Teacher demographics in South Africa: National and provincial insights

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September 2023





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## WHAT'S ALREADY PUBLISHED AND IN-THE-PIPELINE

2020 (released 2022): DHET's School teacher supply and demand in South Africa in 2019

**and beyond** Rudimentary demand projections **without** age-specific attrition but **with** specialisation-specific demand using **enrolment** approach.

2022: Initial Projections of educators by age and average cost to 2070

2023: **Provincial** educator demand projections for South Africa: 2021-2030

2023: Final Projections of educators by age and average cost to 2070 [accompanied

**by Excel tool]** Enhancements: New algorithm for converting joiners by age to first-time joiners; accounting for 'reserve pool'; link to GDP growth projections.

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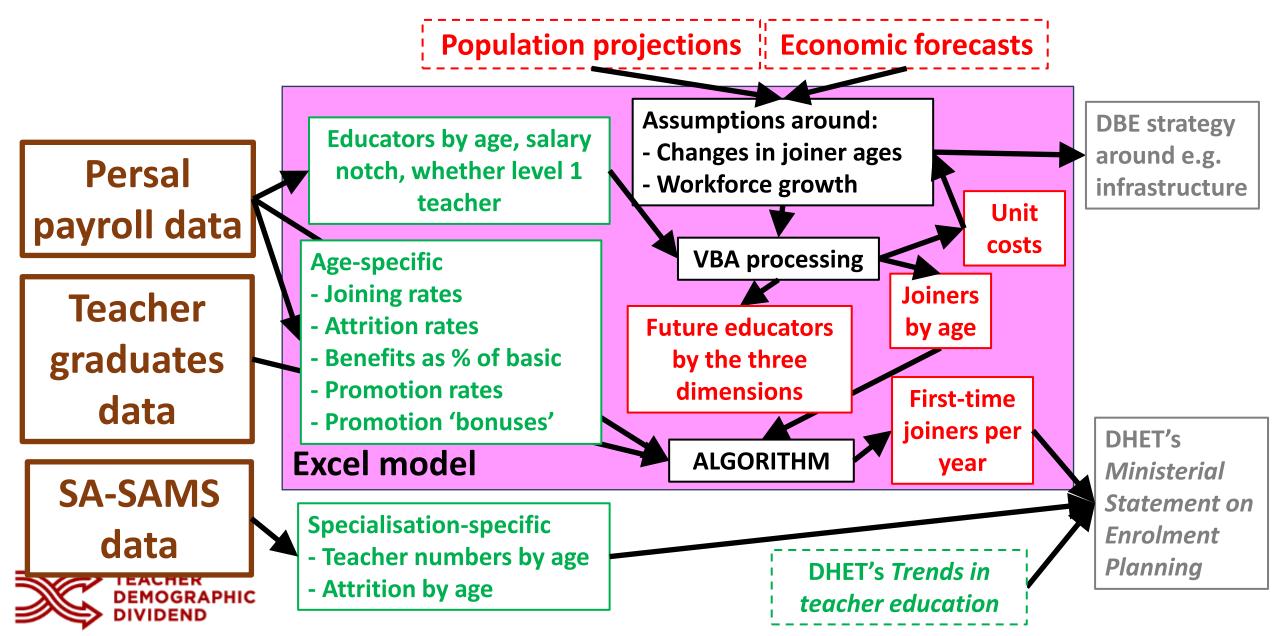
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2023: YouTube video: 'Demand and supply of teachers in South Africa (July 2023)'

**2023: New report on specialization-specific demand** 



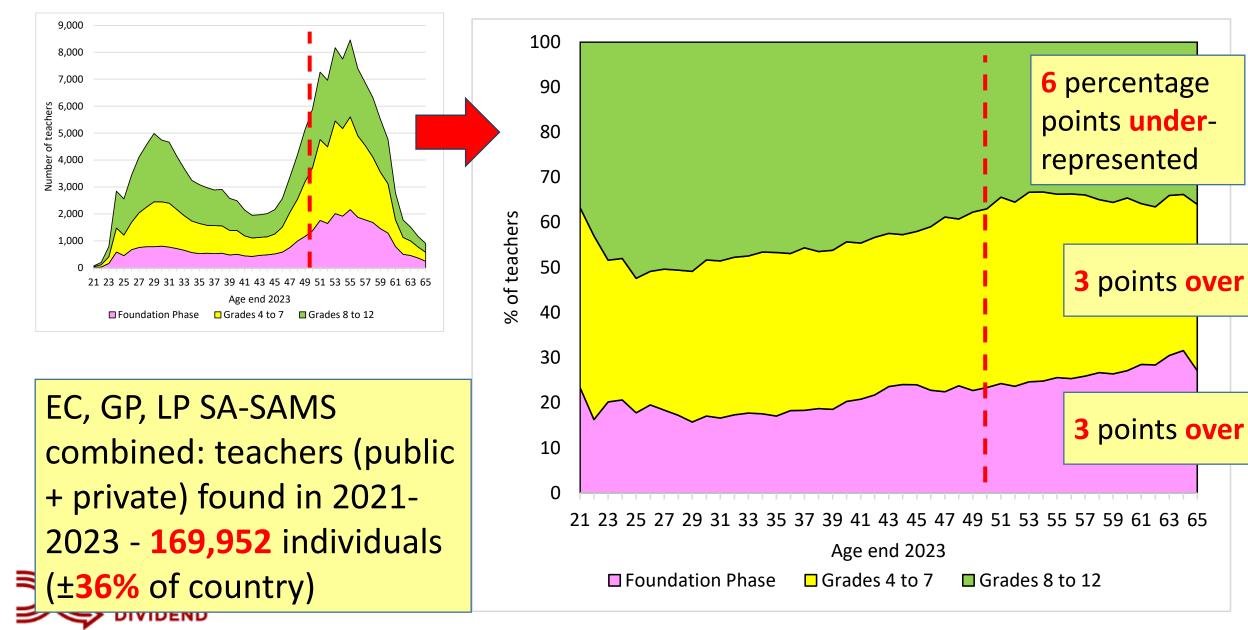
### FROM DATA TO ACTUALS TO FUTURE ESTIMATES TO POLICY



## FUTURE DEMAND, WORKFORCE SIZE AND THE ECONOMY

|  | Now                                     | 2030                     |                                 |                           |  |  |
|--|---|--------------------------|---------------------------------|---------------------------|--|--|
|  |   | Focus on LE (of<br>2011) | Keep LE at<br>present<br>levels | <b>Constant</b> educators |  |  |
| LE ratio (was <mark>27.4</mark> in 2011)       | 29.8                                    | → 27.4                   | <b>→</b> 29.8                   | 31.6                      |  |  |
| Total educators                                | 403 000                                 | 467 000                  | 428 000                         | <b>→</b> 403 000          |  |  |
| Newly graduated teachers                       | 31 000                                  | 40 000                   | 33 000                          | 28 000                    |  |  |
| Above-CPI annual CoL increase                  | <b>1.8</b> 2015-2019,<br>-2.5 2019-2023 | 0.0                      | 0.0                             | 0.0                       |  |  |
| Annual real % increase in unit cost 2022-2030  | <b>0.4%</b> 2011-2022                   | 0.0                      | 0.0                             | 0.1                       |  |  |
| Annual real % increase in total cost 2022-2030 | <b>0.8%</b> 2011-2022                   | 1.8                      | 0.8                             | 0.1                       |  |  |

#### **NEW SPECIALISATION-SPECIFIC DEMAND FIGURES**



#### **NEW SPECIALISATION-SPECIFIC DEMAND FIGURES (contd.)**

Supply over demand

- Foundation: **0.86**
- Grades 4 to 7: 0.79
- Grades 8 to 12: 2.34

3 advantages over enrolmentbased approach:

- Takes into account subjectspecific LE ratios.
- Takes into account age.
- If data good enough, subject-specific attrition rates.

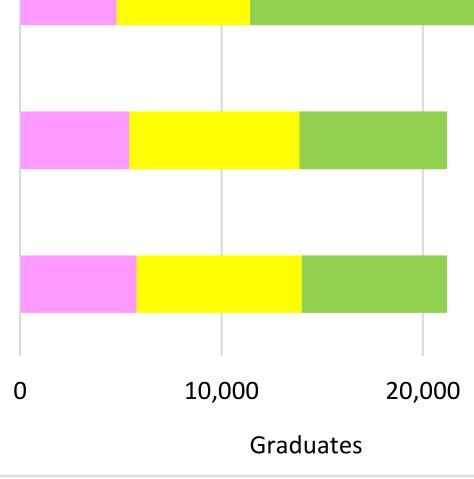
public and private HEIs (DHET) Demand: 2022 ages 50-65 in EC, GP, LP (SA-SAMS)

Supply: 2019 graduates

Demand: 2022 enrolment-based (DHET 2020 report breakdowns) Foundation Phase Grades 4 to 7

Grades 8 to 12

DIVIDEND



#### **NEW SPECIALISATION-SPECIFIC DEMAND FIGURES (contd.)**

|                                  |                  |          |      | Older | - |                             |
|----------------------------------|------------------|----------|------|-------|---|-----------------------------|
| Subject                          |                  | Teachers | %    | diff. |   |                             |
| Mathematics                      |                  | 19,747   | 44.1 | -2.0  |   | E.g. there are an estimated |
| Life Orientation                 |                  | 17,073   | 12.2 | 1.2   |   | 20,000 secondary-level      |
| History                          |                  | 13,172   | 9.4  | 2.4   |   | mathematics teachers in the |
| Life Sciences                    |                  | 13,167   | 9.4  | 0.1   |   | country                     |
| <b>Physical Sciences</b>         |                  | 11,311   | 8.1  | -1.4  |   | •                           |
| Mathematical Literacy            |                  | 8,984    | 6.4  | 0.0   |   |                             |
| Geography                        |                  | 7,868    | 5.6  | 1.2   |   | Red positive means more     |
| Business Studies                 |                  | 7,651    | 5.5  | -0.2  |   | likely to be older.         |
| Creative Arts                    | 16 subjects here | 6,926    | 5.0  | 0.6   |   |                             |
| Accounting                       | account for 95%  | 6,461    | 4.6  | -0.5  |   |                             |
| Economics                        | of non-language  | 6,170    | 4.4  | -0.2  |   |                             |
| Agriculture                      | teaching demand. | 4,525    | 3.2  | 0.2   |   |                             |
| Tourism                          |                  | 3,697    | 2.6  | -0.2  |   |                             |
| Computer Applications Technology |                  | 2,224    | 1.6  | -0.5  |   |                             |
| Engineering Graphics and Design  |                  | 1,871    | 1.3  | -0.2  |   |                             |
| Consumer Studies                 |                  | 1,197    | 0.9  | 0.1   |   |                             |
| DIVIDEND                         |                  |          |      |       |   |                             |