

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

Country context

Zimbabwe is classified by the World Bank as a low-income country. It has a population of just over 14 million people in 2013 (World Bank, 2015). Thirty per cent of the population live in urban areas, the majority in Harare and Bulaywo (UNICEF, 2013b).

The Constitution of Zimbabwe, Amendment No. 20, recognises 16 official languages (Government of Zimbabwe, 2013). These languages include Chewa, Chibarwe, English, Kalanga, Koisan, Nambya, Ndau, Ndebele, Shangani, Shona, sign language, Sotho, Tonga, Tswana, Venda and Xhosa. Amendment No. 20 states that each language must be treated equitably and that government must create conditions for the development of the official languages.

Education

The Education Act 1987 makes provisions for three languages to be taught in all primary schools from Grade 1: English, Shona and Ndebele. Primary education is designed to equip learners with language skills in Shona and English or Shona and Ndebele (UNESCO, 2010). The Education Amendment Bill 2005 was passed in February 2006 and proposes the teaching of 'three main languages of Zimbabwe mainly English, Shona and Ndebele and such other local language in all schools up to form two on an equal time basis' (MOESAC, 2006). The bill also states that prior to Form 1 any language that is best understood by the pupils may be used in instruction (MOESAC, 2006). Zimbabwe's formal education structure includes seven years of primary education (beginning at the age of six and ending at Grade 7), four years of lower secondary education (Forms 1–4), and two years of upper secondary education (Forms 5–6). As of early 2015, external assessments are conducted in the form of the Grade Seven Certificate at the end of the primary cycle, the O-Level examination at the end of the lower secondary cycle, and the A-Level examination at the end of the upper secondary cycle.





After gaining independence in 1980, the Government of Zimbabwe expanded access to primary school education, which resulted in the number of primary school enrolments more than doubling in seven years. By 1982, primary enrolment rates were reported at almost 100 per cent (Nyanguru and Peil, 1991). However, between 1982 and 2004 enrolment rates decreased and in 2008 the provision of education services deteriorated dramatically because of the election period and hyperinflation. During this time, student attendance fell to around 20 per cent, and teacher attendance to about 40 per cent (UNICEF, 2008b).

Zimbabwe's education system was 'once arguably the best on the continent,' but since 2000 the education sector has experienced significant deterioration due to declining financial assistance (UNICEF, p. 1, 2011). To replace the drop in government funding, a system of fees, levies and incentives was imposed that has affected access to and quality of education, particularly for the most disadvantaged children. In addition, the lack of funding has had an effect on school and learning supervision, availability of planning and policy development related to school and system governance, teacher in-service training and school environments in general (UNICEF, 2011).

In 2009, the sector slowly began to recover, with education made a priority in the new government's Short Term Emergency Recovery Programme (Government of Zimbabwe, 2009). After a dramatic decrease in primary school completion rates between 1996 (82.6 per cent) and 2006 (68.2 per cent), completion rates rose to 82.4 per cent in 2009 (UNICEF, 2012).

However, there are still significant concerns about the provision of quality education for primary school children in Zimbabwe. Demographic and Health Survey (DHS) statistics indicate that the nation's rural and poor citizens are substantially overrepresented in drop-out and repetition rates (UNICEF, 2008a). O-level pass rates are still extremely low, and there remains limited access to important material and non-material resources that support teaching and learning (MOESAC, 2009).

To address these shortcomings, the Ministry of Education, Sport, Arts and Culture (MOESAC) launched the Education Transition Fund (ETF) in 2009, managed by UNICEF (UNICEF, 2011).⁷⁷ The purpose of the ETF was to improve the quality of education through the provision and delivery of essential teaching and learning materials for primary schools, and through high-level technical assistance to MOESAC. ETF entered its second phase in 2011 with the overall goal of continued support and revitalisation of the education sector. ETF was renamed the Education Development Fund (EDF) in 2014.

EDF support in Phase II focuses on activities in the following areas linked with the Ministry of Education's Strategic Investment Plan (MOESAC, 2011): School and System Governance; Teaching and Learning; and Second Chance Education. Key activities within these themes include strengthening education delivery mechanisms; improving the quality of education services; improving access, retention, completion and achievement of learners; and a continued focus on the most vulnerable and out-of-school children (UNICEF, 2014). Access to education and improvement of student learning outcomes have been confirmed by the 2013 Education Management System (EMIS), the 2014 Zimbabwe Early Learning Assessment (ZELA) and the 2014 Multiple Indicator Cluster Surveys (MICS) (UNICEF, 2014).

⁷⁷ In 2014, the Ministry of Education, Sport, Arts and Culture (MoESAC) was renamed the Ministry of Primary and Secondary Education (MOPSE).

This case study explores emerging trends from ZELA in student learning outcomes and the provision of textbooks and teaching materials procured through EDF. It also reviews the multi-year programme of an intensive capacity-building partnership with the Zimbabwe School Examinations Council (ZIMSEC) and ACER. The capacity-building programme supports the long-term sustainability of ZELA through system strengthening in assessment, data management and analysis. Kenneth Russell, EDF Manager at UNICEF Zimbabwe, shared his experience with the ZELA Capacity-building Programme for this case study.

The latest available UNICEF annual country report for Zimbabwe is 2013. In it, multiple sources of data suggest that children in Zimbabwe are better off in 2013 than they were in the previous five years (UNICEF, 2013b). The report notes that there was a 95.6 per cent primary net enrolment rate and a 52 per cent secondary net enrolment rate. The gender parity index was quoted at 1:01 and the primary completion rate at the time of the report was 86.7 per cent. Access to and quality of education were reportedly enhanced through the provision of textbooks; training and supervision of teachers in 35 per cent of primary and secondary schools; and improved water, sanitation and hygiene (UNICEF, 2013b, p. 1).

In addition to ZELA (2012–2015), Zimbabwe participated in SACMEQ I (1995–1999) and SACMEQ III (2005–2010). Zimbabwe played a significant role in the eventual development of SACMEQ. Research generated from a collaboration in 1989 between Zimbabwe's Minister for Education and Culture and the Director of IIEP UNESCO led to dialogue that eventually resulted in the development of the SACMEQ consortium (SACMEQ, 2013).

Zimbabwe Early Learning Assessment

The Zimbabwe Early Learning Assessment (ZELA) is a four-year programme commissioned by UNICEF to support and enhance the national capacity to review, reform and re-orient the current system of student assessment in Zimbabwe. It establishes a baseline to help determine whether the EDF programme (2010-2015) has had the desired effects on children, their caregivers, schools, and the education sector in general, and it examined the extent to which the changes identified are attributable to the EDF programme interventions. ZELA's defined target population is students beginning Grade 3 of primary school (ACER and ZIMSEC, 2013).

Main purpose and components

The goal of the ZELA project is to monitor and evaluate the effects of the EDF programme through the introduction of an early–grade learning assessment in language and mathematics.

ZELA measures student performance in language and mathematics. Information is also collected at the school and student level. School head and pupil questionnaires collect information about student background, teaching resources, funding and infrastructure.

The test domains are mathematics and language, including English as well as Ndebele and Shona. Tests were developed in Zimbabwe in February 2012, January 2013 and January 2014, by panels of ZIMSEC subject specialists and curriculum managers (ACER and ZIMSEC, 2015).

Main findings regarding effective strategies and factors

The ACER data, collected from three cycles of the ZELA, indicate socio-economic status is still a strong predictor of performance, and is associated with large differences in assessment results across Zimbabwe. Socio-economically advantaged pupils and schools tend to outscore their disadvantaged peers by larger margins than between any other groups of pupils in English and mathematics. There are large differences in pupils' performance between provinces and between urban and rural areas (ACER and ZIMSEC, 2015).

Key findings include the following:

- The percentage of students performing at or above the grade-appropriate level in English after completing Grade 2 in Zimbabwe was 49 per cent in 2012, 54 per cent in 2013 and 51 per cent in 2014. The 2014 results were not statistically significantly different from the previous years. The 2012 base-line study reported that the percentage of students performing at or above the grade-appropriate level in mathematics after completing Grade 2 in Zimbabwe was 46 per cent. This increased substantially to 63 per cent in 2013 and again increased significantly to 67 per cent in 2014.
- Girls have continued to outperform boys in English and mathematics from 2012 to 2014. In 2014, more girls than boys reached the benchmark for English (by 9 percentage points) and mathematics (by 6 percentage points). From 2012 to 2014, the performance of girls in English was significantly higher in 2014 than in 2012 (by 3.8 percentage points). There was a moderate positive trend in mathematics performance for both boys (by 11.9 percentage points) and girls (by 11.6 percentage points) since 2012. These trends are similar to those of other southern African nations. Findings indicate that gender differences do not change much within southern African countries. Where girls perform better they tend to continue performing better and where boys perform better they tend to continue performing better (Satio, 2011).
- Students in urban schools significantly outperformed students in rural schools in both English (by 42 percentage points) and mathematics (by 25 percentage points). More than eight of 10 urban students reached the benchmark in both English and mathematics, while only four of 10 rural students reached the English benchmark and six of 10 students reached the mathematics benchmark.
- Students in registered schools outperform students in satellite schools in both English and mathematics. Students in registered schools performed better on ZELA 2014 by 18 percentage points in English and 11 percentage points in mathematics.
- Socio-economically advantaged pupils and schools tend to outscore their disadvantaged peers by larger margins than between any other groups of pupils. The percentage of students performing at or above grade level in English was 34 per cent for the lowest socio-economic status (SES) quartile and 77 per cent for the highest SES quartile (a difference of 43 percentage points). In mathematics the difference was also clear, but smaller in magnitude: 53 per cent of the low SES pupils performed at or above the grade level and 84 per cent of the high SES pupils—a difference of 31 percentage points (ACER and ZIMSEC, 2015).

Several relationships have been observed between student performance and student background, teaching or infrastructure variables. These relationships are all correlational, and not necessarily causal.



The school-level variance in performance was found to be relatively high, indicating that schools vary substantially in average student performance. In line with the aims of the EDF programme, one would expect to see a reduction in the proportion of school level variance over the EDF programme cycle (ACER and ZIMSEC, 2015).

ZELA is in its evaluation phase in 2015, and it is too early to draw conclusions from the study beyond some of the indicative trends noted earlier. The EDF programme distributed textbooks and teaching materials to all schools in Zimbabwe. Based on the relatively low base some pupils may be starting from, combined with increasing exposure to reading materials, one would expect to see long-term advancements in pupil performance over the EDF programme cycle.

ZELA Capacity-building Programme

ZELA also targets system-level capacity. One of the key components of ZELA has been to support and enhance national capacity in student assessment. In 2012, ACER worked with ZIMSEC to construct four tests and two surveys. This activity was followed by the administration of these tools in 500 schools in Zimbabwe and the analysis, standardisation and reporting of pupil achievement levels in Zimbabwe through the ACER and ZIMSEC partnership. Training in assessment and data analysis were conducted in 2012, and ZIMSEC took increasing responsibility for these activities in each subsequent cycle of ZELA.

In 2013, ZIMSEC indicated that the training needs of its staff include the following topics:

- Analysis of the relationships between student background characteristics, teaching and learning, and funding and facilities on pupil performance (using SPSS statistical analysis software);
- Intensive and practical training on IRT (including use of ACER ConQuest);
- Knowledge and skills of school-based assessment (in theory and practice).

In 2014, an SPSS Roundtable was organized to reinforce the 2013 and 2014 capacity-building activities and to ensure ZIMSEC colleagues were fundamentally involved in the analysis and drafting of ZELA data. Intensive and practical training on IRT (including the use of ACER ConQuest software) was provided during a three-week training programme, as well as technical assistance on IRT. ACER also received a ZIMSEC delegation in Australia and introduced key ZIMSEC staff to school-based assessment (SBA) prior to 2015 capacity-building activities in this focus area.

In 2015, the focus of capacity-building activities with ZIMSEC is SBA. SBA activities include facilitated workshops with ZIMSEC and key government stakeholders, and a pilot research project with schoolteachers in Zimbabwe. As with 2013 and 2014, an SPSS Roundtable will be conducted with ZIMSEC during the Impact Evaluation report-writing stage. Similarly, an IRT Roundtable will be conducted with ZIMSEC in order to build on the technical assistance and workshops provided in previous ZELA cycles.

The expanded activities also include the placement of a technical assistance officer within ZIMSEC for up to two months per year (Kenneth Russell, UNICEF Zimbabwe, personal communication, 16 April 2015).

ZELA Capacity-building Programme: Experience of the EDF manager

Kenneth Russell, EDF Manager at UNICEF Zimbabwe, shared his experience with the ZELA Capacity-Building Programme. The following is a summary of his responses to questions about the implementation of the capacity-building support, along with some success stories and an outline of the challenges encountered.

How is the ZELA Capacity-Building Programme implemented?

Most of the capacity-building activities were (or plan to be) delivered through facilitated workshops. However, the placement of the technical assistance officer is different, and is one of the distinctive strategies used by ZELA to help with capacity-building. It not only allows for ready access and sustained support but would have helped to deepen relationships between the technical officer and ZIMSEC as well as strengthen partnership among the entities (which might survive beyond the project).

What are some success stories from ZELA's Capacity-Building Programme?

It is difficult to provide success stories from the Capacity-Building Programme without an assessment of the effect of the support for capacity-building that has been provided. What we know from our discussions with and the work of ZIMSEC is the following:

- ZIMSEC played a greater role in the analysis of 2014 data than they had done previously, as well as the preparation of the report. This is due in part to the support they have received in data analysis.
- ZIMSEC has spoken publicly about their increased capacity in IRT. This is a new area of
 work and a new approach to analysis for ZIMSEC, but one which they are interested in
 continuing to use for ZELA and their other assessments.
- ZIMSEC is at the forefront of national discussions on continuous assessment, and SBA specifically, because of the support provided to them through ZELA. They were exposed to good practices in Australia and had opportunities to reflect on how to apply some of these lessons to Zimbabwe.
- ZELA has provided opportunities for ZIMSEC, as well as provincial and district staff
 and teachers, to engage in developing items for the assessment. This helped to deepen
 understanding of the participants, and helped the organisation to grow in how it designs
 items for other assessment. A critical aspect of this area of capacity-building is the diversity
 of those participating and hence the potential for domino effect in the system.
- Institutional capacity has also been enhanced through the provision of software such as SPSS and ACER ConQuest, computers and motor vehicles. These enhance the organisation's access to technology to support its work, as well as its ability to monitor field activities and supervise staff.

What are the main barriers you have encountered that limit sustainable capacity-building, and what ways were considered to overcome these barriers?

The major barrier to sustainable capacity-building is the 'projectised' approach taken with ZELA. While necessary to test and experiment before making it institutional, such a critical project creates expectations and practices that might not be sustainable when mainstreamed. This project approach also resulted in the capacity-building activities being viewed as parallel to or outside the normal functioning of the organisation. In so doing, capacity is built primarily in those who are involved in the project despite their applicability and relevance to other aspects of the organisation. ZELA invested heavily in a small number of core staff who have done great work, but the effect of them leaving ZIMSEC would be potentially catastrophic for ZELA.

Another challenge to sustainability of built capacity is the concentration of investment in capacity-building within ZIMSEC to the exclusion of other organisations that will be critical to sustainability in the years ahead. While ZIMSEC has done a great job, during institutionalisation, the implementation arrangements could be different. In such a case, there could be new players playing critical roles for which they have not had the required capacity-building.

These barriers are the focus of the final year of ZELA as a project. Much of it will depend on the institutional arrangements agreed for ZELA beyond the current phase (up to end of 2015).

We thank Kenneth Russell for sharing his experiences for this research.