KiuFunza May, 2022



KiuFunza Insights:

Voices of Pupils and Teachers

About KiuFunza

KiuFunza - short for Kiu ya Kujifunza or Thirst to Learn - is a teacher performance pay program. It is an incentive system that links teacher bonus payments to KKK skills (reading, writing and numeracy) mastered by their students. KiuFunza has been implemented and tested in schools across Tanzania since 2013. The KiuFunza bonus system targets teachers in Grades 1-3, because these teachers are responsible for KKK and have the largest classrooms. Independent randomized evaluations of KiuFunza show that it results in substantial pass rate improvements equivalent to one third of a school year, added to what a student normally learns.

About the data

All findings in this KiuFunza Insights note are based on the 2019 RISE Tanzania baseline survey and analysis. RISE Tanzania is part of the RISE (Research on Improving Systems of Education) initiative, a global research program based at the University of Oxford.¹ The RISE baseline survey took place between 18 February and 10 May, 2019. It was designed and implemented by the RISE Tanzania Country Research Team and the Bukoba-based survey firm Economic Development Initiatives (EDI) Limited. The data collection was conducted in 397 primary schools, 22 district education offices, and 397 ward-level education offices across six regions of Tanzania: Simiyu, Pwani, Singida, Tanga, Songwe and Kigoma. The baseline survey was designed to generate representative and detailed information on the state of primary education in Tanzania.

This brief was written and produced by Twaweza East Africa.



¹ School enrolment has dramatically increased worldwide, but millions of children spend years in school without gaining foundational skills. Research on Improving Systems of Education (RISE) is an international research programme investigating how education systems can overcome this crisis.

Students

Insight 1: Most students want to complete secondary school or higher

Primary school students in Grades 2 and 3 were asked: *Imagine you had no constraints and could study for as long as you liked. What level of formal education would you like to complete?*

University

University

Secondary school

Primary school

Don't know

7%

7%

Figure 1: What level of formal education would you like to complete?

Source: RISE Baseline survey, 2019

A minority of students (about 20%) are satisfied with only completing primary school. About 40% of girls and boys would like to complete secondary school, and about one in three students would like to complete university. In terms of enrolment, with gross secondary enrolment in Tanzania at 31.4% in 2020, Tanzania is making progress towards the student preference regarding secondary school. Tertiary education enrolment was 7.8% in 2020.²

Twaweza incentivizes primary school teachers to focus on foundational skills (reading, numeracy, writing), so that students do not have to leave school without being able to read stories, or to multiply or write. Our vision of primary school is a place that grows the talents of all students, rather than a filter that selects only the top of the class. Motivated and focused teachers can improve students' chances to realize their education goals.

² Enrolment data from the UNESCO Institute for Statistics (via data.worldbank.org, accessed February 2022). Gross enrolment ratio is the ratio of total enrolment, regardless of age, to the population of the age group that officially corresponds to the level of education shown.

Insight 2: Most students want to be ... a teacher!

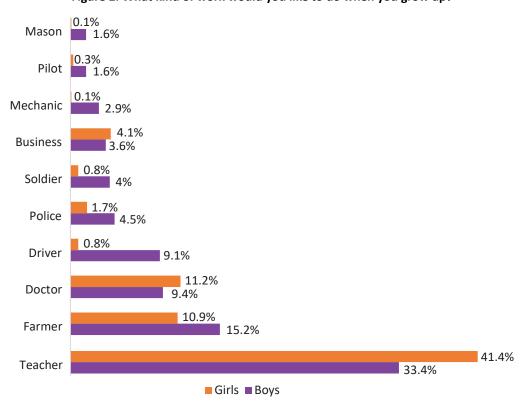


Figure 2: What kind of work would you like to do when you grow up?

Source: RISE Baseline survey, 2019. Based on interviews with Standard II-III students. Jobs with a share of 1% or higher are included

Students were asked what kind of work they would you like to do when they grow up. Teachers are seen as role models by their students. Teacher is by far the most popular stated job choice, with 41% of girls saying they want to become a teacher alongside 33% of boys. Farmer and doctor are the next two most popular jobs among all students, followed by driver for boys.

Teacher motivation

Insight 3: Most teachers would choose teaching again

Teachers were asked: *If you could start over, would you choose teaching as a career?* On the positive side, a majority, 75%, would choose teaching again. At the same time, a sizable minority of 25% would prefer a different job if they had the choice.

Other survey findings (not in graph) show that the job aspects that teachers are relatively less satisfied with are their current salary (48% not satisfied) and opportunities for promotion (44% not satisfied).

No 25% Yes 75%

Figure 3: If you could start over would you choose teaching as a career?

Source: RISE Baseline survey, 2019.

Note on teacher sampling: the RISE sample contains about 8 teachers per school (or 70 percent of all teachers in the sample schools). All teachers in Standards 2 and 3 were sampled; the remaining sample was randomly selected from Standards 1, 4 and 7.

Insight 4: Most teachers prefer not to teach the lower grades

Primary school teachers were asked to indicate what grade of primary school they would want to teach, if given the choice. In our analysis we grouped the grade preference as Upper Primary (if the teacher answered one of Grades 4-7) and Lower Primary (Grades 1-3).

Figure 4 shows the indicated assignment preference, grouped by the *current* assignment of the teacher. The current assignment is labeled *lower* if the teacher only teaches Grades 1-3; *upper* if the teacher only teaches in Grades 4-7; and *both* if the teacher is assigned to both upper and lower grades. *Total* provides the preference of all teachers (irrespective of current assignment).

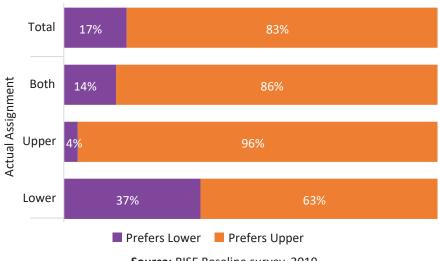


Figure 4: Teacher preferences on teaching assignments

Source: RISE Baseline survey, 2019.

The results show that a large majority of primary teachers prefer to teach the higher grades (Gradess 4-7). Only 17% of all teachers indicate they prefer a lower grade assignment. Among teachers who currently teach only in Upper Primary, 96% prefer staying there. But the preference to teach higher grades is also expressed by teachers who currently only teach in Lower Primary: 63% of current full time lower grade teachers would prefer to switch to teaching in the higher grades.

Overall, the data show a worrying lack of appetite among teachers to instruct children in the first grades of primary school. This is a challenge for the country because the 3R skills of foundational literacy and numeracy (reading, addition, subtraction) are taught in Lower Primary.

Insight 5: Lower grade teachers overestimate student performance by a large margin

In the RISE baseline survey, teachers of students in Grades 1, 2 and 3 were asked "What is the approximate share of pupils in your class that can read Kiswahili at Grade 2 level (for example a short story of five sentences); and answer comprehension questions?". Teachers estimated that 70% of their students could read with comprehension.

A similar question was asked for Grade 2 level addition: "What is the approximate share of pupils in your class that can do Grade 2 level addition, for example 26+32?" Teachers estimated that 78% could do addition.

In the same survey, enumerators administered an assessment of skills mastered by students in Grades 2 and 3. The results showed that only 27% of students in Grades 2 and 3 could read such a story and answer comprehension questions; and only 32% of these students could do addition

at Grade 2 level (for the assessment, Grade 2 level was defined as adding up numbers between 1 and 20, without carrying over: 5+1, 11+4, 5+15). The findings are illustrated in Figure 5.

70%

32%
27%

Teacher estimate

Pass rate on assessment

Addition (up to 2 digits)

Reading and comprehension

Figure 5: Student performance and teacher estimates (percentage passing)

Source: RISE Baseline survey, 2019.

Teachers in lower primary overestimate their students' skill mastery by more than 100%. Put differently, the share of students mastering these skills is less than half of the teachers' estimates. This mismatch may have various explanations. Perhaps teachers know the real situation but, when asked by an enumerator/outsider, they exaggerate their students' performance. Or teachers really do not know the level of their students' performance, although survey evidence shows that teachers do administer tests during the year and correct homework. A final possibility is that the format and timing of the assessment matters: a similar Twaweza test at the end of the year shows that 41% of Grade 2 students can read a story – higher but still far below the estimated 70%.

Most likely, the mismatch is a combination of wishful thinking and reticence vis-à-vis outsiders. In any case, this finding calls for more frequent independent learning assessments in the lower primary grades. Foundational reading and numeracy are vitally important outcomes to secure children's school careers. A shared and realistic understanding of student learning levels among all stakeholders is a requirement to start improving learning for young children.

School conditions

Insight 6: Teaching conditions in lower grades are challenging

101 100 100 65 59 49 1 1 2 3 4 5 6 7 Grade

Figure 6: Student numbers in language classes

Source: RISE Baseline survey, 2019.

The RISE school surveys document the number of students in each school, by grade. In addition, teachers were asked whether they teach all students together in one classroom, or in separate groups.

Figure 6 shows the size of groups that teachers are teaching on average. The group size is calculated as the total number of registered students in the grade divided by the number of groups that students are taught in. There is a clear distinction between the high group sizes in Grades 1-4 of around 100, and smaller group sizes in Grades 5-7.

Other findings from the same survey (not in graph) show that teachers cite large class sizes as one of the most important challenges they face when implementing the new 3R curriculum in the lower grades.

Insight 7: Teacher supervision is uneven

Teachers were asked how often a (deputy) head teacher observes their teaching in the classroom. The findings indicate that this type of supervision is uneven: 41% of teachers say that classroom observation never happens, while 36% (the next largest group) say this happens at least once per month.

Figure 7: How often does someone from the school leadership observe your classroom?

How often does someone from the school leadership observe your classroom?



Source: RISE Baseline survey, 2019.

Conclusion

The insights in this brief provide a strong case to improve both student learning and teacher engagement. Three related issues stand out.

First, students are clearly eager to learn and a many of them want jobs that require at least post-secondary education. However, independent learning assessments in the RISE surveys show that a substantial share of students do not master elementary skills like addition and story reading in their foundational years at school.

Second, on average teachers are not eager to teach in the lower grades of primary school. However, the curriculum prescribes that these grades are the time when students should master these essential skills. In addition, teachers don't know how students are doing and overestimate student progress by a large margin.

Third, teaching conditions in the lower grades are not easy, especially the large group sizes. Supervision is in many cases insufficient.

Overall, the degree of teacher motivation and engagement in the lower primary grades needs to be improved to safeguard student foundational learning outcomes. Improving teacher motivation across a large primary school system is one of the most difficult challenges for governments around the world. An increasing body of evidence shows that well-designed performance pay systems can effectively address this problem.