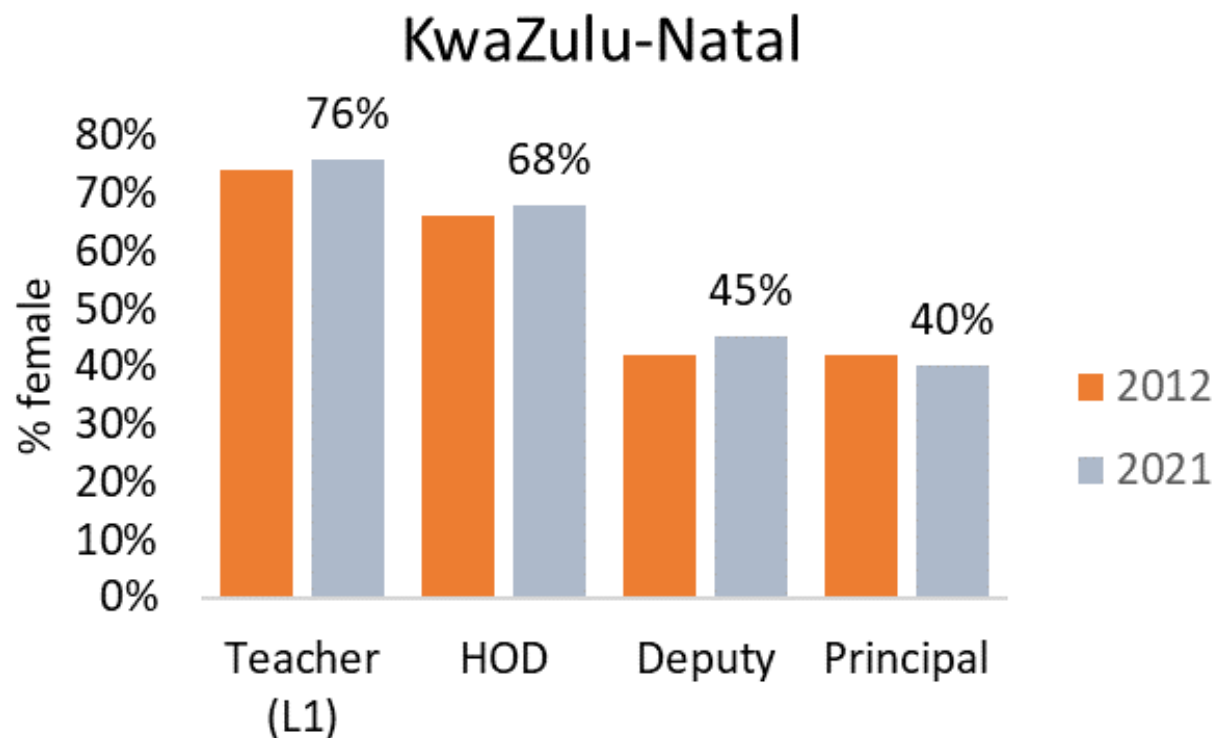


Nationally, very little transformation in senior leadership in terms of gender since 2012, and even back to 2004 (just 34% of principals were female).

More transformation at middle-management level.

In KZN in 2021, 72% of all educators are female yet only 45% of deputy principals are female & 40% of principals are female.

Percentage of educators that are female



In KwaZulu-Natal in 2021, 72% of all educators were women.

Women are underrepresented at all levels of management:

- 68% of HODs are women
- 45% of Deputies are women
- 40% of principals are women

Principal gender gap has *increased* from 28% in 2012 (70-42) to 32% (72-40) in 2021.



Small schools (a brief overview)

Small school closures planned in KZN



“KwaZulu-Natal’s Department of Education (DoE) plans to shut 255 small and non-viable schools – 70 high schools and 185 primary schools – during the 2023/24 financial year and 967 schools by 2028. These are schools with few learners.”
(10 May 2023)

Head of department Nkosinathi Ngcobo said: “We are looking at progressively closing the small schools. Currently, there are over 900 such schools in the province, starting with those with the lowest enrolment or those which are furthest from the threshold, let say of 135 and 200. ...in this financial year, the schools we are targeting have an enrolment of zero already
(09 May 2023)

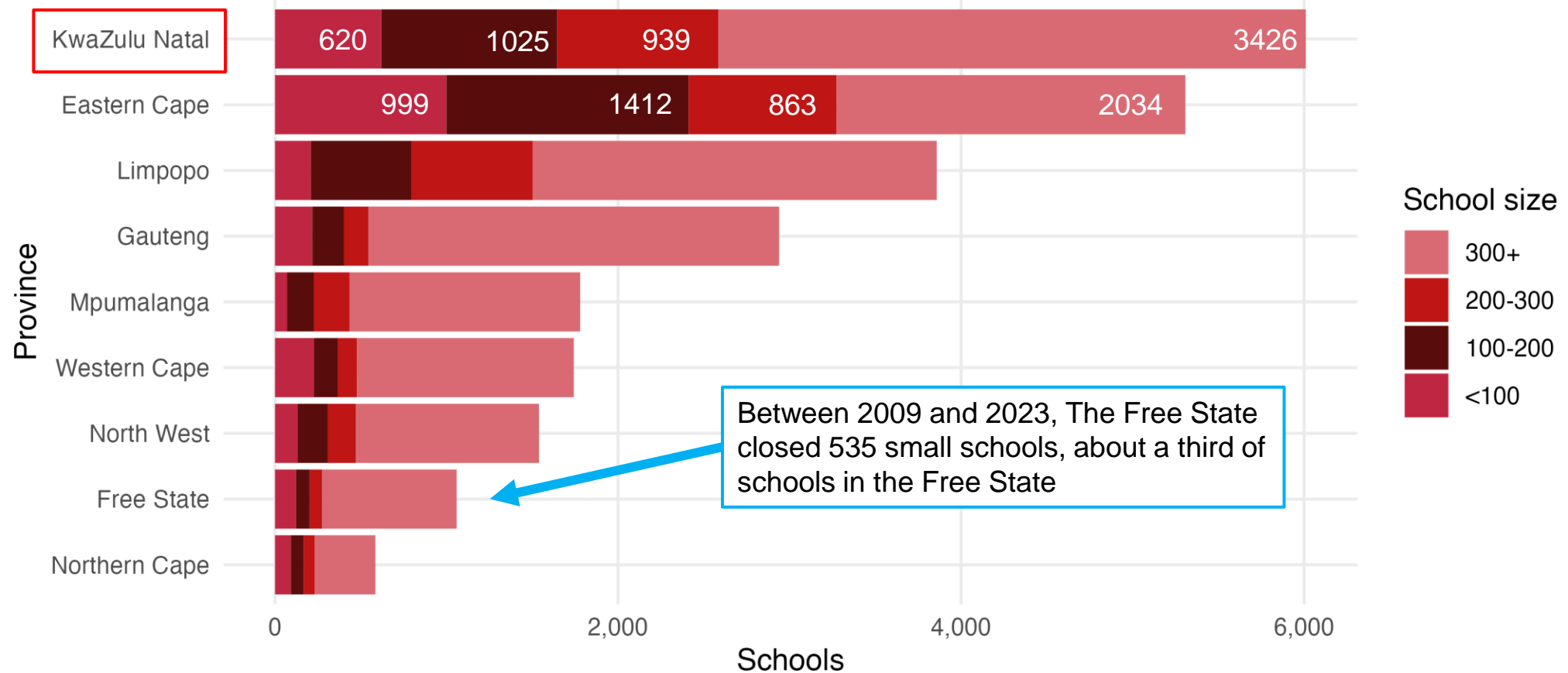
“Schools in urban areas as well as in the townships are much more developed than schools in rural areas. ... Some schools have been closed, but this thing of providing transportation has never happened. When they say 255 schools have got five or 10 learners that is not true,” says Khawula.
(08 May 2023)



News articles from: [KZN Education Department to close more than 900 schools by 2028 \(iol.co.za\)](https://www.iol.co.za/news/kwa-zulu-natal/education-department-to-close-more-than-900-schools-by-2028-2023-05-10) ;
[KwaZulu-Natal: 900 rural schools are facing closure \(sapeople.com\)](https://www.sapeople.com/news/kwa-zulu-natal-900-rural-schools-are-facing-closure-2023-05-09) ;
[ZN Education Dept plans to close over 900 rural schools - SABC News](https://www.sabcnews.com/news/2023-05-09/zn-education-dept-plans-to-close-over-900-rural-schools)

Small schools in KZN

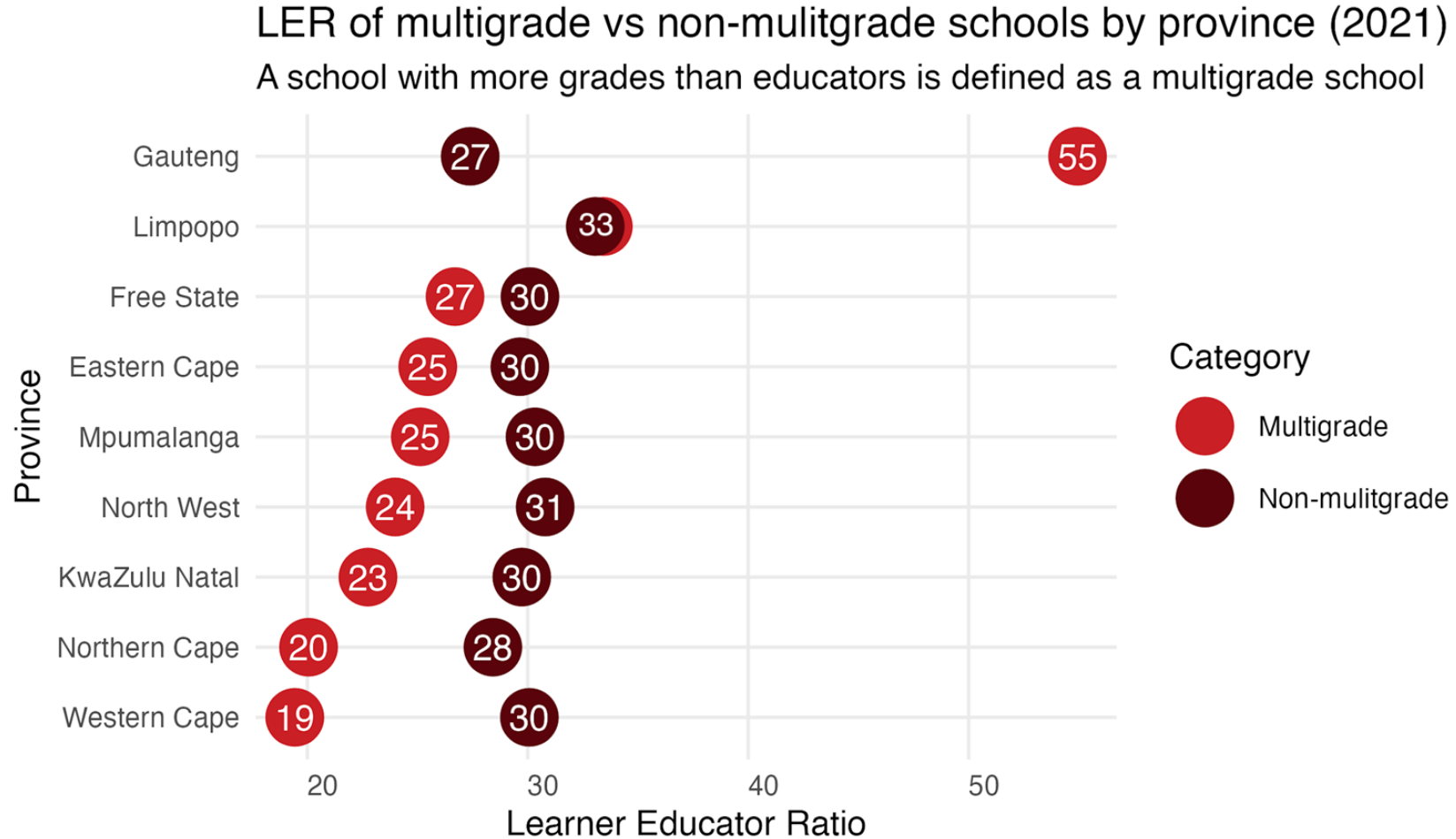
Count of schools by size by province (2021)



Between 2009 and 2023, The Free State closed 535 small schools, about a third of schools in the Free State

Data: Lurits & Masterlist 2021

Small schools in KZN



Data: Lurits & Masterlist 2021

Conclusion

- While KwaZulu-Natal will be *relatively* less affected by the retirement wave to 2035, the province accounts for a large number of retirees (including a large number of SMT and other specialist educators retiring by 2035)
 - ~65% of SMT(Principals, Deputies and HODs) are over 50 in 2021
 - Careful succession planning, efficient promotion processes, and good onboarding practices will be required to manage this transition as they retire
- KwaZulu-Natal's enrolment remains stable, with a slight decrease in educator and school-aged population numbers expected
- Some school rationalisation may be required in future. Currently planning to close a large number of schools (almost a 1 000) by 2030, this will need to be managed to ensure access is not affected
- Unit cost of educators are projected to stay roughly constant between 2022 & 2030

General questions and discussion

- School rationalisation: What factors influenced & informed the decision-making process and plans for school rationalisation (About 900 schools by 2028 (IOL))?
- What explains larger decline in principal numbers than number of schools that closed (2012-2021)?
- How did KZN manage the need for many new appointments in 2015 / 16 when there was a sudden spike in resignations due to pension rumors? - (A case study to prepare for 2030/1 peak in expected resignations?)
- Has gender equity in school management been a concern for KZN province?
What prevents women from applying/being selected into senior management?

Additional slide: Educator, school and enrolment growth

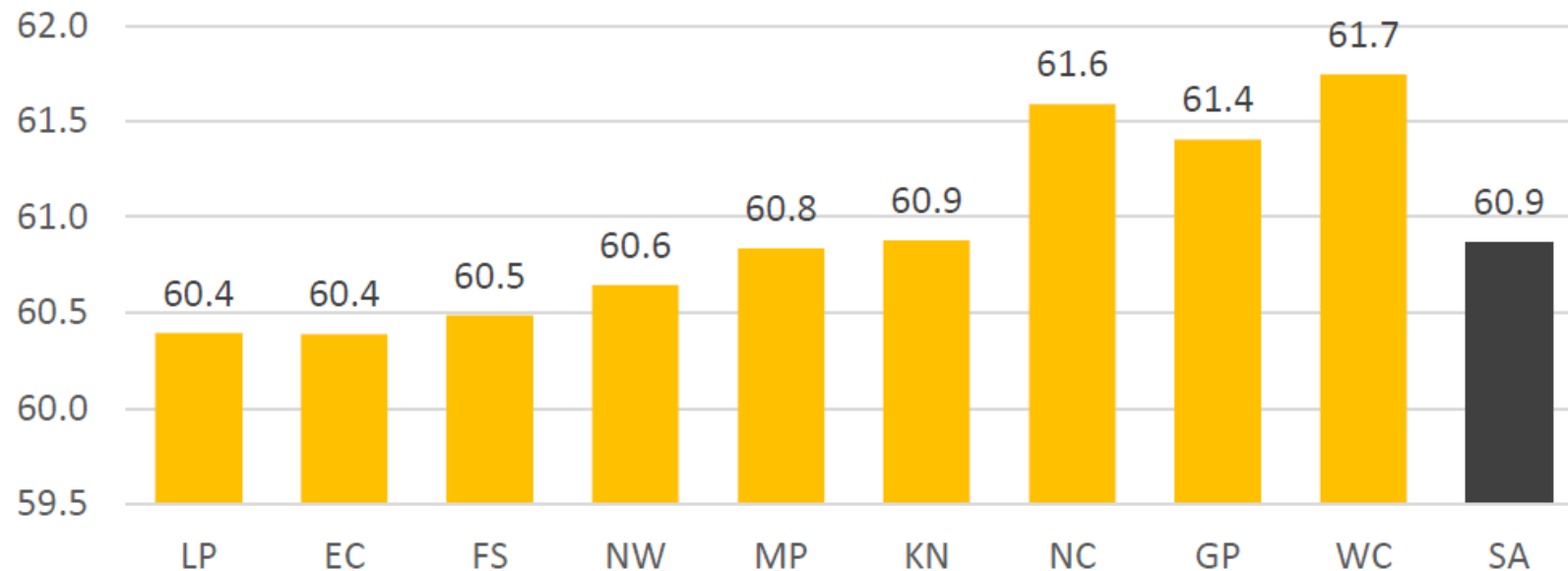
% growth from 2012 - 2021

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))

Additional slide: Average retirement age across provinces

Figure 6: Mean age at which educators from 2012-2014 cohorts leave due to age



Source: Own calculations, using the anonymised 10-year PERSAL dataset, only educators are considered. ECD practitioners, examination reviewers, ABET teachers and TVET lecturers have been removed.

Note: Included all educators in the analysis that were in the dataset at age 58 in the years 2012 - 2014. Age of retirement is set as the age of the educator in the last year in which they were observed in the PERSAL dataset.