

Improving Quality Education and Children's Learning Outcomes and Effective Practices in the Eastern and Southern Africa Region

Country context

Rwanda is the most densely populated country in Africa, with a population of over 11 million. Half of its citizens are under the age of 18. Despite the country's impressive economic growth over the past two decades, since the 1994 genocide Rwanda remains one of the poorest countries in the world, with 44 per cent of the population living below the poverty line. Approximately 80 per cent of the population live in rural areas. With increasing urbanisation since 1994, the urban population is expected to grow to 30 per cent of the population by 2020. One of the main development goals set out in Rwanda's Vision 2020 and Economic Development and Poverty Reduction Strategy is to move from an agriculture-based economy to 'a knowledge-based hub for business and information technology' by 2020.⁷⁸

Education

Primary education in Rwanda starts at the age of seven and comprises six years. Together with three years of lower secondary education, Rwanda has nine years of compulsory basic education (Rwanda Education Ministry, 2014, p. 1). In 2011, a strategy was launched to expand access to education from nine to 12 years of basic education (UNICEF, 2013a, p. 2). The transition from primary to lower secondary education is based on a national examination at the end of primary education (Rwanda Education Ministry, 2014, p. 1).

78 http://www.unicef.org/rwanda/overview.html





Equitable access to education and high-quality education are priorities for the government of Rwanda, which aims to provide its citizen with the skills and knowledge required for the socio-economic development of the country (Rwanda Education Ministry, 2014, p. 1). Since the school year 2003/04, fees from primary to secondary education have been gradually abolished in an effort to increase enrolment, retention and completion rates for basic education, especially for vulnerable children (Rwanda Education Board, 2012, p. 11). Rwanda is one of the few African countries on track to achieve seven of the eight Millennium Development Goals, one of which is universal access to primary education by 2015.⁷⁹ In 2013, primary school enrolment in Rwanda reached 97 per cent (98 per cent for girls). However, the primary education completion rate was still low in 2013 at 69 per cent (64 per cent for boys and 74 per cent for girls) (Rwanda Education Ministry, 2014, pp. 12, 14).

The large increase in enrolment numbers poses enormous challenges for the education system, especially for the provision of adequate learning spaces in primary education (Rwanda Education Board, 2012, p. 11).

Another key challenge for Rwanda's education system is improving the quality of education. The government addresses the remaining disparities in access to education and improvement of education quality in the Education Sector Strategic Plan (ESSP) for 2013/14–2017/18. The plan was developed in consultation with UNICEF and other development partners. The plan focuses on reducing the dropout rate, and improving access and retention for the most vulnerable children, including children with special needs (UNICEF, 2013a, p. 21). To improve the quality and relevance of education, the strategic priorities are curriculum development, quality standards, assurance and assessments, textbook distribution, improving teaching and learning, and implementation of a system for monitoring learning achievement at school level and national level (UNICEF, 2013a, p. 22). Key elements of UNICEF's programme to support the government of Rwanda in its strategy to increase quality education are curriculum review, teacher development and use of learning achievement assessments (UNICEF, 2013a, p. 2).

Learning Achievement in Rwandan Schools (LARS)

An important development regarding the quality standards and assurance programme of education in Rwanda is the 2011 introduction of Learning Achievement in Rwandan Schools (LARS).

Main purposes and components

The main purposes of LARS are to measure the level of achievement in literacy and numeracy at the national level in order to determine factors associated with student achievement – especially low achievement – and to monitor achievement over time. As a monitoring tool, LARS provides the Ministry of Education with a reliable database on learning outcomes as a basis for recommendations to policymakers and other stakeholders for future improvement (Rwanda Education Board, 2012, p. 12).

^{79 &}lt;a href="http://www.unicef.org/rwanda/overview.html">http://www.unicef.org/rwanda/overview.html.

To achieve these goals, LARS measures student achievement in literacy and numeracy at Grade 3 level in public schools, government-aided schools and private schools. Capturing completion of the lower primary level, the target population consisted of students who had completed Grade 3 and were in the second term of Grade 4 (Rwanda Education Board, 2012, p. 13).

The literacy component of LARS focuses on writing and reading skills in the Kinyarwanda language. The numeracy component captures skills in numeration and operations, the metric system, and geometric figures (shapes), in conformity with guidelines from the national mathematics curriculum (UNICEF, 2013a, p. 19). In order to identify the relevant indicators and factors related to low-learning achievement in Rwandan schools, background data were collected through guestionnaires for students, parents, teachers and school administrators.

Main findings regarding effective strategies and factors

The LARS baseline report is based on a national representative sample of approximately 2,500 students in 60 schools across Rwanda (Rwanda Education Board, 2012, p. 15).

Key findings include the following:

- A significant percentage of students fail to meet curricular expectations: 37 per cent in literacy and 46 cent in numeracy, compared to 55 cent of students meeting the expectations in literacy and 27 cent in numeracy (Rwanda Education Board, 2012, p. 41). The percentage of students failing to meet curricular expectations for numeracy is thus higher and more variable than observed for literacy.
- Numeracy results vary significantly between provinces and between districts (Rwanda Education Board, 2012, p. 55). Significant differences between some of the districts are also reported for literacy (Rwanda Education Board, 2012, p. 43).
- Students in rural areas are disadvantaged in meeting curricular standards compared with their peers in urban areas (Rwanda Education Board, 2012, p. 46). Achievement distribution in both literacy and numeracy is relatively equal for girls and boys (Rwanda Education Board, 2012, pp. 47, 55).
- A major impact on school level is also made through higher performing children of highincome parents.
- Another factor influencing achievement is the average teachers 'or head teachers' years
 of experience (Rwanda Education Board, 2012, pp. 51, 61). Interestingly, students with
 teachers with the least experience appear to perform better. One likely explanation
 mentioned in the report is that new teachers are significantly more skilled than previous
 cohorts, in the light of the rapid expansion of the Rwandan education system in response
 to rapid increases in enrolment (Rwanda Education Board, 2012, p. 60).

Two main shortcomings affect the analysis of parent and classroom characteristics. First, the response rate among parents is very low. Second, student data were not linked to teacher and parent data at an individual level. Thus, students can only be linked through the average of teacher and parent characteristics for their school. Results concerning the relationships of parent and classroom background characteristics and student achievement therefore need to be interpreted with caution (Rwanda Education Board, 2012, p. 49).

The LARS report mentions several reasons for the poor performance of students measured in LARS 2011 (Rwanda Education Board, 2012, p. 41). One important factor is that 'the children being tested were born either during or immediately after the civil war, a period when parents' attention was focused largely on matters of survival' (Rwanda Education Board, 2012, p. 41). Another challenge for the education system and classroom management in particular is the rapidly growing enrolment rate, with high growth in overage children and children from low socioeconomic backgrounds as well as rural areas. Language of instruction (transition to English) versus language spoken at home by the student and the teacher, and the language of test (Kinyarwanda) are also seen as important, but have not been captured or analysed in LARS (Rwanda Education Board, 2012, p. 41).

To improve student-learning outcomes in primary education in Rwanda, one major area that needs to be addressed is the number of students failing curricular expectations in literacy and numeracy. Another area is performance differences between districts. Both can be improved by providing resources to low performing students, and schools and districts with the highest proportion of low-performing students (Rwanda Education Board, 2012, p. 64).

The LARS report underlines the importance of further research to investigate and explain the determinants of achievement, especially of low achievement. One example is identifying cognitive strategies that need to be strengthened through in-depth analysis of items that students consistently fail to resolve. This includes letter and number recognition, receptive vocabulary, phonetic accuracy and fluency in reading components. This would help describe more precisely students' missing prerequisite literacy skills (Rwanda Education Board, 2012, p. 65).

In order to allow for the measurement of achievement and the relationships with important background characteristics over time, LARS is implemented periodically in a three-year-cycle. An innovative way of linking LARS with international benchmarks would be to include test items from other regional or international assessments, as suggested in the LARS report (Rwanda Education Board, 2012, p. 66)

LARS capacity-building component

One important accomplishment during the development of LARS was capacity-building. A team at the Rwanda Education Board (drawn from various departments of REB, districts and school teachers) was trained to design and conduct learning assessments. Important skills they acquired include item/tools development, test administration, coding of questionnaires, data entry and data analysis.

Both Rwanda and Zimbabwe focus on assessment design, monitoring and evaluation, gathering background data at individual, school and system levels, and conducting innovative capacity-building programmes at the system level. Both ZELA and LARS include a development programme to improve the capacity of education staff to analyse student learning outcomes. In addition, both programmes appear to support innovation in curriculum reform.

⁸⁰ In Rwanda, the Primary Net Enrolment Rate (NER) rose from 92.9 per cent in 2009 to 96.6 per cent in 2013, with the largest increase between 2009 (92.9 per cent) and 2010 (95.4 per cent) (see Rwanda Education Ministry, 2014, p. 12).