

## **Department of Economics**

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# Recent patterns in the extent and quality of pre-primary education in South Africa

#### INTRODUCTION

A recent paper, using new household data, indicates that the percentage of Grade 1 learners who have experienced pre-primary schooling increased substantially between 2004 and 2008, from 60% to 80%. Evidence is also found that for certain poor learners having participated in pre-primary schooling improves performance in primary school mathematics tests.

This policy brief is largely based on findings from a 2010 paper titled Policy note on pre-primary schooling: An empirical contribution to the 2009 Medium Term Strategic Framework by Martin Gustafsson.

The original paper is available as part of a series of working papers by the Department of Economics, Stellenbosch University, at:

http://ideas.repec.org/p/sza/wpaper/wpapers104.html

## THE POLICY ISSUES

Most developing country governments pay considerable attention to expanding access to pre-primary education, largely because it is widely believed that more time spent in pre-primary education leads to better learning in primary schooling and beyond. The evidence for the latter is still debatable, though there have been a few key studies that have indicated that if the pre-primary schooling is of a sufficient quality, then subsequent learning benefits are noticeable. The educational benefits of pre-primary schooling are obviously an important policy matter given the large public costs typically associated with expanding this level of education.

In South Africa, the 2001 Education White Paper envisaged universal access to Grade R (the grade immediately before Grade 1) by 2010. This target has since been postponed. The 2009 Medium Term Strategic Framework of the Presidency envisages universal Grade R in 2014. The same policy envisages a doubling of enrolment of children aged 0 to 4 years by 2014.

#### THE RESEARCH QUESTIONS

Gustafsson attempts to throw new light on the coverage and quality of pre-primary schooling making special use of four pieces of information collected in the 2008 wave of the National Income Dynamics Study (NIDS) and not normally collected in South African household surveys.

- The availability of the exact birthday (and not just year of birth) of all children in NIDS provides new opportunities to gauge the extent to which official Grade 1 age of entry rules are being followed.
- A question on whether primary school learners received pre-primary schooling allows for a better trend analysis of pre-primary enrolment than what is normally possible.
- Clearer categorisations in NIDS with respect to type of pre-primary schooling being experienced allows for a better picture of the attainment of policy targets regarding pre-primary education. In particular, 'Grade R' features as a separate category within NIDS and is not subsumed under the general heading 'pre-primary'. The category 'day-mother/gogo' also appears as a separate category.
- The application of a mathematics test to learners in the upper primary grades combined with the question of whether learners received some pre-primary schooling provides new opportunities to explore the value added by pre-primary schooling to performance in later grades.

#### **KEY FINDINGS**

Age of entry. NIDS is able to provide new insights into the age of entry of learners into Grade 1, something that influences planning with respect to pre-primary schooling. Despite a flexible admissions policy that allows around half of parents a choice between two years of entry into Grade 1, the practices of parents and schools are even more flexible, with 35% of learners entering Grade 1 either before or after the years stipulated by the policy (the 35% is split about evenly between early and late starters). The following graph illustrates the situation.

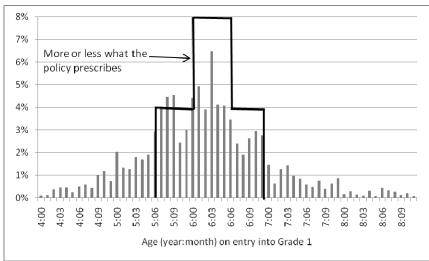


FIGURE 1: Age of entry into Grade 1

Pre-primary enrolment trend. If one only considers what is explicitly labelled 'Grade R' in NIDS, then around 57% of South African children were going through Grade R in 2008. However, a much higher figure of over 80% is obtained if one asks learners currently enrolled in Grade 1 whether they underwent 'pre-primary or Grade R' before starting Grade 1. This 80% figure represents a marked improvement in a short space of time. Only 60% of Grade 4 learners say they went through some form of pre-primary schooling. Separate data sources suggest that the 57% level corresponds to formal Grade R only, whilst the 80% level includes non-formal pre-primary schooling in the year prior to Grade 1. The extent to which primary school learners have undergone some pre-primary schooling is lowest for the poor, though even for the poor the enrolment ratios are fairly good. The ratio is 60% for the poorest income quintile and 90% for the least poor.

The following graph provides a picture of the kind of pre-primary enrolment experienced by children in 2008. The graph illustrates how large the proportion of children enrolled with a day-mother or gogo is. In the age range 0 to 2 (counting age at the start of the year), over 20% of children are in this kind of care, with an additional 10% being enrolled in what is described as a crèche.

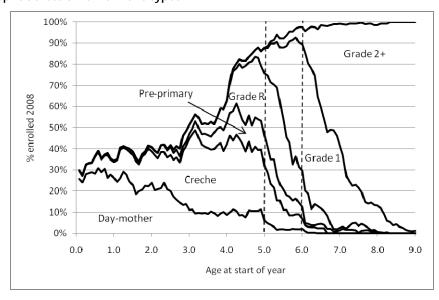


FIGURE 2: Split across all enrolment types

In 2008, 1.3 million 0 to 4 year olds, or 26% of the five age cohorts, were enrolled in an institution. Doubling this would obviously mean creating an additional 1.3 million places for children in this age bracket. This becomes easier if new publicly funded Grade R places result in a shift in private spending from Grade R to schooling below Grade R. The 26% enrolment ratio for 0 to 4 year olds assumes that the category 'day-mother/ gogo' is not considered ECD for the purposes of the MTSF target. If the 'day-mother/ gogo' category were included, the enrolment ratio in 2008 would be as high as 51%.

A model of the determinants of enrolment for children aged 4 to 6 confirms that enrolment levels are lower in poorer households, but also that children in rural formal areas of the country

experience particularly severe barriers when it comes to enrolling in pre-primary institutions. This suggests that special attention needs to be paid to poor children in places such as commercial farms and forestry stations.

Contrary to what one may expect, pre-primary enrolment is exceptionally high in the poorer provinces Eastern Cape and Limpopo. It is also lower than what one would expect in the better off Western Cape. These conclusions are drawn from a number of different data sources and not just NIDS.

The value pre-primary education adds to later learning. The availability of numeracy test scores for some children in the NIDS dataset allowed for a model that would test the impact of pre-primary participation on subsequent learning. The model suggests that in better off communities, what may appear to be learning advantages linked to prior pre-primary participation may in fact be the effects of home background advantages. However, in rural informal settings the impact of pre-primary schooling appears positive and significant, even when one controls for home background effects.

General characteristics of pre-primary services. Fees in Grade R are slightly higher than those in primary school, though for the poorest four quintiles annual Grade R fees mostly did not exceed R100 in 2007. Travelling time is slightly shorter for Grade R learners than Grade 1 learners, in general by about 5 to 10 minutes. This gap is likely to be reduced, and travelling times for Grade R learners can be expected to become a bit longer, as more Grade R shifts to public schools. The problem of very large classes seen in primary schools is also visible in Grade R, though to a lesser extent. Around 15% of Grade R learners are in classes exceeding 40 learners. On average around 1.0 day per month is missed by learners in Grade 1, and the figure is virtually the same for Grade R.

### WAY FORWARD

The findings from the paper suggest that it is possible to attain 100% enrolment in some form of preprimary education for all South African children in the year prior to Grade 1 by 2014. However, this should be differentiated from attaining 100% enrolment in formal Grade R, which is more difficult to attain by 2014 as the baseline is lower (in 2008 it was around 57%). Doubling pre-primary enrolment for those aged 0 to 4 is a massive undertaking as this means raising enrolment levels from around 25% to 50%, across five age cohorts. Targeting publicly funded pre-primary services to the poor and ensuring that minimum quality criteria are upheld is particularly important if pre-primary education is to have an impact on subsequent learning.

The NIDS data elements discussed above are of great value for answering key policy questions. Their inclusion within the official Statistics South Africa household surveys deserves consideration.

#### **CONTACT DETAILS**

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