Williams College – Center for Development Economics

Policy Brief

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Stemming the Learning Crisis

How Uganda can improve basic skills?

Summary

Uganda, while having successfully boosted student enrollment in the last 30 years, lags behind regional peers and the world, in the delivery of effective basic education, as measured by adjusted school years for learning. Consequently, not only is the investment in human capital not contributing to growth but it also affects other development objectives like health, equality, and quality of life. Nonetheless, there is strong evidence that suggests the resolution of the difference between learning and schooling lies in the smart calibration of incentives for teaching either through better governance & accountability and or training. This will ensure productive teacher-student interaction to enhance learning outcomes which shall eventually support sustained and inclusive growth in the long run.

1. Introduction

Despite Uganda being a pioneer in Sub-Saharan Africa by expanding access to basic education with the policy of Universal Primary Education starting in 1997, which enabled an explosion of learner numbers from 2.5 million in 1996 to 8.3 million in 2015, it is increasingly apparent that the exponential growth of enrolment has unfortunately not translated into effective learning. This is delaying the anticipated benefits of education investments. For instance, according to a World Bank Report¹, only 6 percent of students can read at grade 4 level, and an even more worrisome 2 percent are competent at solving age-appropriate mathematics problems. Whereas this challenge is not exclusive to Uganda relative to Sub-Saharan Africa, it is markedly more acute here than in the neighboring countries of Kenya and Tanzania.

This state of affairs dampens the outlook for returns to education as a driver for growth in the Ugandan economy because it weakens the link between education and worker productivity whereby low-skilled workers are failing to serve the needs of an economy aspiring to modernize by 2040. Low acquisition of basic skills also prevents the accumulation of further skills for subsequent productivity. In addition, lackluster delivery of basic education is diluting the positive intergenerational effects that basic education confers on society (such as improved health outcomes)² and it is worsening inequality given the fact that learning poverty disproportionately affects poorer households³

¹ (Uganda Economic Update 13th Edition - Economic Development and Human Capital in Uganda, 2019)

² (Arias, Evans, & Santos, 2019)

³ (World Bank, 2018)

Against that background, therefore, we note that the successful deployment of basic education with an emphasis on learning is a uniquely important pursuit, capable of facilitating both productivity and inclusion⁴. Indeed, there is evidence that expansion and quality can be attained simultaneously through a mix of interventions that are geared towards enriching teacher-student interaction.

The bulk of the research, some of which is elaborated in subsequent sections of this paper, provides a strong indication that interventions that explicitly address the improvement of school governance, enhancement of the skill level of teachers, and boosting the preparedness of students present a higher likelihood of success. This holistic approach can serve as a template for the initiation of reforms that will improve the quality of basic education.

This policy brief, however, intends to demonstrate that in the case of Uganda, the greatest dividends with respect to quality can be generated through restructuring teacher incentives and contexts, in ways that will guarantee significantly better teacher performance than is currently the case.

2. Challenge

A. Scope of the Problem

When examining the scope of the learning gaps in Uganda, the data is unequivocally dismal. Roughly half of the students in Uganda, after three years of mathematics teaching, cannot place numbers between 0 and 999 in order.⁵

According to the last national assessment of progress in education (NAPE) administered in 2014, the proportion of P6 pupils who reached the defined proficiency levels in Numeracy and Literacy in English was 39.4 percent and 38.3 percent, respectively. This means that less than half of the P6 pupils have acquired most of the competencies in Numeracy and English Literacy specified in the P6 curriculum.

More recent evidence from the 2018 UWEZO Learning assessment shows that 25% of children aged 11 could not understand a Grade 2 story in English.

In other words, the problem of learning trailing schooling is persisting over time. This will have undoubtedly been made infinitely worse when one considers the fact that Uganda had the longest Covid school closure in the world, from February 2020 to October 2021 (UNESCO) which has most likely rolled back whatever modest gains may have been achieved in the last decade. This tragic reality was characterized by UNICEF as an "insurmountable loss" of learning.⁶ The statement made during the 2022 International Day of Education further noted that 70% of 10-year-olds are unable to read or understand a simple text, up from 53% prepandemic, across the world.

Of even greater concern is the fact that the school closures widened the disparities in learning attainment between the rich and the poor.

⁴ (Arias, Evans, & Santos, 2019)

⁵ (Bold, et al., 2017)

⁶ (Buchholz, 2022)

B. Proximate Causes

I. Governance

The primary education sector in sub-Saharan Africa has undergone a rapid expansion, realizing coverage of up to 98%. This has however largely happened without a commensurate strengthening of governance at all levels. In Uganda, the general administrative weakness and low capacity of local government entities responsible for school oversight is mirrored by downstream gaps in the quality of school governance. The absence of governance suppresses any quality concerns for the delivery of basic education.

II. Teaching basic Skills

(i) Low Quantity

The Service Delivery Indicators program conducted in Uganda in 2013 revealed it as having the highest level of Teacher absenteeism compared to all the other countries surveyed, at 57%. This translates to roughly "half the scheduled teaching time". Juxtaposed against a rising number of teachers, estimated at twice as many joining the profession in the last decade versus the previous one, this discrepancy is even more puzzling. There are more teachers, but there is no more teaching.

The above revelation is problematic when we consider empirical findings which indicate a reasonably strong association between teacher presence and some degree of learning. For instance, Logistic regression findings for English reading and numeracy competencies in Uganda showed a negative significant effect of teacher absenteeism on English competence at a grade 2 level. It is amply clear that learning is being negatively impacted by teacher absence in Uganda.

(ii) Low Quality

Deficiencies in teacher competencies aggravate the low contact time with students. In some cases, the subject knowledge of many teachers is virtually indistinguishable from that of their grade 4 students. In Uganda, more than 90% of teachers at Grade 4 level have at least 80% of knowledge equivalent to a 4th Grader. This is, however, no cause for celebration since it is expected that the minimum knowledge for teaching should very well exceed fourth-grade subject matter knowledge. In this regard, Uganda is close to the uniformly low sub-Saharan average of 7% for teachers possessing this minimum level of knowledge.

This provides a strong basis for the intuitive formulation which is that where there is no teaching either through absenteeism or ineffectual delivery; there can be no learning. This elevates the teachers' effectiveness as a primary and necessary condition for any objective discussion on improving basic skills and combatting learning poverty.

⁷ (Bold, et al., 2017)

⁸ (Bold, et al., 2017)

⁹ (Uwezo, 2021)

¹⁰ (Bold, et al., 2017)

3. Solutions

There is a consensus that the overarching long-term solution to various development challenges such as low-quality basic education is institutional reform, for example, judicial independence, government accountability, expansion of democratic spaces, efficient bureaucracies, etc. This is however an incremental fundamental change that happens over a very long-term horizon. Education policy must still play a role in the interim, by providing viable second-best alternatives in as far as the problems exist and are being experienced in the current period.

A. Better Teachers



A mural of African music legend Fela Kuti's most famous album –"*Teacher, Don't Teach Me Nonsense*", which decried the poor quality of teachers in Nigeria

The contention, therefore, is that the most appropriate channel for improving basic education in both English and mathematics is through a relentless focus on enhancing teacher performance. This paper will cluster the recommendations in four broad categories, i.e.: Teacher Training, Teacher Accountability, Teacher Incentives; and, Other approaches.

I. Teacher Incentives

The incentive structure for teaching is defective. There is no systematic link between teacher pay and teacher performance. This arbitrary remuneration mechanism is therefore not efficient in influencing the level of effort since it is not tied to delivery. Moreover, the poor incentive structure limits the potential to attract and retain high-caliber professionals in the field.

However, there is good evidence to support the use of financial incentives that are related to student performance or attendance¹¹.; or even to teacher performance directly¹².

Whereas teaching is a relatively well-paid profession in Uganda, it is by no means lucrative. As such, Government still has scope for introducing financial incentives that are related to school performance and/or teacher attendance since these incentives can plausibly influence teacher behavior with respect to attendance and intensity. It is important, however, that the design of such incentives is based on relative performance improvement and not absolute school performance because this can create perverse incentives for teachers to make efforts to teach at schools that are already performing well.

II. Teacher Accountability

Teacher accountability is a subset of effective school governance. Interventions for the latter beget the former and result in better learning outcomes.¹³ . Indeed, accountability has had some impact on student learning in some areas of Latin America, and crucially, in Uganda.¹⁴

Quality of School Management is a strong determinant of teacher accountability and performance. In fact, school-based management programs improve learning when the community has the capacity to make and implement smarter decisions.¹⁵

Therefore, Government should leverage its discretionary school grant-aiding power to enforce the operation of robust Parent-Teacher Associations (PTAs) by making them mandatory. Furthermore, portions of school grants should be pegged to proof of their functionality and relevance as pertains to teacher monitoring and accountability. This action will empower the PTA mechanism to enforce quality standards that should equally be well-articulated.

The PTA when in possession of sufficient relevant information can also act as a strong proxy for community-wide participation. This is in part because the parental representation will be skewed toward motivated parents who are inherently more likely to be interested in quality assurance. The dissemination of relevant information by schools and government stakeholders directly will be an important feature to bolster their effectiveness.

III. Teacher Training

The current teaching curriculum has an over-emphasis on pedagogic methods as opposed to prioritizing mastery of the content. As indicated previously, the minimum requirements for content knowledge are largely missing among teachers.

The National Curriculum Development Center needs to re-orient teaching curricula to focus on creating content knowledge as well as on imparting skills that are beneficial for teaching. These skills should build teachers capacity to do the following: structure lessons, plan content and lessons, ask questions to engage and challenge learners, and give useful feedback during lessons.

Teacher training should also adequately simulate classroom practice and be delivered by dedicated and well-trained instructors. In general, teaching future teachers must be deliberate,

¹² Evans, et al.,(2016)

¹¹ Duflo, et al., (2012)

¹³ Glewwe, P. & Muralidharan, K. (2015).

¹⁴ Tahir, et.al, (2017)

^{15 (}World Bank, 2018)

well suited to the needs of the learners, and executed over a long enough period to ensure mastery.

Additionally, in light of the excess demand for the teaching profession, tighter entry standards for teachers are necessary to ensure more competent individuals are responsible for imparting basic skills. This will follow a pattern seen in higher-performing education systems around the world¹⁶

IV. Other Approaches

Technology

Whereas technology can have significant impacts on education, it is a somewhat complex intervention. The key challenge with the use of technology goes beyond the initial cost of implementation to other weaknesses in execution, such as a general lack of relevance of the technology coupled with a lack of capacity of teachers to use the technology amidst an apparent lack of digital and other infrastructure to maintain its use.

Learning Materials

The provision of inputs like learning aids and materials can also be helpful but are sensitive to the environment and other specific contexts.

4. Conclusion

The gulf between learning and schooling imposes constraints on the thriving of the economy. In the context of a fast-growing population that will place demands on economic output, the resolution of learning poverty for Uganda is even more urgent.

It is worth recognizing, first of all, that although the conventional solutions/interventions for the provision of basic education such as school infrastructure, feeding, etc are important for access¹⁷, when it comes to the quality of basic education, there is need for policy finesse as there is limited opportunity for broad strokes and wholesale common-sense undertakings.

It is also not true that rapid expansion of access should inevitably result in low quality as is clearly demonstrated by the case of South Korea which secured high levels of learner performance alongside universal literacy¹⁸.

Ultimately, solving deficiencies in learning will not be achieved through a single well-implemented intervention but rather through a combination of policies operating in concert. Importantly, as I have tried to illustrate, these should primarily be tailored toward creating a more productive teacher-student interaction.

Plucking low-hanging fruit by improving teacher accountability through co-opting parental and community oversight is a good way to start. Subsequent medium-term interventions many of which may require only modest additional investment (for example; curriculum reform and performance financial incentives) should be prioritized within available funding ceilings.

¹⁷ (World Bank, 2018)

¹⁶ (Bold, et al., 2017)

¹⁸ (World Bank, 2018)

References

- Arias, O., Evans, D., & Santos, I. (2019). *The Skills Balancing Act in Sub-Saharan Africa*. Washington, D.C.: The World Bank.
- Bold, T., Filmer, D., Martin, G., Molina, E., Stacy, B., Rockmore, C., . . . Wane, W. (2017). Enrollment without Learning: Teacher Effort, Knowledge, and Skill in Primary Schools in Africa. *Journal of Economic Perspectives*, 185-204.
- Buchholz, K. (2022, January 24). The longest School Closures of the Pandemic. Statista.
- Group, W. B. (2019). *Uganda Economic Update- Economic Development & Human Capital in Uganda: A Case for Investing in More Education*. Kampala: World Bank.
- (2019). Uganda Economic Update 13th Edition Economic Development and Human Capital in Uganda. Kampala: WORLD BANK.
- Uwezo. (2021). Inequalities in Children's Basic Literacy and Numeracy Skills in Uganda and their Implications for Policy. kampala: uwezo .
- World Bank. (2018). *The World Development Report Learning to Realize Education's Promise*. Washington D.C.: World Bank.
- Duflo, et al., (2012). *Incentives Work: Getting Teachers to Come to School*. American Economic Review, 102 (4): 1241-78.
- Evans, et al.,(2016). What Really Works to Improve Learning in Developing Countries?: An Analysis of Divergent Findings in Systematic Reviews. Published by Oxford University Press on behalf of the World Bank. Washington D.C.: World Bank.
- Glewwe, P. & Muralidharan, K. (2015). Improving School Education Outcomes in
- Developing Countries . RISE Working Paper Series, Oxford, United Kingdom. Tahir, et.al,
- (2017). Report Cards: The Impact of Providing School and Child Test Scores on Educational Markets; American Economic Review vol. 107, No. 6, June 2017 (pp. 1535-63)
- De Hoyos, et.al., (2015). *The Impact of an Accountability Intervention with Diagnostic Feedback: Evidence from Mexico*. Policy Research Working Paper;No. 7393. World Bank, Washington, DC. World Bank.