In the transition from apartheid to democracy in South Africa, the government promised to provide equal educational opportunities to all racial groups and regions. However, wide variations in major indicators of educational quality persist. Given the clustered spatial distribution of racial groups in the country, it is not difficult to infer variations among children across different population groups. This paper uses recently available South African school census data from 1996 and 2000 to assess variations in educational quality across former population groups of public schools and dynamic changes in post-apartheid South Africa. The author argues that unless the government actively strengthens its support to former Black schools in allocating both budget and personnel, a vicious cycle of poverty and low-quality education will persist. The worry is that children who do not receive a sufficiently high quality of education are less likely to engage in regular employment and are more likely to suffer from low wages, potentially contributing to the long-term poverty trap.

The Data
To study gaps in educational quality across population groups, this paper focuses on the ratio of students to teachers and other staff—the learner-educator ratio (LER). The data come from school censuses, the School Register of Needs (SRN) in 1996 and 2000. The LER can serve as a good indicator not only of the distribution of education quality but also of the effectiveness of policy interventions toward educational equity. The SRN particularly focuses on school facility information in addition to basic information such as the number of educators and learners. It lacks information, however, on financial conditions and student performance. To identify the former racial groups of those schools, SRN 2000 provides information on former apartheid departments that governed the schools. Therefore, merging the two surveys, the author can systematically track former apartheid departments.

Methodology
The author first discusses the optimal allocation (adjustment) of educators across schools under the assumption that the optimal LER is unique. He presents a simple static model of school finances and the demand for educators to clarify intuitions on the roles of liquidity constraints, government subsidies, and government coordination in the determination of the LER. The assumption is that, without government intervention, LERs are determined by school-level budgetary constraints, provided that the best ratio is unique in all schools, no matter what racial group students belong to. However, with active government interventions, the ratios should be equalized across all schools as subsidies are allocated more to those schools with less favorable socioeconomic conditions, i.e., larger initial LERs.

Results
The empirical findings indicate that, first, LER distributions for former Black, White, Coloured, Indian, and other racial group schools are statistically different in both 1996 and 2000. In particular, the difference between former Black schools and White or Indian schools was statistically significant. A large number of formerly Black schools exhibit LERs above the targets set by the government (40 and 35 for primary and secondary schools, respectively).

The results show that opportunities for education in public schools are still unequal between Black and White children in South Africa, even post-apartheid.
To identify how the number of educators was adjusted in response to changes in the number of learners, the estimation strategy takes into account both community- and school-level unobserved fixed components and the endogenously changing number of learners (fixed effect-instrumental variable estimation). There are some interesting results. First, the dynamic responses of educators to learners (with budget constraints) differ statistically across racial groups in primary schools, especially in the adjustment of subsidized educators. Formerly Black schools are more budget (liquidity) constrained than non-Black (White, Coloured, and Indian) schools in employing educators.

Second, among secondary schools, the gaps are smaller than those found in primary schools. Interestingly, formerly White secondary schools do not show any significant dynamic adjustment to changes in the number of learners during this period, probably because their condition was already optimal.

Third, in combined schools (both primary and secondary levels), the gaps between formerly Black and Indian or new schools are significant. This observation reflects that combined schools are regionally concentrated in certain districts and that there are few White schools of this type.

Finally, in the analysis restricted to nonsubsidized (privately employed) educators, educator size does not significantly respond to changes in the number of learners. In this sense, the liquidity constraint is more binding at the school level than at the government level.

**Conclusions and Recommendations**

These results show that opportunities for education in public schools are still unequal between Black and White children in South Africa, even post-apartheid. The unequal educational opportunities could lead to persistent inequality in labor markets and earnings opportunities in South Africa.

Dynamics of school education also demonstrate strong inequity between population groups. Changes in the number of educators respond to those in learners in all population groups at primary school level. However, the dynamic adjustment of educators is significantly larger for formerly White, Coloured, Indian, and new schools than Black primary schools. On the other hand, at the secondary school level, the results do not display significant apartheid-type inequity. In the case of White schools, the number of educators does not respond to changes in the class size, probably because of the superior initial condition.

These results call for stronger policy support to Black primary schools and children that promises the human capital-based reduction of apartheid-created poverty, inequity, and inequality in South Africa.

**Keywords:** quality of education, race, poverty, apartheid, South Africa

---

**The results show that opportunities for education in public schools are still unequal between Black and White children in South Africa, even post-apartheid.**—DP182