

# Department of Economics, University of Stellenbosch

# Increasing the supply of teacher graduates

Hendrik van Broekhuizen\*

# RESEP Policy Brief

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The findings in this policy brief are based on a working paper in which I analysed initial teacher training enrolment and graduation data from the 2004–2013 HEMIS (Higher Education Management Information System) database.<sup>1</sup> HEMIS records data on all students at South African public universities, including initial teacher education training programme enrolments and graduations.<sup>2</sup>

# 1. A critical teacher shortage

Teachers are the backbone of any schooling system. But South Africa is currently short of teachers, particularly of adequately qualified and competent teachers, and crucially short in mathematics and the physical sciences. These shortages prevent the country from achieving its educational goals and cause learners to do badly in many parts of the schooling system.

\* RESEP, Department of Economics, Stellenbosch University

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<sup>1</sup> Van Broekhuizen, H., 'Teacher supply in South Africa: A focus on initial teacher education graduate production', Stellenbosch Working Paper Series No. WP07/2015. www.ekon.sun.ac.za/wpapers/2015/ wp072015

<sup>2</sup> Teacher education programmes are of two broad types: Initial Teacher Education (ITE) and Continuing Professional Teacher Development (CPTD). ITE is the basic qualification for specific phases and/or subjects for a first teaching post. CPTD improves the teaching capacity of unqualified or underqualified existing teachers. Qualifications that further enhance and refine the teaching capacity of qualified teachers also fall under CPTD.

Ensuring an adequate supply of qualified teachers is a logical and vital policy objective. To achieve this objective we first need to understand the scale of the teacher shortages and how current trends in the production of new teachers affect the supply of qualified teachers to the schooling system.

### 2. How many new teachers does South Africa need?

South Africa's teacher shortages are partly the result of too many teachers leaving the schooling system and too few new ones entering the profession. The public schooling system needs between 20,000 and 30,000 new teachers each year just to replace the teachers leaving the system and maintain current teacher-pupil ratios.

In recent years the number of qualified teachers entering the system has consistently been below 20,000. And more than half of them are returning teachers who had left the profession. Less than half are first-time new teachers who have recently completed their initial teacher training programmes at university.

To ensure that South Africa's schools are supplied with the number of teachers they need, and in the requisite subject areas, the higher education system must produce enough suitably qualified teacher graduates. Analysis of the 2004–2013 HEMIS data reveals the main trends in new enrolments and graduations in initial teacher training programmes at South Africa's 23 public universities as well as the factors that might explain these trends.

# 3. Is the higher education system producing enough teacher graduates?

Figure 1 shows that despite a rapid increase in graduations from initial teacher training programmes between 2008 and 2013, in 2013 the public higher education system produced only 50% more initial teacher training graduates than in 2004 – about 15,650. This means that South Africa is currently still not producing enough teacher graduates to satisfy the demand. In fact, even if all the new teacher graduates produced between 2004 and 2013, about 92,500, had gained employment as teachers immediately after graduating, this would still not have been sufficient to fill all the posts over the period.

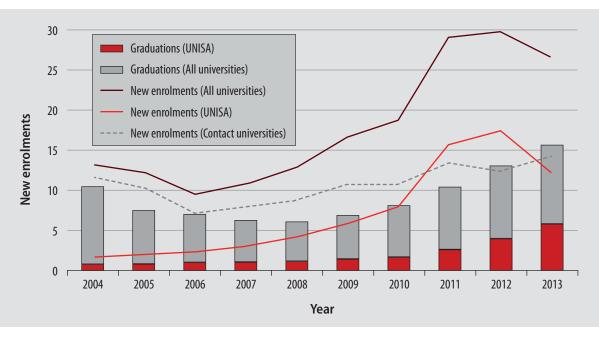


FIGURE 1: New enrolments and graduations in initial teacher training programmes

## 4. Are enough students enrolling in initial teacher training programmes?

New enrolments in these programmes at public universities have increased markedly over the past decade, effectively doubling between 2004 and 2013, as Figure 1 shows. While this trend is encouraging, present levels of enrolment are not. Even if all the teacher training students who are expected to enter initial teacher training programmes over the next three to five years successfully complete their programmes this would only just cover the annual demand for new teachers (using a conservative estimate of teacher demand). Of course, it is by no means the case that all teacher training students successfully complete their programmes.

# 5. How many teacher training students successfully complete their programmes?

Two major obstacles to teacher graduate production are the high dropout rate and the fact that many students take longer than they should to graduate. Table 1 shows that low levels of programme throughput are a problem throughout the higher education system, and particularly at UNISA.<sup>3</sup>

TABLE 1: Percentage of students who graduate, and number of years taken (2004–2013)

	Bachelor of Education Degree			Postgraduate Certificate in Education		
	4 years	5 years	6 years	1 year	2 years	3 years
UNISA	7%	15%	21%	12%	38%	56%
Contact universities	39%	45%	46%	42%	60%	63%
All universities	32%	38%	41%	31%	52%	60%

Notes: The BEd is an undergraduate initial teacher training programme requiring a minimum of four years' study; the PGCE is a postgraduate initial teacher training programme requiring a minimum of one year's study.

Initial teacher training students at UNISA have far lower and much slower programme completion rates than those at contact universities. It is important to bear in mind that the students who enrol at UNISA are likely to be different from those who enrol at contact institutions since many UNISA students are only part-time students. This has major implications for the production of new teacher graduates since much of the increase in new enrolments in initial teacher training programmes since 2004 has been concentrated at UNISA. UNISA accounted for only 22% of all new enrolments in initial teacher training programmes in the public higher education system between 2004 and 2008, but over 48% of such enrolments between 2008 and 2013. UNISA is playing an increasingly important role in the teacher training landscape. But unless the level and pace of throughput at this institution are improved, it is unlikely that the increasing rate of enrolment in its teacher training programmes will be reflected in an increasing rate of production of new teacher graduates.

# 6. How many new teacher graduates become teachers?

Data on the production of new teacher graduates and data on the employment of new teachers are not integrated but are separate databases. This makes it difficult to say precisely how many new teacher graduates obtain employment as teachers after graduating. It is common knowledge, however, that a substantial proportion of new teacher graduates do not become first-time teachers after graduating.

<sup>3</sup> The University of South Africa is a distance-learning university and the largest higher education institution in the country.

Many new teacher graduates are existing teachers who choose to upgrade their teaching qualifications. Some studies<sup>4</sup> have found that a substantial proportion of teacher training students do not plan on becoming teachers in South African schools or, if they do, only seek employment in a school some years after completing their studies. There is also evidence to suggest that some new teacher graduates struggle to find employment as teachers after graduating.<sup>5</sup> All these factors whittle down the already insufficient number of graduates who could be added to the stock of qualified teachers.

The gap can be clearly seen in the statistics. The number of new first-time teacher appointments in the public schooling system in recent years has consistently been far lower than the number of new teacher graduates produced over the period.

### 7. What must be done?

To make up the shortfall in South Africa's teacher supply we need policy interventions that complement the drive to increase enrolments in teacher training programmes with other methods, such as ensuring that students complete their programmes, specialise in high-demand subject areas and phases (e.g. the Foundation Phase, grades 1 to 3), move into the teaching profession with minimal delays and stay in the school system for longer. On the basis of my research I offer the following four policy recommendations:

#### Focus on UNISA

The fact that UNISA plays an increasingly prominent role in teacher training in South Africa implies that any intervention aiming to increase the production of new teachers substantially must look at the number of new enrolments in UNISA teacher training programmes and the quality of these programmes.

### Promote the teaching profession

Policies aimed at increasing teacher supply tend to focus primarily on recruitment into teacher training programmes. Yet it is evident that not all students who enrol in the programmes intend to become teachers. Efforts should be made to increase the attractiveness of the teaching profession rather than just increasing the attractiveness of teacher training programmes. This requires active promotion of teaching as a vocation and raising the status of the teaching profession in South Africa.

### Increase the absorption of new teacher graduates

Given the urgent need for more teachers, it is disconcerting to find that some new teacher graduates struggle to find employment in the schooling system. There appears to be a matching problem, where we have both excess supply (teachers who cannot find employment) and excess demand (many vacancies at schools). To avoid further erosion of the stock of qualified teachers in South African schools, it is essential that new teacher graduates are absorbed into teaching posts with minimal delay.

### Expand targeted funding for African-language teaching students

HEMIS data show that the higher education system is still producing only a small fraction of the number of African-language teacher graduates needed in the system. Urgent intervention is necessary to remedy the situation. To increase the number of African-language teachers, particularly for the Foundation Phase, it may be necessary to expand the funding opportunities available specifically to African-language students who enrol in Foundation Phase initial teacher training programmes.

<sup>4</sup> See for example: CDE Value in the classroom: The Quantity and Quality of South Africa's Teachers, Johannesburg: Centre for Development and Enterprise, 2011. www.cde.org.za/wp-content/uploads/2012/12/VALUE\_IN\_THE\_CLASSROOM\_full\_report.pdf

<sup>5</sup> See for example: Integrated Strategic Planning Framework for Teacher Education and Development in South Africa 2011–2025, Pretoria: Department of Basic Education (DBE) and Department of Higher Education and Training (DHET), 2011.