

# How well have teacher supply and demand been aligned in recent years? Looking below the aggregates at the specialisation of teachers

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Despite fears some years back that aggregate teacher supply would be insufficient to deal with a bulge of teachers reaching retirement, increases in the output by universities of teacher graduates point to demand roughly being met. However, new analysis points to concerning supply-demand mismatches when it comes to specialisation in terms of: (a) school level; (b) skills across the official languages among teachers trained for the primary level; and (c) subject specialisation among teachers trained for the secondary level. With respect to school level, around twice as many secondary-level teachers as are required have been graduating, resulting in a situation where many of these teachers end up teaching at the upper primary level, though few end up in the Foundation Phase. The latter is fortunate, given that secondary teachers are unlikely to have the specialised skills needed, for instance, to advance early grade reading, a national priority. With respect Foundation Phase languages, the output of teachers for this level fluent in one of the nine indigenous African languages is around half of what it should be. Moreover, even where fluency is present, the evidence suggests teachers are not sufficiently trained to use the language in the classroom, including in the mathematics class. With respect to subject specialisation among secondary teachers, the output of specialists in the critical subject of mathematics is more or less sufficient, while there is a clear oversupply of teachers with a humanities specialisation. It is noteworthy that at least a half of teacher graduates emerge from distance education programmes. While this may not be too problematic for secondary school teachers, the question is whether Foundation Phase teachers, who require special human interaction skills, would be adequately trained if from a distance education background.

#### IS SUPPLY MEETING DEMAND AT THE AGGREGATE LEVEL?

The wave of teacher retirements over the coming decade<sup>1</sup>, alongside the expected increases in learner enrolment, means that many more qualified teachers will be needed to at least maintain the current teacher numbers. Recent modelling of educator demand, which considers various scenarios, indicates that the total number of new graduates that would need to be produced by universities will range between 28 319 and 46 489 in 2030, depending on the assumptions made around learner-educator (LE) ratios, attrition rates, improvements in survival to grade 12 and how well the economy is doing<sup>2</sup>. Given that in recent years universities have responded well to the pressure to train more teachers, there is less of a concern that they will be unable to meet the needs of the system. For instance between 2010 and 2019 universities managed to triple the number of Initial Teacher Education (ITE) graduates from about 9 000 to 28 000 per year<sup>3</sup>. Additionally, according to the Department of Higher Education's 2022/23 and 2023/24 annual performance plans, the target for ITE graduates is 30 000 by 2024 and 33 094 by 2025<sup>4</sup>. The schooling system is, however, facing challenges with absorbing these increases in teacher graduates, primarily due to budget constraints. The implications of these budget constraints can be seen by the decline in the number of teacher graduates who were hired into the public schooling system between 2014 and 2021. In contrast to 85% of teacher graduates who moved into public employment in 2014, only 60% were being absorbed into the system in 2021<sup>5</sup>.

In short, at the aggregate level the supply of new teacher graduates by universities more or less meets the demand of the schooling system. However, while concerns around universities' capacity to train enough teachers to respond to the incoming retirement wave have been allayed, budget constraints being faced by provincial education departments make it difficult for new teacher graduates to be absorbed into the system.

# WHAT ARE THE KEY SPECIALISATIONS TO CONSIDER IN THE SOUTH AFRICAN CONTEXT?

Section 12 of the Revised Policy on the Minimum Requirements for Teacher Education Qualifications (MRTEQ) outlines the teacher specialisation requirements for the three school phases and the subjects that prospective teachers may be trained to teach during their studies at university. Specialisation at the Foundation Phase (FP) (grades R-3) means that prospective teachers specialise in home language teaching in one of the official languages, where they are expected to teach the entire phase and all subjects<sup>6</sup>. Prospective Intermediate Phase (IP) (grades 4–7)<sup>7</sup> teachers are required to specialise in at least four subjects that are specific to the IP phase. They are required to specialise in two languages (HL and FAL teaching) and at least two non-language subjects. However, even if they choose to specialise in a few non-language subjects, they are expected to be able to teach all of the content subjects in the IP curriculum<sup>8</sup>.

An additional requirement for prospective FP and IP teachers who do not specialise in home language teaching in one of the nine indigenous African languages and who do not have an African language as their FAL, is that they must also study an African language at a basic conversational level<sup>9</sup>. The aim of this requirement is to empower the nine indigenous African languages and to foster "multilingualism and intercultural communication"<sup>10</sup>.

<sup>1</sup> By 2030, 34% of all government-employed educators that were part of the teacher workforce in 2021 would have left the schooling system due to age and by 2035, about 54% would have left (Gustafsson, 2023).

<sup>2</sup> Gustafsson, 2023: 60–62.

<sup>3</sup> Böhmer and Pampallis, 2022.

<sup>4</sup> Department of Higher Education and Training, 2022; Department of Higher Education and Training, 2023.

<sup>5</sup> Gustafsson, 2023:41.

<sup>6</sup> Department of Higher Education and Training, 2015:24.

<sup>7</sup> The Intermediate Phase (IP) here refers to grades 4–7 in terms of the teacher training policy, MRTEQ, as opposed to grades 4–6 in terms of the national curriculum.

<sup>8</sup> Department of Higher Education and Training, 2015:24.

<sup>9</sup> Department of Higher Education and Training, 2015:24–25.

<sup>10</sup> Department of Higher Education and Training, 2015:64.

At the Senior and Further Education and Training phase (grades 8–12)<sup>11</sup> prospective teachers are required to specialise in two subjects, where at least one subject is a FET subject<sup>12</sup>. While all universities follow the rules outlined in the national policy on teacher specialisation, the subject combinations available for prospective teachers to choose from may vary from one university to another<sup>13</sup>.

#### WHAT DATA DO WE HAVE AND WHAT ARE THE DATA GAPS?

The South African School Administration Management System (SA-SAMS), which is maintained by the Department of Basic Education (DBE), contains data on both learners and educators<sup>14</sup>. Schools are responsible for capturing and updating the data on SA-SAMS before submitting it to their respective districts for collation and uploading it onto the provincial data warehouse<sup>15</sup>. SA-SAMS data is used to generate the Learner Unit Record Information Tracking System (LURITS) data, which is a national dataset that allows for learners to be tracked over time, such as their movement between schools and across different provinces<sup>16</sup>. Additionally, the Data Driven District (DDD) initiative relies on SA-SAMS as its main source of data, where the SA-SAMS data feeds a dataquerying portal that is intended to assist district officials with their administrative, management and governance needs<sup>17</sup>. More than 92% of public schools in the country are using SA-SAMS, with coverage exceeding 97% in six provinces<sup>18</sup>.

Until recently, studies that have used SA-SAMS, LURITS, and DDD data in their analyses have mostly focused on issues relating to data quality, learner progression, repetition and school drop-out rates, with little attention being paid to educator data<sup>19</sup>. For the first time, a new study examining educator data from SA-SAMS for the Eastern Cape, Gauteng, and Limpopo, sheds light on the specific grades and subjects that teachers teach<sup>20</sup>. This is a key contribution as it helps answer questions such as "How many teachers teach mathematics?", which is crucial for ensuring effective educators aged 55 years and older, including those in promotion posts, are underrepresented in the SA-SAMS data, which has implications for accurately calculating educator attrition rates and identifying where the specialisation needs are<sup>22</sup>.

In a more recent study that sought to understand teaching patterns, the analysis focusing on teacher specialisation is extended further by also considering the subjects that the 2018 teacher graduates were trained to teach during their studies and the ones they ended up teaching once they were employed in the public schooling system in 2022<sup>23</sup>. The data that is used for this analysis is the 2018 DHET teacher graduate data, which has been linked to the 2022 SA-SAMS data of Eastern Cape, Gauteng and Limpopo<sup>24</sup>. The drawback, however, is that owing to this linking exercise, the analysis excludes privately paid educators even though SA-SAMS does include data on them.

Although the Personnel Administrative and Salary (PERSAL) system is generally efficient and is also capable of capturing the subjects taught by teachers, its focus has mainly been on collecting information related to pay<sup>25</sup>.

<sup>11</sup> The Senior Phase (SP) here refers to grades 8–9 in terms of the teacher training policy, MRTEQ, as opposed to grades 7-9 in terms of the national curriculum, and the FET phase refers to grades 10 to 12.

<sup>12</sup> Department of Higher Education and Training, 2015:25.

<sup>13</sup> Department of Higher Education and Training, 2015; Department of Higher Education and Training, 2020.

<sup>14</sup> Van der Berg et al, 2023.

<sup>15</sup> Ibid.

<sup>16</sup> Ibid.

<sup>17</sup> https://www.home.dbedashboard.co.za; Van der Berg et al, 2023.

<sup>18</sup> Van der Berg et al, 2023:39.

<sup>19</sup> Van der Berg et al, 2019; Van der Berg et al, 2020.

<sup>20</sup> Van der Berg et al, 2023.

<sup>21</sup> Ibid.

<sup>22</sup> Van der Berg et al, 2023:44–45.

<sup>23</sup> Gustafsson, 2025.

<sup>24</sup> Ibid.

<sup>25</sup> Department of Higher Education and Training, 2020; Van der Berg et al, 2023.

In summary, SA-SAMS is a rich administrative dataset that can be used to analyse issues beyond those related to learners. As shown by two recent studies, educator data from SA-SAMS can, for instance, be analysed to provide insights into teacher specialisation in various subjects and phases across different provinces. Furthermore, by linking SA-SAMS data with DHET teacher graduate data, insights into what teachers were trained to teach and the extent to which it is aligned with what they end up teaching can also be obtained. While there are data gaps, such as the fact that there is an under representation of older educators and those not permanently employed in SA-SAMS, the aforementioned studies highlight the "significance of SA-SAMS and how it can be strategically used to improve education planning and system-wide monitoring".

# ARE WE GRADUATING ENOUGH TEACHERS FOR EACH OF THE THREE LEVELS OF SCHOOLING?

At the aggregate level, universities produced 4 174 foundation phase teacher graduates in 2018, which is about 54% of the estimated demand of 7 709 foundation phase teachers in 2019<sup>26</sup>. Owing mainly to budget constraints faced by the schooling sector, only about 55% of the 4 174 graduates had found employment as teachers in the public system by 2022<sup>27</sup>. In 2018, universities produced 5 627 teacher graduates who were trained to teach at the upper primary school level (grades 4 to 7), which translates to about half of the estimated demand. About 2 660, or 47% of these graduates, were employed in the public schooling system by 2022<sup>28</sup>.

In contrast to the undersupply at the primary schooling level, at the aggregate level, the number of teacher graduates trained by universities to be secondary teachers in 2018 was double what was demanded in 2019. Additionally, of the 14 949 graduates that were trained for the secondary level, 7 449 or about 50% of them were employed in the public schooling system by 2022<sup>29</sup>.

Figure 1 and 2 below report the 2020 teacher graduates by phase<sup>30</sup> specialisation and university<sup>31</sup>. Figure 1 shows that the 2020 teacher graduates output numbers for the 22 universities (see figure 2 for the universities considered) were higher for those who were trained to teach at the secondary level (13 419 graduates) than those trained to teach at the lower primary school (2 694 graduates) and upper primary school level (2 444 graduates). As shown in figure 2, 17 out of 22 universities produce more teacher graduates trained to teach at the secondary school level than at the primary school level.

UNISA produced more teacher graduates trained to teach at the secondary level (5 731 graduates) than those trained to teach at the upper primary school (3 927 graduates) and the lower primary school level (2 591 graduates).Compared to the 22 universities, Unisa alone produces the bulk of teacher graduates (62%) trained to teach at the upper primary level and almost half (49%) of teacher graduates trained to teach at the lower primary school level. UNISA's production of teacher graduates trained for the secondary level only accounts for 30% of the total 2020 teacher graduate output number.

29 Gustafsson, 2025:15.

<sup>26</sup> Gustafsson, 2025:9.

<sup>27</sup> Ibid.

<sup>28</sup> Gustafsson, 2025:11.

<sup>30</sup> The phase specialisation or the three levels of schooling are in terms of the teacher training policy, MRTEQ, as opposed to the four phases (i.e. grades 1–3, 4–6, 7–9 and 10–12) of the national curriculum. Based on the 2022 DHET report, the following assumptions are made: ECD/FP, FP, and FP/IP refer to grades 1–3, IP, IP/SP refer to grades 4–7, and SP, SP/FET and FET refer to grades 8–12.

<sup>31</sup> In this analysis, UNISA is being considered separately from the other 22 universities because of its size. In 2020, out of the total 30 806 teacher graduates that universities produced, UNISA alone accounted for about 40%.

Based on the demand figures for 2022<sup>32</sup> for the three schooling levels, a similar trend to the one highlighted above holds, where at the primary school level, there is an under-supply of teachers and an over-supply at the secondary level.



■1 to 3 ■4 to 7 ■8 to 12



Source: Department of Higher Education and Training's Trends in Teacher Education 2020 Report



Figure 2 Teacher graduates by phase specialisation for 22 universities,2020

Source: Department of Higher Education and Training's Trends in Teacher Education 2020 Report

Figure 3 below reports the 2020 teacher graduate output numbers by the level for which they were trained to teach and the level at which they were actually teaching in 2022. The data used for this analysis was the 2020 teacher graduate numbers from the 2022 DHET report and the SA-SAMS data of 2022 for the Eastern Cape, Gauteng and Limpopo provinces. Given that these three provinces make up about half of the country's enrolment rates, the figures were imputed assuming that the relationship between the training level and teaching level was similar across the other six provinces.

<sup>32 2022</sup> demand figures were around 9 000, 13 000 and 12 000 for grades 1–3, grades 4–7 and grades 8–12, respectively (Department of Higher Education and Training, 2020: 60).

What is clear from figure 3 is that at the lower primary school level, for those teacher graduates who enter the public schooling system, there is alignment between what teachers are trained for and what they end up teaching. Out of the 3 054 teacher graduates who entered the public schooling system to teach grades 1–3, 78% were trained to teach at this level. At the upper primary school level, a different picture emerges. Of the 5 569 teacher graduates who entered the public schooling system to teach grades 4–7, 44% of them had also been trained to teach at this level, while 52% had been trained to teach at the secondary level. With respect to the 19 150 teacher graduates who had been trained for the secondary level, 45% of them did not move into the public system, and 17% entered the public system to teach at the primary school level.





Source: Department of Higher Education and Training's Trends in Teacher Education 2020 Report and SA-SAMS data of 2022 for the Eastern Cape, Gauteng and Limpopo

To conclude, there aren't enough lower primary and upper primary school teachers graduating, while at the secondary level, there are far too many teachers being produced. The result is that many of the teachers trained to teach at the secondary level end up teaching at the upper primary school level.

## WHAT DO WE KNOW ABOUT THE LANGUAGE SPECIALISATION OF FOUNDATION PHASE TEACHERS?

At the FP level, there is an under-supply of teachers who are trained to teach in the African languages. While the demand for teachers with an African language as their language of learning and teaching (LOLT) accounts for close to 70% of the total demand for foundation phase teachers, of the total number of foundation phase graduates produced by universities in 2018, about half of the graduates specialised in African languages, and the other half had English or Afrikaans as their LOLT<sup>33</sup>. The key concern is that those graduates who have specialised in English or Afrikaans, are not likely to be fluent in the African languages needed by the public schooling system.

The supply of teachers trained to teach in African languages has been around 41% of the estimated demand for these languages<sup>34</sup>. Notably, the teacher graduate output of universities in 2018 is much less than 60% of the estimated demand for isiZulu, Sesotho, isiXhosa, Setswana, Sepedi and Xitsonga. The supply of teachers trained in these languages ranges, for example, from about

<sup>33</sup> Gustafsson, 2025:9.

<sup>34</sup> Ibid.

20% (for isiXhosa and Sepedi) to about 55% (for isiZulu and Sesotho) of what is demanded by the system<sup>35</sup>. However, for Tshivenda, teacher graduate output is over 80% of the estimated demand, whereas, for isiSwati and isiNdebele, it meets the estimated demand<sup>36</sup>. With regard to English and Afrikaans, the teacher graduate output is 78% and 93% of the estimated demand, respectively<sup>37</sup>.

In the case of African languages, with the exception of Setswana, close to 80% of 2018 teacher graduates were employed in the public system by 2022. However, for English and Afrikaans, less than 50% of the 2018 graduates were absorbed in the public schooling system by 2022<sup>38</sup>.

Overall, the under-supply of teachers trained to teach in African languages at the FP warrants attention, particularly with the supply being as low as 20% of what is being demanded by the system in some instances.

#### WHAT ABOUT THE SPECIALISATIONS OF UPPER PRIMARY TEACHERS?

Similarly to the FP, at the upper primary level, the under-supply of teachers is more pronounced for African languages. With the exception of isiZulu, isiSwati, isiNdebele, and Sesotho, the output for 2018 teacher graduates trained to teach grades 4 to 7 for the other African languages ranges from about 17% to 28% of the estimated demand<sup>39</sup>. Whereas for English and Afrikaans, the teacher graduate output is 53% and 79% of the estimated demand, respectively<sup>40</sup>.

Arguably, the under-supply of teachers trained to teach African languages may not be too much of an issue beyond grade 3, as across virtually all the schooling system non-language subjects are not taught in an African language. However, in the context of Mother Tongue-based Bilingual Education (MTbBE), which is scheduled to be phased in incrementally as of 2025<sup>41</sup>, and with learners still needing concepts to be explained to them in their mother tongue, particularly at the beginning of the IP, ensuring that there are enough teachers who are trained to teach in African languages remains key even at the upper primary school level. Mbude (2019) who in their study sought to investigate the impact of learners using their mother tongue for the first six years of their schooling alongside English, found that the use of isiXhosa for MTbBE was beneficial for developing the mathematical and science skills of grade 6 learners in Comfivaba area in the Eastern Cape. In particular, these mathematical and science skills were developed in both isiXhosa and English, which supports the call for extending mother tongue instruction to grades 4 to 7<sup>42</sup>.

To conclude, the under-supply of teachers trained to teach African languages at the upper primary level is cause for concern, given that many learners will still require support in their mother tongue as they switch to being taught in English at the beginning of the IP.

## WHAT DO WE KNOW ABOUT THE SUBJECT SPECIALISATION OF SECONDARY TEACHERS?

At the secondary school level, the under-supply of teacher graduates is with reference to language subjects, while with non-language subjects there is generally an over-supply.

In the case of languages, the university supply of teacher graduates did not meet the 2019 estimated demand, with the under-supply of graduates being more pronounced for graduates trained to teach Afrikaans, Setswana and Sepedi<sup>43</sup>.

- 38 Ibid.
- 39 Gustafsson, 2025:11.
- 40 Ibid.
- 41 Department of Basic Education, 2024.
- 42 Mbude, 2019.
- 43 Gustafsson, 2025:18.

<sup>35</sup> Ibid.

<sup>36</sup> Ibid.

<sup>37</sup> Ibid.

With the exception of mathematical literacy and the grades 8–9 arts and culture subject, there is an over-supply of teacher graduates trained to teach non-language subjects in mathematics, sciences, humanities, commercial, technical and life orientation fields at the secondary level. Universities produced less than what was demanded for mathematical literacy and arts and culture at the grades 8 and 9 level<sup>44</sup>. However, the undersupply of mathematical literacy teacher graduates is less of a concern as this is compensated for by an oversupply of graduates with a specialisation in mathematics<sup>45</sup>. This is evident when one considers whether or not teachers teach the subjects they are trained to teach. Out of a sample of 1582 linked educators (who were linked based on whether they had been teacher graduates from 2018 specialising in secondary level teaching and had taught at least one grade at the secondary level in 2022), 81% of the 378 graduates that had specialised in mathematics were teaching mathematics and/or mathematical literacy in 2022<sup>46</sup>. Additionally, other teachers with a mathematics specialisation but not teaching mathematics are found to be teachers of either physical science or grades 8 and 9 natural science subjects. This is indicative of the fact that mathematics training is fairly well utilised in the schooling system, particularly for newly trained graduates<sup>47</sup>.

In summary, there is an under-supply of teachers trained to teach language subjects, while there is an over-supply non-language subjects, especially for the humanities specialisation. By and large, there are enough teacher graduates trained to teach mathematics.

## WHAT CAN THE DATA TELL US ABOUT THE QUALITY OF TEACHER GRADUATES?

Teachers are considered to be a key input in any education system. While there seems to be consensus around the importance of teacher quality and its contribution to learner achievement, there is somewhat less agreement about the specific qualities that make up a "good teacher" and what policy interventions are needed to ensure that better teachers are produced and are incentivised to teach in public schools<sup>48</sup>. Regarding the quality of newly trained teacher graduates, this will largely depend on two factors, namely the quality of teacher education programmes offered by universities and the quality of those students entering these programmes (as is indicated by the overall quality of grade 12 outcomes)<sup>49</sup>.

Studies that have sought to get a better understanding of the mathematical competencies of teachers in the public schooling system and those who are being trained to become teachers, point to low competency levels. In a study by Venkat and Spaull (2014, 2015), which assessed the content knowledge of grade 6 mathematics teachers using the SACMEQ 2007 teacher test data, found that 79% of teachers "could not master 60% of the test items" set at the grade 6 or grade 7 level.

Findings from the Primary Teacher Education Development (PrimTEd) project for the period 2018 to 2021 show that students in Bachelor of Education (B.Ed) programmes specialising in primary education tend to come in with poor mathematical skills, where, worryingly, this can even persist up until their final year of study<sup>50</sup>. However, what is encouraging is that despite inequalities that plague South Africa's schooling system, there is some evidence that the quality of teaching in schools has improved over time. At the primary school level, there have been significant improvements in the mathematics and reading outcomes of grade 6 learners between 2007 and 2013<sup>51</sup>.

45 Ibid.

<sup>44</sup> Gustafsson, 2025:15–17.

<sup>46</sup> Gustafsson, 2025:21.

<sup>47</sup> Gustafsson, 2025: 20.

<sup>48</sup> Angrist and Guryan, 2007; Hanushek, 2010.

<sup>49</sup> Department of Basic Education, 2020:13.

<sup>50</sup> Roberts and Moloi, 2022.

<sup>51</sup> Van der Berg and Gustafsson, 2019.

Similarly, at the high school level, the mathematics performance of grade 9 learners improved between 2002 and 2011<sup>52</sup>. For grade 12, learning gains were large for 2009 to 2016, particularly for disadvantaged schools in Mpumalanga and Limpopo and where, notably, at the high school level, the learning gains occurred alongside reduced inequalities in educational performance<sup>53</sup>. Additionally, findings from the international SACMEQ programme, which tests learners and teachers, show that newly graduated teachers tend to have better subject knowledge than older teachers<sup>54</sup>.

To conclude, while there is evidence of the quality of teaching improving over time, much more still needs to be done to ensure that learners from all socio-economic backgrounds have access to quality teachers.

#### WHAT MORE CAN BE DONE REGARDING TEACHER EDUCATION? HOW CAN WE ENSURE THAT ACCESS TO QUALITY TEACHERS IS NOT THE PRIVILEGE OF ONLY A FEW LEARNERS?

Based on the evidence on the quality of teacher graduates discussed in the section above, one would argue that one of the ways in which the quality of teachers can be improved is to ensure that ITE programmes select candidates from a pool of high-performing matriculants. Gustafsson (2025) who in their analysis investigated whether selecting better candidates for teacher training programmes is an optimal approach to improving the mathematics competencies of teachers found that this may not necessarily be the best option.

Using teacher graduate data from DHET merged with Grade 12 National Senior Certificate (NSC) results for the period 2010 to 2015, he found that teacher graduates were likely to have taken mathematics as opposed to mathematical literacy. Additionally, for those teacher graduates who specialised to teach mathematics at the secondary level, around 5% had taken mathematical literacy, and those who had taken mathematics were among the top performers<sup>55</sup>. This finding points to the fact there is not much room to select from even more capable learners, given that teacher graduates already come from the "better Grade 12 mathematics performers" and because top performers in mathematics are also likely to choose other career paths such as engineering, finance and medicine<sup>56</sup>. This finding, therefore, suggests that in order to improve the mathematical competencies of teachers, the overall level of mathematics emerging from schools would need to also improve<sup>57</sup>.

With the vast majority of learners being taught in African languages at the foundation phase level, it is concerning that universities only provide training in English or Afrikaans for those specialising in teaching at this level<sup>58</sup>, though there are some exceptions, notably the University of Fort Hare, which is offering mother-tongue based bi/multilingual education teacher training programmes<sup>59</sup>. The result is that the burden of adapting and translating teaching practices in English or Afrikaans into African languages will solely fall on the teacher, and this may not necessarily be approached in the same way by all teachers, which arguably may hamper the quality of teaching, especially say in mathematics. Therefore, to improve the quality of teaching, efforts and resources need to be directed towards developing the African language teacher training curriculum at the tertiary level<sup>60</sup>. This should be accompanied by high-quality materials for the B.Ed programme in all official school subjects, with particular emphasis on Mathematics and the Sciences<sup>61</sup>.

<sup>52</sup> Ibid.

<sup>53</sup> Ibid.

<sup>54</sup> Department of Basic Education, 2020:13.

<sup>55</sup> Gustafsson, 2025: 24.

<sup>56</sup> Ibid.

<sup>57</sup> Ibid.

<sup>58</sup> Mbude, 2019.

<sup>59</sup> In 2018, the University of Fort Hare started offering a bi/multilingual Bachelor of Education foundation phase programme. The first cohort of 83 students graduated in 2022 (Ramadiro, 2022).

<sup>60</sup> Mbude, 2019; Ramadiro, 2022.

<sup>61</sup> Ibid.

Additionally, more lecturing staff would need to be hired to ensure that lecturers have the required language competencies<sup>62</sup>. Taken together, UNISA and North-West University produced 60%, 78% and 46% of teacher graduates trained to teach at the foundation phase, upper primary and secondary levels, respectively<sup>63</sup>. Given that these two institutions train a fairly large number of teacher graduates who go on to be employed in the public schooling system, attention needs to be given to improving the quality of graduate training that happens through distance education, particularly for those whose specialisation is at the foundation phase level as this has implications for how learners progress through the schooling system. The concern, however, is that distance education may not adequately train the type of foundation phase teachers needed by the system, mainly because the nature of distance education training may disregard the human interaction skills as well as other "unique pedagogical skills beyond the mastery of content" that are crucial for teaching at this schooling phase<sup>64</sup>.

Effective in-service training is needed to strengthen teacher quality and address the inequalities associated with teacher training for teachers already in the system<sup>65</sup>.

<sup>62</sup> Ibid.

<sup>63</sup> Gustafsson, 2025:8–14.

<sup>64</sup> Gustafsson, 2025:6.

<sup>65</sup> Department of Basic Education, 2020; Mbude, 2019:151.

#### REFERENCES

- Angrist, J.D. and Guryan, J. (2008) 'Does teacher testing raise teacher quality? Evidence from state certification requirements', *Economics of Education Review*, 27(5), pp. 483–503.
- Böhmer, B., & Pampallis, I. (2022). Note 6: How many teachers are universities producing? (Teacher Demographics Policy Dialogue). RESEP. https://resep.sun.ac.za/wp-content/uploads/2022/12/ Note-6-How-many-teachers-are-universities-producing-TDD-1-Dec-2022\_v3.pdf
- Department of Basic Education (2024). Mother Tongue-based Bilingual Education to be rolled out incrementally by 2025. Available at:ttps://www.education.gov.za/ArchivedDocuments/ ArchivedArticles/Mother-Tongue-based-Bilingual-Education-0624.aspx
- Department of Higher Education and Training (2015). *Revised Policy on the Minimum Requirements for Teacher Education Qualifications*. Government Printers. Pretoria
- Department of Higher Education and Training (2020). School teacher supply and demand in South Africa in 2019 and beyond. Pretoria.
- Department of Higher Education and Training (2021). *Trends in teacher education 2019: Teacher education enrolment and graduation patterns at public and private universities in South Africa in 2019.* Pretoria. [Unpublished report]
- Department of Higher Education and Training (2022). *Trends in teacher education 2020: Teacher education enrolment and graduation patterns at public and private universities in South Africa in 2020.* Pretoria. [Unpublished report]
- Department of Basic Education (2020). Action Plan to 2024: Towards the realisation of Schooling 2030. Pretoria.

Department of Higher Education and Training (2022). Annual Performance Plan 2022/23. Pretoria Department of Higher Education and Training (2023). Annual Performance Plan 2023/24. Pretoria

- Gustafsson, M. (2023). *Projections of educators by age and average cost to 2070: Final report.* Stellenbosch: Research on Socioeconomic Policy.
- Gustafsson, M. (2025). Specialisation-specific teacher supply and employment in the 2019 to 2022 period. Pretoria: Department of Basic Education.

Hanushek, E.A. (2010) 'Education and Economic Growth', International Encyclopedia of Education, 2.

Mbude, N. (2019). IsiXhosa as the language of teaching and learning mathematics in Grade six: Investigating the mother tongue based bilingual education mathematics pilot in the Eastern Cape Province, South Africa. Makhanda: Rhodes University.

Roberts, N. & Moloi, Q. (2022). The quality of primary mathematics teacher preparation in SA: Findings from PrimTEd. Stellenbosch: RESEP.

- Ramadiro, B. (2022). Implementing multilingual teacher education: Reflections on the University of Fort Hare's bi/multilingual Bachelor of Education Degree programme. *Education as Change*, 26(1).
- Van der Berg, S. & Gustafsson, M. (2019). Educational outcomes in post-apartheid South Africa: Signs of progress despite great inequality. In Spaull, N. & Jansen, J. (eds): South African Schooling: The Enigma of Inequality. Springer.
- Van der Berg, S., Van Wyk, C., Selkirk, R., Rich, K., & Deghaye, N. (2019). *The promise of SA-SAMS & DDD data for tracking progression, repetition and drop-out.* Stellenbosch Economic Working Paper 17/2019.
- Van der Berg, S., Van Wyk, C., & Selkirk, R. (2020). Schools in the time of COVID-19: Possible implications for enrolment, repetition and dropout. Stellenbosch Economic Working Paper 20/2020.
- Van der Berg, S., Van Wyk, C., Gustafsson, M. et al (2023). *What rich new education data can tell us.* Stellenbosch: University of Stellenbosch.

#### NOTES


Requests for additional information on the Teacher Demographic Dividend project can be directed to **info@tdd.sun.ac.za**.

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