RESEP
Research on Socio-Economic Policy

Stellenbosch
UNIVERSITY
IYUNIVESITHI
UNIVERSITEIT

forward together
sonke siya phambili
saam vorentoe

RESEP POLICY BRIEF

Department of Economics, Stellenbosch University

Policy Brief No.
03/25

NOVEMBER 2025

This brief was produced as part of the MILAPS project, funded by Optima and utilises Data Driven Districts data

How home language mastery predicts early learning outcomes

Author

Ros Clayton

OPTIMA

Policy brief: How home language mastery predicts early learning outcomes

Date: November 2025

Author: Ros Clayton, Resep, University of Stellenbosch

SUMMARY

International research consistently shows that children learn to read and write most effectively when taught in their home language, and that these literacy skills transfer to a second language[1-3]. Learners who build strong foundations in their mother tongue – while receiving early exposure to a second language – typically have better outcomes when formal instruction transitions to the second language later, even beyond Grade 7[4].

In South Africa, the legacy of apartheid policies which marginalised African languages continues to limit access to home language instruction and assessment beyond Grade 4[5]. Yet policy momentum to expand mother tongue education is growing, supported by a body of local and international evidence.

This policy brief reports on the findings from my paper *Linguistic interdependence? Foundation Phase mastery in home language as a predictor of Grade 4 repetition and EFAL marks*[6], which contributes new empirical evidence using comprehensive data. Drawing on administrative data from six provinces between 2017 and 2023, the analysis tracks learners as they transition from Grade 3 to Grade 4 – the critical shift from learning in the home language to learning in English.

Results show a strong positive association between Grade 3 Home Language (HL) marks and Grade 4 English First Additional Language (EFAL) outcomes: each additional percentage point in HL3 is linked to a 0.4 percentage point increase in EFAL4, even after controlling for prior performance, gender, and overage status. Stronger HL3 results are also linked to lower probabilities of repeating Grade 4. Moreover, girls perform better than boys in both EFAL achievement and progression, pointing to a widening pro-female gender gap at this crucial language transition.

These findings support the current policy drive to expand mother tongue instruction in primary schools. However, with most learners already accessing home language instruction in the Foundation Phase, attention must be given to improving the quality of teaching and learning in these languages. The gender gap is not an easy fix – it reflects a pattern that begins early and widens through the Foundation Phase[7] – underscoring the need for more research to understand and address its causes.

1 WHAT IS THE BEST WAY TO ACQUIRE LITERACY IN A SECOND LANGUAGE?

Most South African learners eventually receive instruction in a second or even third language. Intuitively, one might assume that if the language of instruction in matric will be English, then it would be best to start teaching in English from Grade 1. However, extensive international evidence shows that this approach is misguided[2,3]. Learners acquire literacy in both their first and second language most effectively when initial instruction is delivered in their mother tongue, with structured exposure to the second language alongside it. Ideally, mother tongue education should continue until at least Grade 7 before transitioning to the destination language of instruction[4].

A causal study in South Africa reinforces this conclusion[8]. Exploiting the staggered roll-out of mother tongue instruction in the Foundation Phase to derive causal estimates, the researchers find that receiving home-language instruction in the early grades caused higher English scores in Grades 4, 5, and 6 compared to being taught in English from Grade 1.

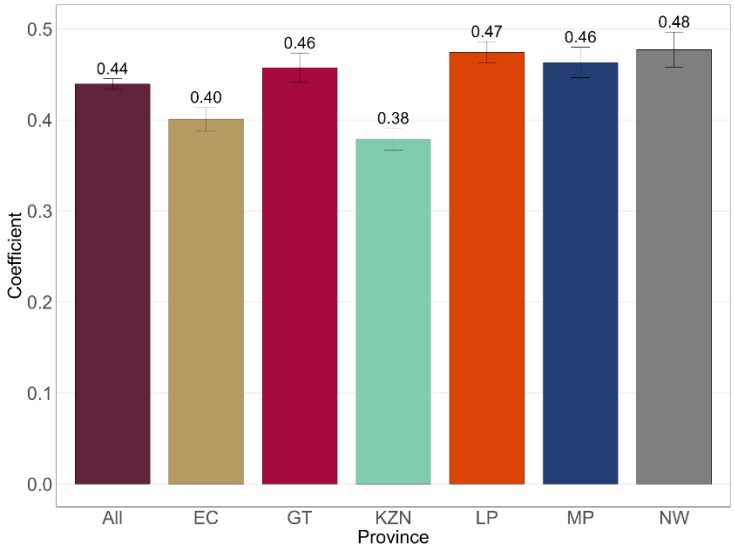
Building on this body of evidence, the study underpinning this brief uses administrative data from six provinces (Eastern Cape, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, and North West) between 2017 and 2023 to quantify the relationship between home language mastery in the Foundation Phase and later learning outcomes, among African mother tongue learners.

2 HOME LANGUAGE MASTERY IS ASSOCIATED WITH BETTER EFAL RESULTS

I estimate the relationship between learners' Grade 3 Home Language (HL) marks and their Grade 4 English First Additional Language (EFAL) marks, controlling for prior academic performance, gender, overage status in Grade 4, and school-level factors. Figure 1 presents the results, disaggregated by province.

Across all six provinces, there is a strong positive relationship between Home Language mastery and subsequent English performance. On average, a one percentage point increase in Grade 3 HL marks is associated with a 0.44 percentage point increase in Grade 4 EFAL marks. The relationship is strongest in Gauteng, Limpopo, Mpumalanga, and North West, and somewhat weaker in KwaZulu-Natal, where each one percentage point increase in HL3 corresponds to a 0.38 percentage point increase in EFAL4.

Figure 1. Estimated relationship between HL3 results and EFAL4 results



Source: DDD data longitudinal panel, own calculations. Notes: Error bars indicate 95% confidence intervals. Models control for gender, overage status in Grade 4, baseline academic ability (Grade 1 Mathematics), learning trajectory (change in Mathematics between Grades 1 and 3), and school-level fixed effects.

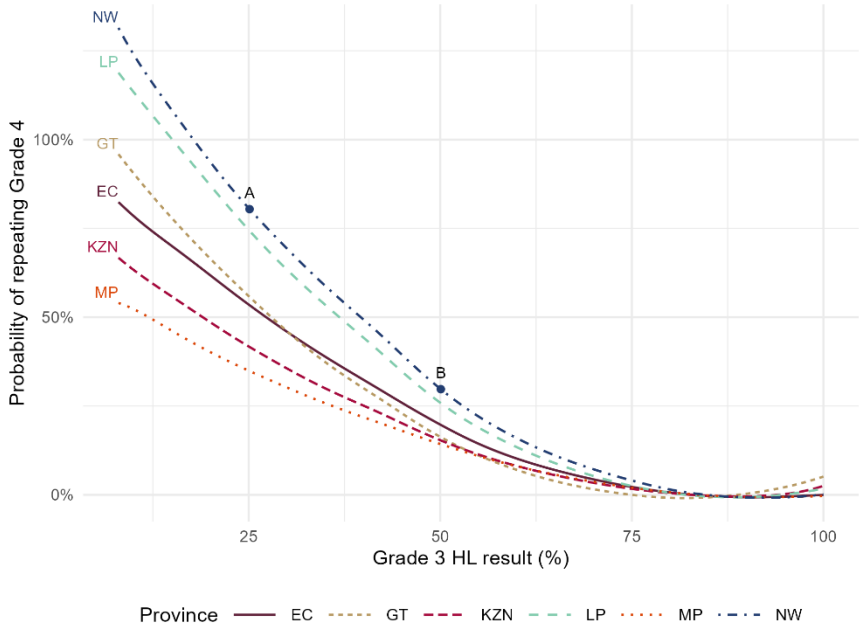
3 HOME LANGUAGE MASTERY IS ASSOCIATED WITH LOWER REPETITION

The relationship between Grade 3 Home Language (HL3) mastery and the likelihood of repeating Grade 4 is non-linear and cannot be summarised by a single statistic. Nonetheless, the results show a clear pattern: learners with stronger HL3 performance are substantially less likely to repeat Grade 4, even after controlling for gender, overage status in Grade 4, and prior academic performance. Figure 2 presents the modelled relationship.

There are marked provincial differences, largely reflecting variation in overall repetition rates. In the longitudinal dataset, the North West province shows the highest Grade 4 repetition rate (13%), while Mpumalanga has the lowest (7%). For illustration in North West a learner scoring 25% in HL3 has an estimated 80% probability of repeating Grade 4 (Point A), compared to a 30% probability for a learner scoring 50% (Point B), holding other factors constant. Across all provinces, the probability of repetition converges to near zero for learners achieving above 75% in HL3.

Stronger Home Language skills in Grade 3 translate into better English outcomes a year later

Figure 2. Estimated relationship between HL3 marks and Grade 4 repetition

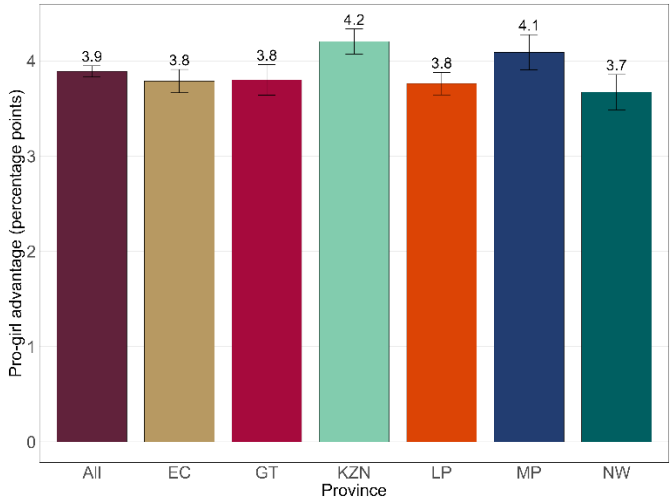


Source: DDD data longitudinal panel, own calculations. Notes: Predicted values are derived from OLS regressions of Grade 4 repetition outcomes on Grade 3 Home Language marks (and their square), gender, overage status in Grade 4, baseline academic ability (Grade 1 Mathematics), learning trajectory (change in Mathematics between Grades 1 and 3), and school-level fixed effects. Smoothed lines are fitted to the predicted values using an epanechnikov kernel of degree 2.

4 GIRLS DO BETTER IN GRADE 4, CONTROLLING FOR GRADE 3 MARKS AND OTHER FACTORS

As learners progress from Grade 3 to Grade 4, a clear pro-girl advantage emerges, even after accounting for other factors such as prior achievement in Home Language. Figure 3 illustrates this difference: girls score, on average, 3.9 percentage points higher than boys in Grade 4 English First Additional Language (EFAL), controlling for Grade 3 Home Language marks, prior academic performance, overage status in Grade 4, and school effects. The gender gap is largest in KwaZulu-Natal and Mpumalanga, at 4.2 and 4.1 percentage points respectively.

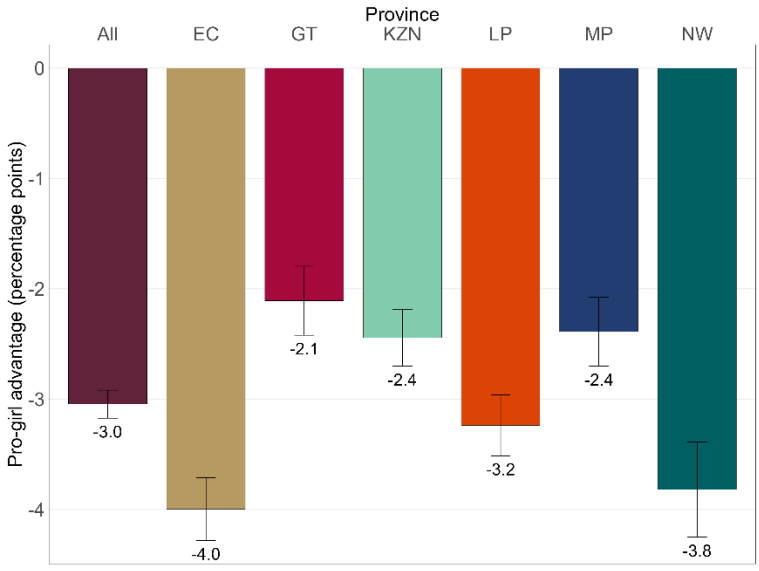
Figure 3. Pro-girl advantage in Grade 4 English First Additional Language outcomes, controlling for Grade 3 Home Language marks and other factors



Source: DDD data longitudinal panel, own calculations. Notes: Error bars indicate 95% confidence intervals. Estimates show the coefficient on the *female* indicator from OLS regressions of Grade 4 EFAL outcomes, controlling for Grade 3 Home Language marks, overage status in Grade 4, baseline academic ability (Grade 1 Mathematics), learning trajectory (change in Mathematics between Grades 1 and 3), and school-level fixed effects.

Girls are also less likely to repeat Grade 4, as shown in Figure 4. Across all six provinces, girls are 3.0 percentage points less likely than boys to repeat, even after controlling for prior performance and other characteristics. The pro-girl advantage in repetition is smaller in Gauteng, KwaZulu-Natal, and Mpumalanga but remains evident across all provinces.

Figure 4. Pro-girl advantage in the probability of Grade 4 repetition, controlling for HL3 and other factors



Source: DDD data longitudinal panel, own calculations. Notes: Error bars indicate 95% confidence intervals. Estimates show the coefficient on the *female* indicator from OLS regressions of Grade 4 repetition outcomes, controlling for Grade 3 Home Language marks, overage status in Grade 4, baseline academic ability (Grade 1 Mathematics), learning trajectory (change in Mathematics between Grades 1 and 3), and school-level fixed effects.

5 RECOMMENDATIONS

The findings of this study support the current policy focus on expanding access to mother tongue instruction in primary schools. However, while most learners already receive home language instruction in the Foundation Phase, the majority still cannot read for meaning – in any language – by Grade 4[9]. Expanding access is therefore not enough. Meaningful progress will require a stronger emphasis on the quality of home language teaching and learning, including improved teacher preparation, better learning materials, and more systematic monitoring of reading progress.

The gender gap findings point to a further opportunity for improvement: if boys could be brought up to the level of girls, overall outcomes would rise substantially. Yet this study – and the available data – cannot explain why gender gaps widen at this critical language transition. Emerging research suggests that these disparities do not originate in the Grade 3 to 4 shift but reflect a continuation of a growing pro-girl advantage throughout the Foundation Phase[7]. While small gender gaps are common globally, South Africa stands out for the size of the gaps[10]. Further research is needed to understand the underlying causes – whether social, behavioural, or pedagogical – and to identify potential policy levers to reduce them.

6 REFERENCES

1 Cummins, J. Linguistic Interdependence and the Educational Development of Bilingual Children. *Review of Educational Research* **49**, 222–251 (1979). https://doi.org/10.2307/1169960

2 Ball, J. Enhancing learning of children from diverse language backgrounds: mother tongue-based bilingual or multilingual education in the early years. (UNESCO, 2011).

3 Melby-Lervåg, M. & Lervåg, A. Cross-linguistic transfer of oral language, decoding, phonological awareness and reading comprehension: A meta-analysis of the correlational evidence. *Journal of Research in Reading* **34**, 114–135 (2011).

4 Benson, C. J. Real and Potential Benefits of Bilingual Programmes in Developing Countries. *International Journal of Bilingual Education and Bilingualism* **5**, 303–317 (2002). https://doi.org/10.1080/13670050208667764

5 Wildsmith-Cromarty, R. & Balfour, R. J. Language learning and teaching in South African primary schools. *Language Teaching* **52**, 296–317 (2019). https://doi.org/10.1017/S0261444819000181

6 Clayton, R. Linguistic interdependence? Foundation Phase mastery in home language as a predictor of grade 4 repetition and EFAL marks. (Research on Socio-Economic Policy, Stellenbosch University, Stellenbosch, 2025).

7 Wills, G. & Clayton, R. *Growing apart: Tracking the widening pro-girl achievement gap in South African primary schools*. [Manuscript submitted for publication.] (2025).

8 Taylor, S. & von Fintel, M. Estimating the impact of language of instruction in South African primary schools: A fixed effects approach. *Economics of Education Review* **50**, 75–89 (2016). https://doi.org/https://doi.org/10.1016/j.econedurev.2016.01.003

9 Department of Basic Education. PIRLS 2021: South African preliminary highlights report. (Department of Basic Education, Pretoria, 2023).

10 Mullis, I. V. S., von Davier, M., Foy, P., Fishbein, B., Reynolds, K.A., & Wry, E. PIRLS 2021 International Results in Reading. (Boston College, TIMSS & PIRLS International Study Center, 2023).