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Repoa Brief

Learning Environment and Performance of Primary Education in Tanzania

Lucas Katera and Derick Msafiri

Introduction

Since independence in 1961, Tanzania declared war against three social enemies, which are ignorance, poverty and diseases. The fight against ignorance was to succeed by giving special attention to the education sector. Thus, throughout the history of Tanzania, education is regarded a key priority for development that impacts the lives of people (Rajani & Omondi, 2003). The importance attached to the education sector manifests itself in various national development frameworks. From early 2000s, the Poverty Reduction Strategy identified education as one of the priority social sector. Later during implementation of the successor National Strategy for Growth and Poverty Reduction (MKUKUTA), emphasized improvement of quality of life and social well-being, which included education, health, and water as one of its three outcome areas. The most recent second Five-Year Development Plan covering the period 2016/17 to 2020/21 also gives special attention to the education sector as a key quality enhancer of the country's labour force in realizing the National Development Vision 2025, which aimed to take the country to the middle-income status, driven by industrialization by 2025 (URT, 2016).

Consistently, the budget allocation to the education sector has been increasing over time. In absolute terms, it increased from 1.73 trillion shillings in 2009/10 to 4.77 trillion in 2016/17 (URT, BEST 2016). Similarly, as a percentage of GDP, it increased from 4.3% in 2009/10 to 4.5% in 2016/17 (*Ibid*). While there are improvements in several indicators attributed to these budgetary increases, especially those related to quantity, some quality indicators remain a challenge. The education Sector Development Plan 2016/17-2020/21, for instance, cites poor learning outcomes as the main challenge (URT, 2018). This is reflected by poor pass rates in the national examinations in both primary and lower secondary education, poor literacy and numeracy skills among children in the education system and lower skills among graduates at various education levels. Benchmarking of the skills profiles conducted in 2012/13 shows Tanzania to have a gap of between 0.6 and 14 times of necessary skills in major groups of occupations compared to Middle Income Countries (URT, 2013).

REPOA, in collaboration with the World Bank conducted a Service Delivery Indicator (SDI)survey to assess learning outcomes by looking at inputs, commitments and competencies of service providers in the education and health sectors. The survey was conducted in two rounds in 2014 and 2016/17. The two surveys had been preceded by a pilot conducted in 2010 in Tanzania and Senegal, which allows Tanzania to undertake analytical comparison over three waves of data.

Key Findings

Availability of Key inputs

These indicators deal with the service delivery environment, including the school's facility infrastructure and availability of material supplies. In terms of the availability of school infrastructure (electricity, water and sanitation), the 2016/17 SDI survey indicates 44% of schools had the required minimum infrastructure. While more than half of the schools (54%) had toilets meeting the standard, privacy was a problem in which teachers did not have separate toilets from the pupils. In total, less than 61 percent of the schools had private toilets for teachers. The shortage of toilets was much higher in rural than urban schools. In terms of teaching materials, the percentage of pupils who had a mathematics or English textbook in the classroom in 2019/17 was 20%.

Overtime, there has been a modest change in the availability of inputs, with some cases showing improvements and deterioration in others. The percentage of schools with minimum infrastructure, for instance, increased from 41% in 2014 to 44% in 2016/17. The percentage of schools in which pupils used either English or Mathematics textbooks in the classroom decreased slightly from 23% in 2014 to 20% in 2016/17. The figure for 2016/17 was also observed in the pilot survey of 2010.

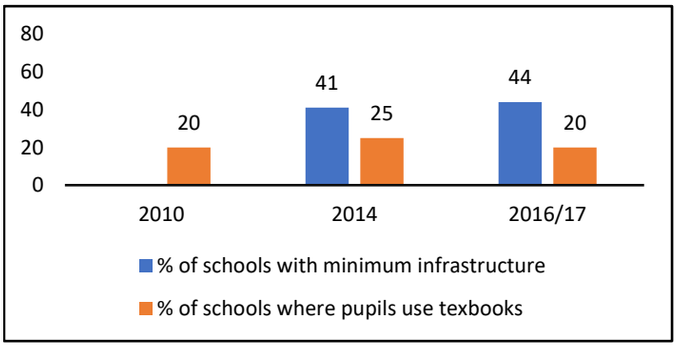


Figure 1: Availability of key inputs | 2010-2016/17

Teacher effort: What providers do?

Under this indicator, the focus is on the presence (or absence) of teachers at school. In addition, teachers should not only be at school, but be at school and adhere to the timetable. Two visits were made at sampled schools, one announced and another unannounced. In the announced visit, general information on schools were asked. This included observation of teaching in selected subjects and classes. Absenteeism of teachers in schools was assessed during unannounced visit. The combination of two visits gives the total teaching time the pupils miss. This combines absent from school, present at school but not in the classroom and being in the classroom but not teaching.

The results showed that 14% of teachers were not present at school during the 2016/17 survey. It also revealed that 29% of the teachers were not found in the classroom teaching despite being present at school, making a total of 43% absenteeism from classrooms. The absence of teachers in both classroom and school resulted into a loss of time and resources which deteriorated pupils' performance.

Trend analysis showed impressive progress in the decline of school absenteeism rate from 23% in 2010 to 14% in 2014; however, the rate has remained at 14% in the 2016/17 survey. Furthermore, classroom absenteeism progressively declined from 53% in 2010 to 43% in 2016/17.

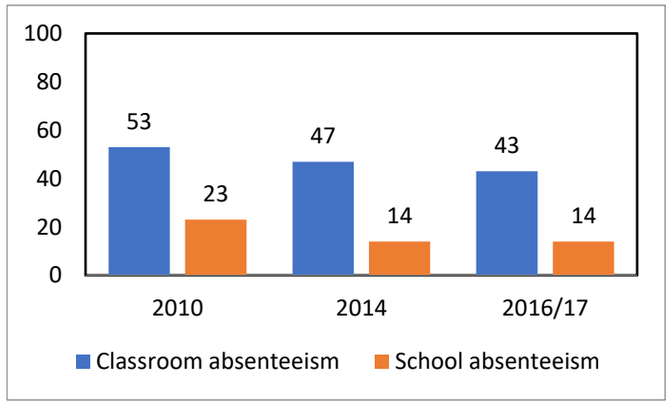


Figure 2: Teachers' absenteeism rate |2010-2016/17

Teacher ability: What providers know?

Teachers need to have at least a minimum level of knowledge of the subjects they are teaching and skills to transform their knowledge into meaningful teaching. The SDI survey assessed these skills particularly in English, Mathematics and Pedagogy.

The survey found that content knowledge among Tanzanian teachers was generally low. While performance was relatively better in Mathematics, the performance in English was not good and it was even poor in pedagogy. The results revealed that Mathematics teachers faired better with a national average pass rate of 71%.

English teachers performed poorly (44%), indicating that they could not master half of the standard four curriculum.

The lowest score was in the pedagogy section, where the national average for teachers was only 35%. This is particularly a challenge because this test assesses teachers' ability to transfer their knowledge to pupils, implying generalized poor delivery of required knowledge and lessons.

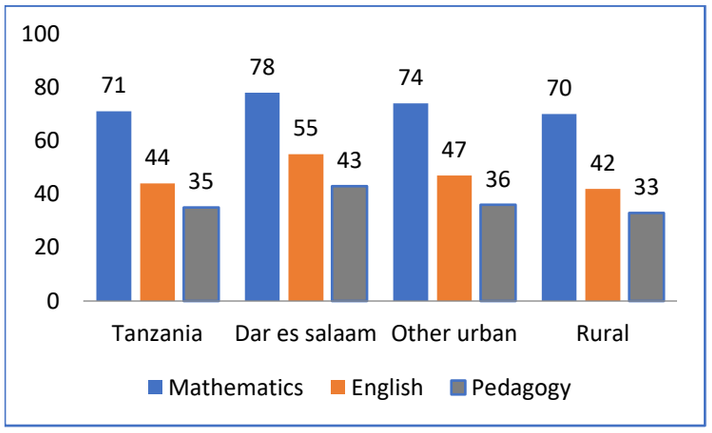
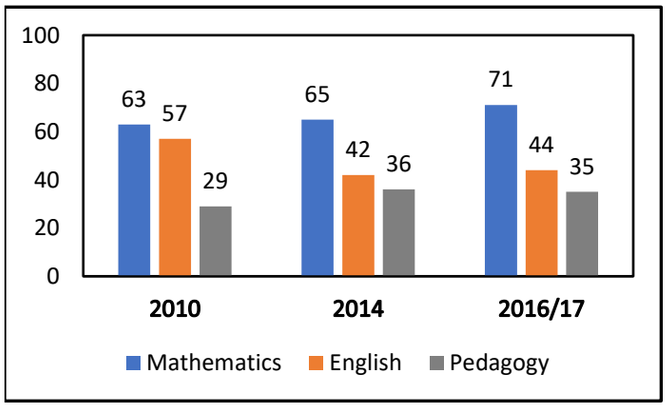


Figure 4. Teachers' average score on English, Mathematics and Pedagogy |2016/17

Disaggregating the results by urban/rural shows that, urban areas were doing relatively better than rural areas. This was consistent for all three tests, Mathematics (74%), English (47%) and Pedagogy (36%), compared to rural areas whose scores for the three tests were 70%, 42% and 33%, respectively. Dar es Salaam which is taken as a special case among urban areas, did better than average urban areas for all three tests, with scores of 78% (Mathematics), 55% (English) and 43% (Pedagogy).

In all the three surveys, the results were consistent in that, highest performance has been in Mathematics, followed by English and Pedagogy. In terms of subject specific performance overtime, we note mixed results. In Mathematics content assessment, for instance, teachers recorded a progressive improvement from 63 percent in 2010 to 71 percent in 2017. In contrast, the content knowledge of English among Tanzanian primary teachers declined to 42% in 2014 from 57% in 2010, and later in 2017, the content performance increased slightly to 44%. On the other hand, pedagogy skills among teachers increased from 29% in 2010 to 36 percent in 2014 and remained almost the same at 35 percent in 2017.

Therefore, consistently teachers' content knowledge and skills remained lower for English and Pedagogy skills for all three surveys. The performance in Mathematics was not only consistently higher for all three surveys, but also showed consistent improvements ***(see figure 5)***



Pupil performance

This section assesses pupils' performance in English, Kiswahili and Mathematics. It was noted that there were similarities between the performance of pupils and that of teachers reported in the preceding section for common subjects. Pupils performed better in the Kiswahili version of the test, followed by Mathematics and then English.

On average, pupils scored 88% in the Kiswahili section, 74% in the Mathematics section and 42% in the English section. As was the case for to teachers' assessment, in both cases the performance was higher in Mathematics than in English tests. Disaggregating the results by urban-rural provided similar picture as the one depicted in the teachers' assessment presented earlier.

Urban areas performed better, at rates of Kiswahili (96%), mathematics (79%) and English (64%), compared to rural areas where average performance was 89 % for Kiswahili, 71% for Mathematics and 50% for English. Consistently, Dar es Salaam performed even better with average performance of Kiswahili (97%), Mathematics (84%) and English (72%).

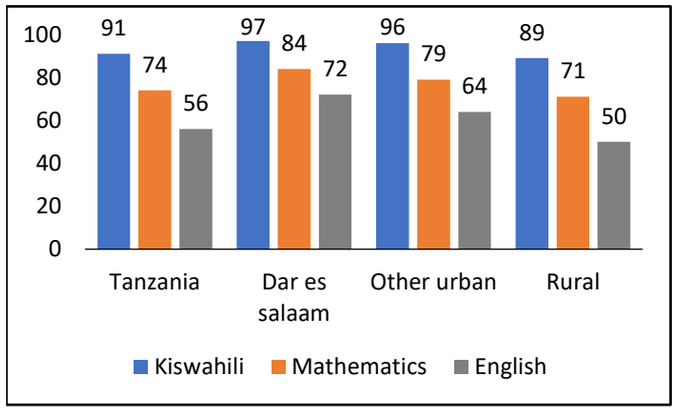
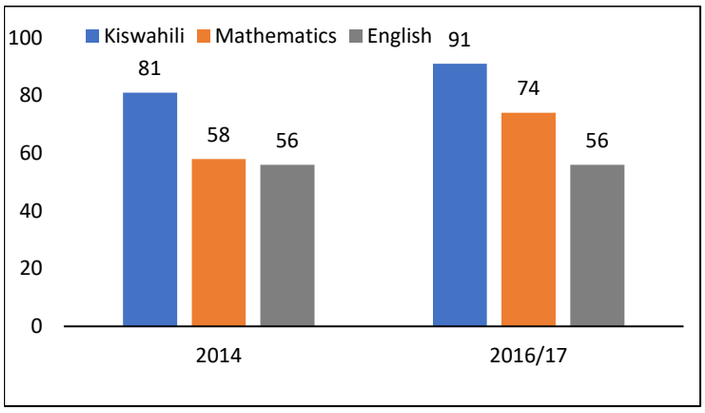


Figure 6. Pupils' performance - Average scores |2016/17

Trend analysis of pupils' performance showed consistent improvement unlike that of teachers, except for English test, whose average performance remained at the same level between 2010 and 2016/17.

Table 7 summarizes the trend in pupils' performance.

Figure 7. Pupils' performance - average scores |2014-2016/17



The performance of Kiswahili section among pupils increased from 81% in 2014 to 91 percent in 2016/17 while that of Mathematics increased from 58% to 74 percent between the two surveys. English performance among pupils remained the same at 56% between 2014 and 2016/17.

While average performance in the Kiswahili version of the test was the highest, huge jump between the two surveys was witnessed in the Mathematics section where the increase was of 16%. The pupils' performance in Mathematics and English mirrored well the teacher's performance discussed earlier. Results showed that teachers' knowledge in Mathematics was relatively higher, making pupils' performance in the subject to be also high. Similarly, teachers' knowledge in English seemed low as reflected in the pupil's performance and even progress overtime.

Conclusions and recommendation

As Tanzania continues with efforts to transform into middle income economy, education plays vital role in the transformation process. The SDI results showed that Tanzania was making progress in certain areas and not so much in others.

Specifically, there was good progress in the minimum infrastructure availability but not so in the teaching materials. While teachers' classroom absenteeism remained the same at 14% as reported in 2014, school absenteeism rate slightly increased in 2016/17. On content knowledge, good knowledge among teachers in the Mathematics test was observed but not so in the English and Pedagogy. It was also clear that the knowledge of teachers manifested itself in the leaning outcome of pupils. The results showed good performance of pupils in Mathematics than in English. Finally, the results revealed unequal learning outcomes between rural and urban areas, with the later doing better in all aspects.

It is recommended from these findings, that the government needs to ensure close follow ups of the teachers' performance and inspection to improve their accountability and enhance the delivery of quality primary education. Moreover, we see increasing number of pupils sharing the same textbook. This may be due to increased awareness of importance of education especially with the expansion of basic education to lower secondary, which assured parents of access to education for their children up to form four.

More investment is still needed to enhance better learning facilities and infrastructure, such as textbooks, to catch up with the increased demand. Frequent upgrading of teachers' skills and teaching methods are highly recommended to ensure teachers master their subject curriculum to deliver high quality content. This should be in line with provision of incentives for high performance teachers to work in rural areas as well to narrow the inequality in learning outcomes.

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REPOA
157 Mgombani/REPOA Street,
Regent Estate, P.O. Box 33223, Dar es Salaam, Tanzania
Tel: +255 22 2700083 Cell: +255 75 409 1677 Fax +255 22 2705738
Website: www.repoa.or.tz Email: repoa@repoa.or.tz

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