



POLICY BRIEF SEPT 2019

# Factors and drivers of dropout and repetition in Rwandan schools

Towards evidence-based policies to improve the quality of education

## The Context

Over the past two decades, the Government of Rwanda has made significant investments to improve the quality and coverage of primary and secondary education.

These included, for example, a national school meal program, a competency-based curriculum, and a construction drive to build more schools and classrooms. The efforts were complemented with policies to ensure universal and equitable access to 12 years of education for all children.

This goal has been achieved and since 2016 Rwanda has recorded net enrolment rates above 97.5%. These achievements were the beginning of a process of lasting change in the Rwandan education system.

*"The study reached 8,000 children aged 6 to 18, and interviewed members of their households, schools and communities."*

## The Study

The new challenge is to improve the quality of the education, by addressing the dropout and repetition among the students and understanding the factors limiting their progression through the system.

Laterite, UNICEF and the Ministry of Education (MINEDUC) conducted a survey across Rwanda to assess the drivers of dropout and repetition in schools. The study reached 8,000 children aged 6 to 18, and interviewed members of their households, schools and communities.

The findings will inform the development of evidence-based policy options to increase retention, completion and the overall efficiency of the education system.

# KEY FINDINGS



**Repetition affects mostly younger children entering the education system.** It's a widespread phenomenon limiting the flow of children through the education system, in particular in lower primary school.



**Dropout affects mostly older children, especially in upper primary school.** Dropout increases with each grade, and it is closely related to students' age, as a late start is a key predictor of future dropout. The highest incidence of dropout happens during the transition from primary to secondary school.



**Children from wealthier households are more likely to stay on-track compared to children from the poorest households.** An increase in non-tuition related education expenses (e.g. uniforms, transportation costs) and the increased opportunity cost of being in school are some of the drivers of dropout after Primary 6.



**The causes of repetition in Primary 1 are related to household-level factors while in Primary 5 they are related to school-level issues.** Repetition in Primary 1 is related to low level of parental education and school readiness (pre-primary school enrolment), while the main driver of repetition in Primary 5 is the application of higher passing standards compared to other grades.

# Dropout and repetition in Rwandan schools

## Dropout

The dropout rate in primary school is closely related to the student's age. Dropout rates increase from less than 1% in Primary 1 to more than 20% in Primary 6. The steep increase is not related to the grade attended, but rather to the child's age, as older children are much likely to drop out of school compared to younger children, regardless of what grade they are enrolled in. In 2016 an estimated 0.9% of children aged 7 to 12 that were enrolled in primary school dropped out, compared to 13.4% of children aged 13 or older.

The highest incidence of dropout in the education system happens during the transition from primary to secondary school. Dropout rates peak at the end

## Primary School - Completion rates in 2017

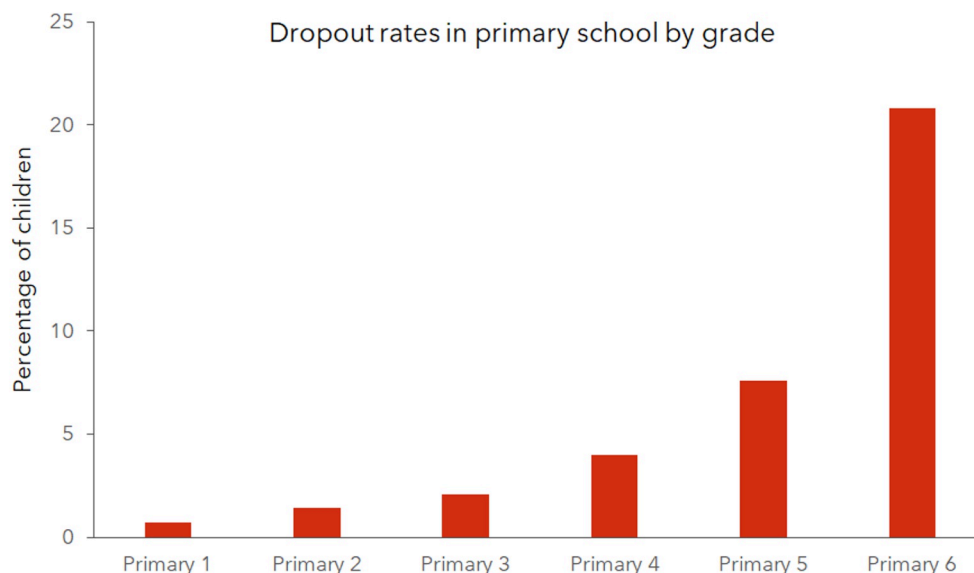
**9.1%**

Percentage of 13-year-old children with completed primary school

**37.1%**

Percentage of 15-year-old children with completed primary school

of primary school (P6), where 20.8% of children dropped out in 2016. Only a small proportion of the children that drop out after Primary 6 re-enroll in lower secondary school. In 2017 this happened for 3.9% of students, most of them boys. This suggests that failure to transition to secondary school right after Primary 6 marks the end of education for most of the pupils who drop out.



## Repetition

Repetition rates remain a challenge for Rwanda's primary education sector. An estimated 16.5% of children enrolled in primary education repeated in 2017. In primary school boys are more likely to repeat than girls. Repetition rates peak in early years and decrease with each passing grade, with the exception of Primary 5.

Repetition is not a one-time event during a child's primary education. By Primary 6 an estimated 56% of children repeated at least twice, and almost 30% count three or more repetitions. 67% of students have repeated at least twice by the age of 18.

## Effects of dropout and repetition

Pupils are often in lower grades than expected for their age. This means that classes are made up of students with a wide range of ages, and the lower primary school system is burdened with many more pupils than predicted by age-cohort distributions. This in turn

### Key repetition statistics in 2017

**84%**

Percentage of 7-year-old children on-track with their education (i.e. enrolled in Proprimary 1)

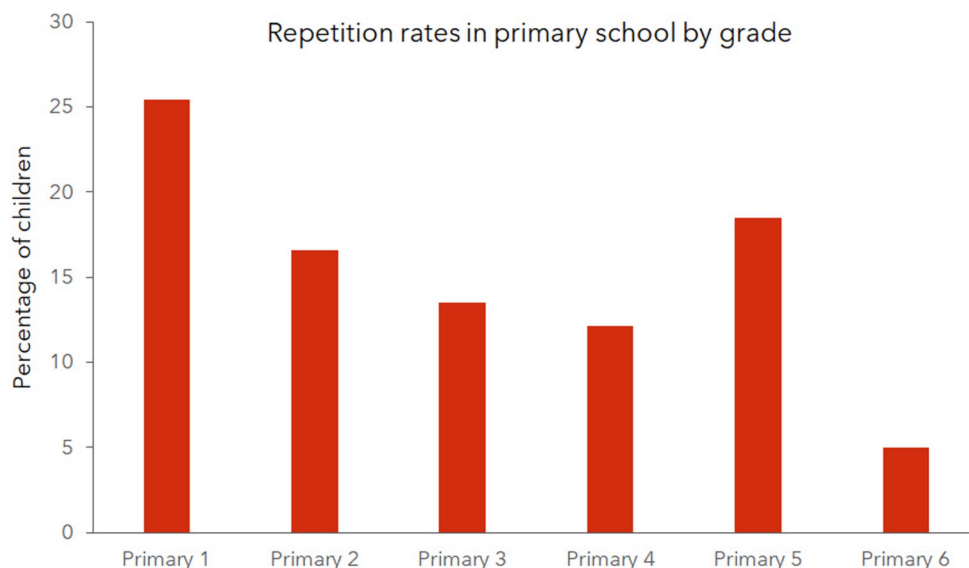
**56%**

Percentage of children in P6 who have repeated at least one year

affects classroom dynamics and the quality of teaching.

Completion rates in primary school are low. This delays children's progress through the education system, and has a negative impact on the efficiency of the whole education system.

Gross enrolment rates in early grades are high. This has implications for future resources requirements in later grades, i.e. the physical capacity to provide education to a large cohort of children currently enrolled in primary.



## Analysis by grade

### Dropout in P6

The highest dropout rates occur in the transition from primary to secondary. This is due to:

**Increase in cost of education:** non-tuition related expenses, such as higher transportation and food costs, are the biggest barrier to entry into secondary school.

**Learning barriers:** children who do not perform well in P6 and in the national exam, are more likely to drop out.

**Increasing opportunity cost:** longer school days in lower secondary imply that children have to scale back on household responsibilities. As the child grows, school attendance has to compete with activities that generate income for the household.

**Supply-side constraints:** projections suggest that insufficient resources in secondary education, especially schools and classrooms, could become one of the biggest challenges facing Rwanda's education system as the number of students transitioning to secondary education grows.

### Repetition in P1

Repetition rates for children are the highest in Primary 1 (24.5% in 2017). This is due to:

**Child-level factors.** Low level of school readiness in terms of literacy, numeracy, and socio-emotional development.

### Dropout between P1 and P5

The children at risk of dropping out between P1 and P5:

- > have accumulated many delays in their education with multiple repetitions
- > have started school late and did not attend nursery school
- > come from under-privileged households where neither parent has attended secondary school

**Household-level factors.** Low-level parental education is a strong predictor of low scores and high repetition rates in the first year of education.

**School-level factors.** Primary 1 is under-resourced, it has the highest pupil-to-teacher ratio, the most overcrowding in classrooms and the greatest issues with teacher attendance. This suggests that high-performing teachers are not being allocated to this grade.

### Repetition in P5

**Schools apply higher standards in Primary 5.** Repetition rates increase in P5 - 18.5% of children repeated this grade in 2016. This is because schools tend to apply higher standards in P5 to secure better school-level results in the national primary school examination at the end of P6.

# Key drivers of dropout

## **Age is a strong predictor of dropout.**

Older children (aged 13 to 18) enrolled in primary school are more likely to drop out compared to younger children. Dropout is a very rare event for children of primary school age (7 to 13 years of age). Children aged 13 and above accounted for 88% of the cases of dropout in primary school in 2016-2017. Dropout more than doubles for children between the ages of 13 and 14, from 4% to 11%, increasing to about 16% at the age of 16 and 17. At 18 more than half of the children have dropped out of school.

## **Poverty is correlated with dropout rates.**

There is a clear inverse correlation between household wealth and dropout, or wealth and being out of school. Twelve years after the start of their education an estimated 39% of children from the poorest 60% of households were still enrolled, compared to over 60% of children from households in the wealthiest 40% of households.

## **Early start is associated with improved completion rates.**

Patterns suggest that children that start school early perform better and have lower dropout rates.

## **Delayed start drives the out-of-school rate for young children.**

What drives the out-of-school rate for young children is not dropout, but rather a delayed start to their education. Children who start school late are more likely to drop out in the future, and thus less likely to transition from primary to secondary. Delayed start to education explains ~95% of out-of-school cases for children between the ages of 7 to 9.

## **Re-entry increases the risk of dropout.**

Re-entry is a positive outcome for children who have experienced dropout. Nevertheless, children re-entering the education system are at a high risk of dropping out again. Dropout becomes more permanent with age and with each passing grade.

### **Gender is a factor.**

Girls are much likely to be out of school from age 16 onwards, due to lower re-entry rates, as dropout is more permanent for girls than for boys. The main causes identified for this are:

- (i) girls reach Primary 6 before boys;
- (ii) girls are historically less likely to make the transition to secondary school;
- (iii) pregnancy and/or marriage are likely to be a dropout driver for females over 18 still enrolled in school; (iv) girls are more likely to drop out due to unexpected household circumstances (i.e. death of a family member).

### **Geography plays a role.**

Dropout rates are much higher in rural areas than in cities. This effect is seen only after the age of 13, i.e. after primary school age.

## **Key drivers of repetition**

### **Age is a factor in repetition.**

Repetition rates are higher for younger children, in particular in their first years of education. Repetition rates are lower for children aged 13 and above, but only because they face a greater risk of dropout.

### **Gender determines who is less likely to repeat.**

At all ages, girls are less likely to repeat than boys. Girls progress through their education much faster than boys and are more likely to attend grades that correspond to their ages.

### **Poverty is correlated with repetition rates.**

Children from the poorest households repeat the most and from the earliest ages, and children from the wealthier households are more likely to stay on-track. Young children aged 7 to 9 in the poorest wealth quintile are almost two times more likely to repeat than children from households in the wealthiest quintile. Similarly, children aged 16 to 18 in the poorest group of households are much more likely to repeat than children from the wealthiest group of households.

## Acknowledgements

This brief was prepared by Laterite based on the “Assessment of Repetition and Dropout in Basic Education in Rwanda”, a study prepared in close collaboration with MINEDUC and UNICEF.

Laterite’s Data Team, led by Belise Kangabe, was in charge of field logistics and data collection. Laterite’s Data Quality Team lead by Dominique Kalisa with the assistance of Denis Kamugisha was in charge of data quality and assurance. The team in charge of econometric analysis was led by Dimitri Stoelinga. The lead author of the brief was Cecilia Berlanga.

Laterite would like to thank:

> **the team from MINEDUC**, in particular Director General Rose Baguma, Director General Dr Marie Christine Gasingirwa, Emmanuel Niyomana, Clement Mugabo, Janet Nakato, Apollinaire Ndayisaba, and Ernest Rutungisha for their support and for facilitating access to MINEDUC data.

> **the team at UNICEF**, in particular Sara McGinty and Erin Tanner for their support and advice at every step of the project, from roll-out through completion.

> **the special advisers on this project**, Prof. Pauline Rose and Dr Ricardo Sabates, for their continued support throughout this effort, and Save the Children.

## Citing this brief

Laterite, 2019, “Factors and drivers of dropout and repetition in Rwandan schools”, Laterite Policy Brief no. 07 / 2019, Kigali, Rwanda.

## About Laterite

Laterite is a data, research and advisory firm based in Rwanda, Ethiopia, Uganda, Kenya and the Netherlands. Laterite specializes in innovative data collection and analysis techniques that help answer critical development questions.

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