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Assessment for Action: An Organic, Free-Range Approach to Raising Learning for All

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This report comprises part of a project funded by The William and Flora Hewlett Foundation that seeks to better understand and inform the PAL Network's work in undertaking assessment for action, i.e. utilizing its expertise in assessment to establish actions that can improve children's learning. Other parts of the project focus on the links between assessment and action, both within specific country contexts (via a theory of change table and accompanying narrative for each Network member) and across the Network as a whole (via a case study report).

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The analysis and arguments in the paper, as well as any errors, are the responsibility of the authors of the paper.

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Summary

The aim of this synthesis report is to identify commonalities that can help to characterise the PAL Network's work as a whole. More specifically, it presents:

1. The role that the PAL Network's assessments provide in both depicting as well as improving children's learning, i.e., assessment for action
2. The unique strengths of the PAL Network that can enable to deliver these actions, namely its organic growth and free-range adaption.

It identifies that PAL Network members are diverse in their backgrounds, in their history with the use of citizen-led assessments, and in their evolutions from assessment to action. The Network provides a structure and platform with which to harness this diversity, using assessment for action to help raise learning for all.

Introduction

The People's Action for Learning (PAL) Network is one of the leading South-South collaborations in education. It brings together members working in 14 countries, across three continents, to assess the basic reading and numeracy competencies of all children, through household-based, citizen-led assessments (CLAs). Network members' CLAs have already achieved a great deal. The use of household-based assessments provides coverage well beyond that offered by school-based assessments. Importantly, by also assessing those children who are out of school, these CLAs provide a robust evidence base on the most vulnerable children globally. Through further adaptations to their CLAs, Network members have continued to extend the range of children whose learning is acknowledged in educational debates, such as those with disabilities (in Pakistan) and those living in refugee settlements (in Uganda).

By showing whether children are actually developing foundational skills – such as the ability to read a second-grade text or divide a three-digit number by a single-digit number – CLA findings have galvanised educational debates within member countries. Both the PAL Network's CLA methods and findings have also gained traction in global policy debates, such as in the UNESCO Institute for Statistics' Handbook on Measurement of Equity in Education (2018) and The International Commission on Financing Global Education Opportunity (2017), in addition to a range of peer-reviewed academic publications (see, for example: Alcott & Rose 2015, 2016, 2017; Carr-Hill 2013; Chudgar 2012; Goodnight & Bobde 2018; Jones & Schipper 2015; Jones, Schipper, Ruto, & Rajani 2014).

Increasingly, the work of the PAL Network goes beyond assessment towards actions that can directly improve children's learning outcomes. The aim of this synthesis report is to identify commonalities that can help to characterise the PAL Network's work as a whole. More specifically, it presents:

1. The role that the PAL Network's assessments provide in both depicting as well as improving children's learning, i.e., assessment for action
2. The unique strengths of the PAL Network that can enable to deliver these actions, namely its organic growth and free-range adaption.

The analysis that follows is based on a combination of interviews with PAL Network members, participation in PAL Network events, and documentary analysis. Members of the research team held two individual interviews each with ten of the Network's country members, as well as an interview with the PAL Network Secretariat. Members of the research team attended the PAL Network's annual meeting in Mexico, March 2017, and held a workshop focused on the current project in Uganda, May 2018, which was attended by the Secretariat and representatives from each of the ten participating Network countries. Documentary analysis was undertaken on a combination of published and grey literature provided by PAL Network members.

1. Assessment for action

The value of assessment

Assessments can benefit actions to improve learning by helping people to understand:

- the nature of the problem at present, and
- the extent to which children are making progress towards gaining literacy and numeracy.

The ability though of a given assessment to achieve these two goals depends on their design and use.

Figure 1 shows sample assessment tools from members across the PAL Network. While the details of the tools differ across countries, they share clear common principles:

1. A focus on foundational literacy and numeracy skills, with even the most difficult tasks still expected at the primary school level
2. Assessors orally explain instructions to children, rather than requiring them to read the instructions. This is important because reading the instructions (i.e. sentences) is more challenging than the tasks for the most foundational reading levels (e.g. letters or words).
3. Depicting each child's skill level according to a small number of discrete categories that are explicitly linked to concrete learning outcomes – e.g. able to read a sentence, able to multiply – rather than to continuous scales – e.g. 480 out of 800, 23rd percentile – as is common in many assessments.

Figure 1: Excerpts from assessment tools for India, Kenya, and Mexico (upper level: literacy; lower level: numeracy)

The figure displays four sample assessment tools from different countries, illustrating common principles in design:

- India (Hindi):** 'पढ़ने की जाँच SAMPLE (1)'. Includes a reading passage about a girl named Meera and a comprehension question: 'बगीचे में एक पेड़ है। पेड़ पर एक तोता रहता है। तोते का रंग हरा है। वह लाल टमाटर खाता है।' (In the garden, there is a tree. A parrot lives on the tree. The parrot's color is green. It eats red tomatoes.)
- Kenya (Kiswahili):** 'STADI ZA KISWAHILI (1)'. Includes a reading passage about a doctor and a comprehension question: 'Wiki iliyopita tulikuwa na karamu kubwa nyumbani. Dada yangu alikuwa amefaulu mihani wake. Mama na baba walijawa na furaha tele. Waliilika jamaa na marafiki kwenye karamu. Wageni wote walifika mapema sana karamuni.' (Last week, we had a big party at home. My sister was successful in her case. Mom and Dad were very happy. Relatives and friends came to the party. All guests arrived very early to the party.)
- Mexico (English):** 'Lectura Lectura'. Includes a reading passage about a doctor and a comprehension question: 'El papá de Fernando es doctor. El fontanero no compuso la fuga de agua. El edificio cuenta con portón eléctrico. El cielo se ilumina con los rayos del sol. La escuela no tiene reja ni jardín. Mi perro se llama Fanfarrón.' (Fernando's father is a doctor. The plumber didn't fix the water leak. The building has an electric gate. The sky is lit up with the sun's rays. The school doesn't have a gate or garden. My dog's name is Fanfarrón.)
- India (Math):** 'MATH TEST SAMPLE (1)'. Includes a numeracy test with four sections: Number recognition (1-9, 10-99), Subtraction, Multiplication, and Division. Sample questions include: '46 63', '29 39', '7) 879', '47 45', '28 17', '6) 824', '55 26', '92 84', '76 57', '8) 985', '91 43', '52 66', '14 48', '4) 517', '36 27'.

These principles have important consequences. First, the emphasis on foundational skills ensures that attention is focused on those children most in need of improving their learning. It also necessitates working from the actual level of many children's learning, rather than where it should be according to curricular expectations; this is important given how unrealistic curricula are in many education systems globally (Pritchett & Beatty 2015). Assessments tied to unrealistic curricula run the risk of 'left-censoring', which occurs when a data point is below a certain value, but that value is unknown. In other words, this happens when many children simply score zero. Left-censoring can tell us little more than that a test is too difficult; it cannot identify the

stages through which children still need to progress in order to reach these higher levels. Unfortunately, the prevalence of left-censoring in curricular assessments is corroborated by the fact that so many children are unable to reach the highest levels on the PAL Network assessments.

Second, the design and format of the assessment, with reading out instructions to children, helps make the assessment more widely accessible, even to those with very basic literacy. The assessment is also more readily understandable to adults who are not literate. This is an important consideration, given that children without foundational skills are more likely to come from households and communities where these skills are in short supply. Making the assessment process more accessible can help to make the process of understanding and acting upon assessment results more inclusive and engaging.

Third, the use of discrete categories explicitly linked to concrete learning outcomes helps to make the process of learning more tangible to citizens. Parents and carers can start to understand both the current state of learning among their children and the steps necessary to reach foundational literacy and numeracy. It also helps orientate debates on learning to focus on children's absolute, rather than relative, levels. Assessments that provide a continuous distribution of ability may be viewed commonly as preferable in statistical analyses of learning. However, using such assessments to inform action implicitly places a focus on whether or not each child is better or worse than others. In contrast, a focus on absolute levels shifts the focus onto ensuring that every child is reaching at least the foundations of learning.

These benefits enable PAL Network assessments to play a dual role in building actions to raise learning. First, assessments help lay the foundations for action through large scale, citizen-led assessments that help to mobilise citizens to collect data before, then using this data to establish current levels learning among their children and stimulating interest in improving learning. Second, assessments become integral to citizen's action for learning, as their clarity means citizens can use them to understand the impact of actions taken to support children.

Assessment for action: a theory of change

Initially, large-scale CLAs provide an essential foundation for future action. In a given country, initiating a CLA is an organic, within-country process, driven by a native organisation's recognition of the need for the data on children's learning. Citizens and other key actors, such as government and civil-society organisations, then mobilise to generate citizen-led data. In coming together to collect data, these groups are encouraged to discuss the analysed data, which serves to establish the nature of the problems faced in children's learning. This means the CLA serves two purposes: it provides robust evidence on the need for action in education, but through the shared act of developing and conducting the CLA it also builds engagement with the challenge.

Figure 2: A theory of change depicting the PAL Network's work in assessment for action

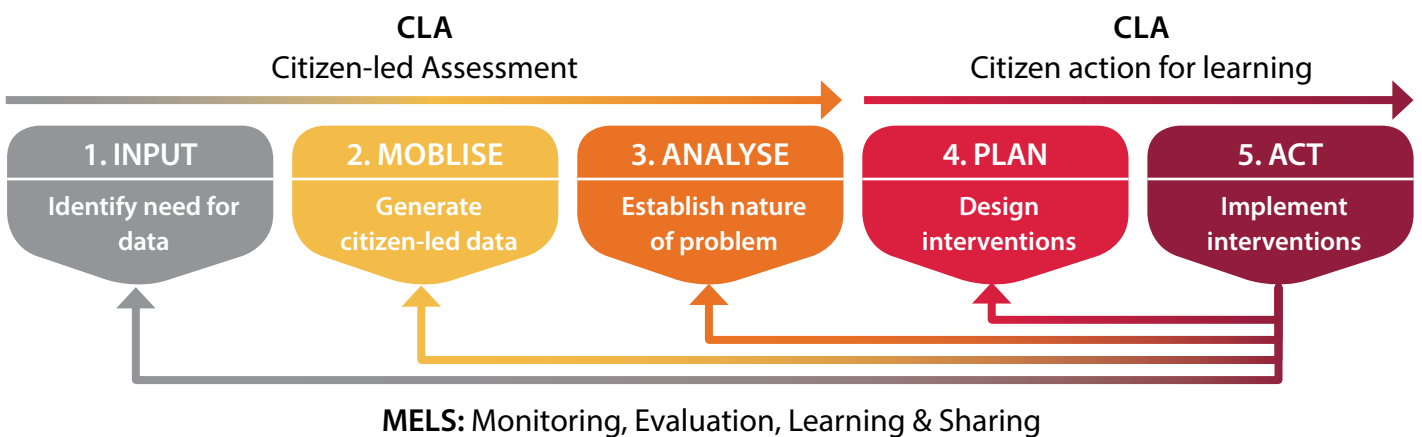


Figure 2 illustrates the common stages through which the PAL Network works towards assessment for action. Naturally, given the diversity of country contexts across the Global South, Network members will differ in the specifics of their work at each stage from assessment to action. Accordingly, country-specific narratives and theory-of-change tables are also available help to elucidate these specifics.

Regarding the Network at large though, five key stages are apparent in its work from assessment for action:

1. Initiate: Identify need for data

As more children attend school than ever before, the assumption has been that sending children to school will automatically lead to learning (Pritchett 2013). This assumption has led to millions of children attending school without acquiring the foundational skills that provide the basis for all future learning (UNESCO 2014). The majority of existing approaches to obtain learning data at national and global level focus on standardized school-based assessments. These are typically pen and paper assessments, which assume that a child is already able to read and write. In many countries across the global South though, millions of children are unable to read and write, despite having spent at least four years in school. Furthermore, a significant proportion of children are either out-of-school or attending irregularly. This means that school-based assessments suffer from selection bias and fail to cater to the realities of many global South countries.

An absence of inclusive learning assessments has meant that millions of children are excluded from official sources of data tracking learning progress. Therefore, the first step in PAL Network's Theory of Change identifies the need to collect more and better equitable and inclusive data to capture the learning progress of all children. With many children out-of-school or attending irregularly, household-based surveys are an essential means to gather inclusive learning data.

2. Mobilise: Generate citizen-led data

The majority of existing assessments are administered in schools by small numbers of teachers, trained enumerators or specialized education professionals. In addition to ignoring out-of-school children, this has also excluded parents, families and community members from assessment processes.

A key aspect of PAL Network assessments is to democratize understanding of the state of education among citizens. This leads to the second step in PAL Network's Theory of Change. The PAL Network's philosophy is that if you do not understand the scale of the problem, then you cannot begin to find a solution. Understanding learning progress and helping children to gain the foundational skills that will provide the foundations for lifelong learning cannot be left to a small number of trained experts or the government. It is the responsibility of everyone to ensure children are in school and learning well, and that responsibility starts at home.

By mobilizing citizens to help generate assessment data, the PAL Network identifies citizen volunteers as an effective method to collect robust data, at large scale and low cost. Of equal importance though is democratizing the understanding of learning levels, helping in turn to broaden awareness of the problem of poor learning outcomes and catalyse discussions about how best to effect change.

3. Analyse: Establish nature of problem

PAL Network members believe that, in order to establish the scale and nature of the problem, the hardest-to-reach children must be included in the sampling frame. Across the developing world, the household is the only place where you are likely to find the majority of children, regardless of their schooling status¹.

Establishing the scale and nature of the problem is a key step for identifying where action needs to be taken to help those children that are furthest behind to catch up. Across the Global South, using evidence on learning outcomes to inform policy, planning and implementation is not yet an entrenched practice. PAL Network members work to rectify this by producing analysis of assessment data and then engaging with key stakeholders – including government, civil society, and local communities – to share these findings. A key focus of this analysis is to provide learning data that is readily comprehensible. If action is to be taken, then data needs to be easily understood by those who must act – whether policymakers, teachers, or parents. This is key if data is to enable action.

4. Plan: Design interventions

Across the PAL Network, using assessment data to identify potential 'solutions' to improve learning outcomes has happened in different ways, at different levels, and at different points in the process. In some PAL Network countries, conducting the assessment is the first step in the journey towards improving learning outcomes. In other countries, the assessment is a standalone process. And in others, citizen-led assessments are one of several parallel strategies to encourage citizen engagement with educational outcomes. Wherever member countries fit on this continuum of assessment to action, there is broad agreement across the membership that data on learning outcomes needs to be robust, equitable, inclusive of all children, simple to understand and easy to act upon.

This leads to the fourth step in PAL Network’s Theory of change. Solutions need to be based on relevant and recent data, need to be contextually relevant and appropriate, respond to the immediate learning needs of the child (based on where they are and not where they ought to be) and should be scalable and sustainable. In addition, the inclusive nature of the assessment process should help to broaden the scope of who is able to have a voice in identifying appropriate learning interventions. Network members may or may not directly implement interventions to improve learning outcomes. However, common to all members who are directly implementing programs to improve learning outcomes within the network, is the central position of the assessment tool to monitor and track progress for every child over time.

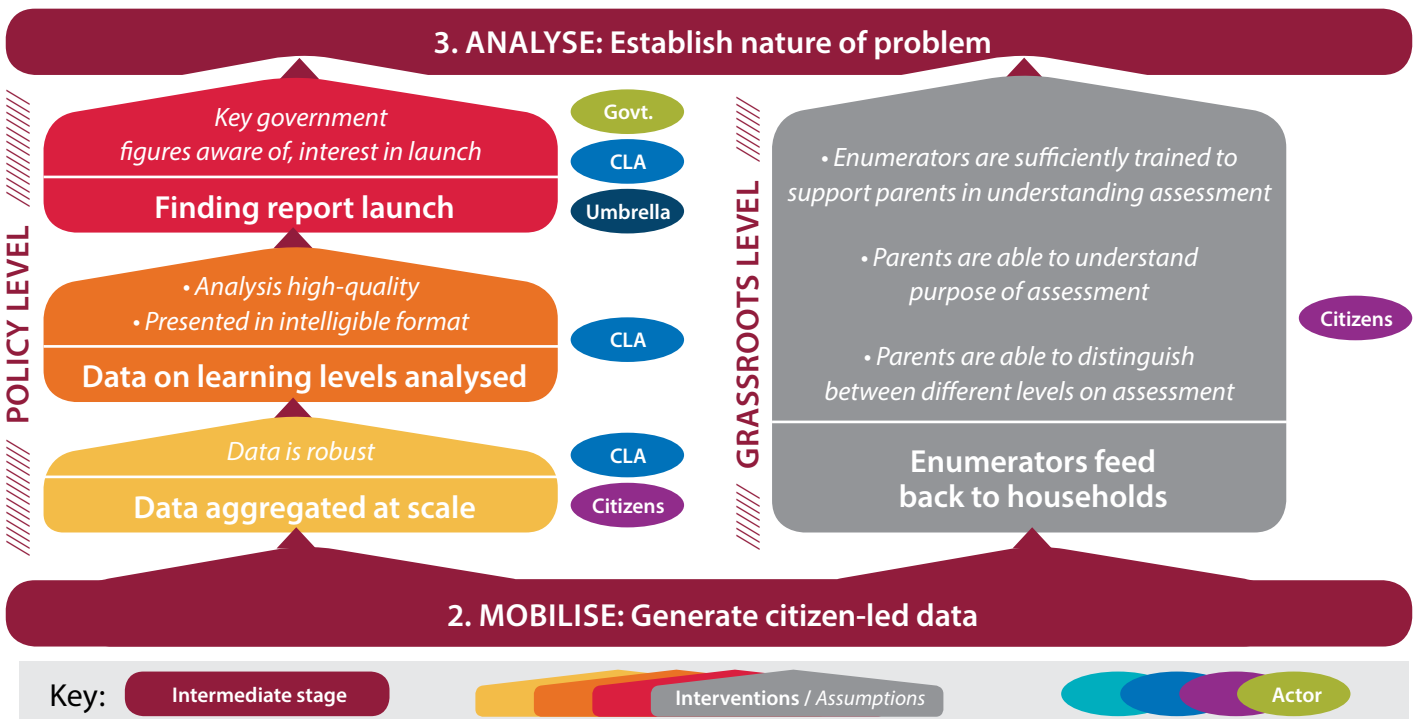
5. Act: Implement solutions

The final step in the PAL Network’s Theory of Change is the implementation of assessment to action programs. The ultimate change envisaged through the Theory of Change is the acquisition and improvement of foundational learning skills for all children, providing them with the building blocks that will provide the basis for all future learning. The assessment and action programs work cyclically to ensure that all action programs collect baseline data, monitor and measure learning periodically throughout the intervention program, and provide end line data to empirically demonstrate learning gains over time. Such data is used to provide MELS – Monitoring, Evaluation, Learning, and Sharing – which in turn help to provide iterative improvements throughout the assessment and action processes, thus helping improve over time the efficacy of the Network’s assessment for action work.

It is worth noting that there are of course a range of factors adding to the complexity within each of these stages. To illustrate, Figure 3 provides an example of how one Network member theorises its progress between two intermediate stages: 2. Mobilise and 3. Analyse. In addition to these stages, this theory of change contains three other key elements:

1. Interventions, which are the actions that drive the movement between one stage and another.
2. Assumptions that one must make in order for there to be plausible links between interventions and intermediate stages.
3. Actors who take part in a given intervention.

Figure 3: Sample within-stage theory of change



As Figure 3 shows, in this particular example there are two pathways linking the stages. The first takes place at the national policy level and depends primarily on the work of the Network members’ Citizen-Led Assessment (CLA) and umbrella organisation in interacting with the government. The second takes place at the grassroots, community level, and depends primarily on the interactions between those citizens conducting the CLA (enumerators) and those living in the local community (namely, parents in the surveyed households).

Given the diversity of Network members' backgrounds and the contexts within which they are working, the interventions, assumptions and actors operating within each stage of the broader theory of change varies. While this synthesis report focuses on commonalities across countries, the greater detail of each Network member's work is provided in country-specific theory of change tables, which detail each of the above components at each stage, and accompanying narratives.

2. The Network's strengths

'Organic' growth

Every member country has come to join the PAL Network on its own terms. There is no top-down strategy of pushing for growth into specific new countries or regions, or of assigning people out to countries to establish new members. Instead, the Network has grown organically according to where experts in the Global South see real synergies between their own country initiatives and that of the broader Network.

In addition, the Network works not just for the Global South, but also from the Global South. In other words, Network members come from and live in their respective countries. Thus, the Network acts as a focal point for experts with a demonstrated motivation to work in improving education for all, and who are embedded in the very countries in which they are trying to enact meaningful change.

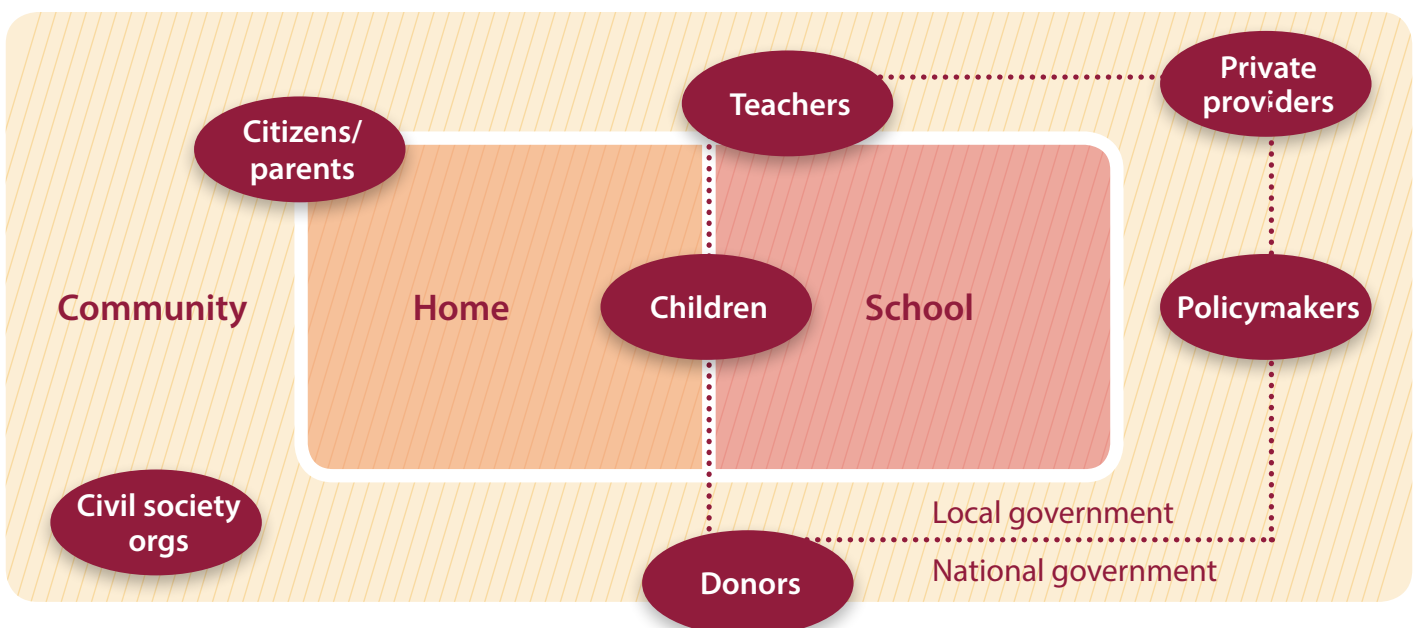
These features further enable support and sharing across the Network. This has helped leverage the diversity and knowledge gained in a range of contexts across the Global South. Often, this has taken the form of support provided by more long-established Network members to newer members in the implementation of direct interventions. For example, Kenya shared its experiences running CLAs in order to help Mozambique establish its own model. Similarly, Pakistan and Mexico learned from India's work in moving from assessment to action and designing interventions, enabling them to build upon successful precedents while still adapting to the particularities of their respective contexts.

'Free-range' adaption

Adaption is paramount to the Network's work in assessment for action. Rather than a fixed framework that is to be replicated, there is instead an emphasis on Network members learning from precedents but tailoring to their own contexts.

This valuing of adaption is exemplified in the proliferation of Teaching at the Right Level (TaRL) models across the network (including, for example, in Botswana, India, Mexico, Mozambique, Pakistan, and Senegal). TaRL emphasises assessing children for foundational literacy and/or numeracy, grouping them according to their current level, and then conducting teaching activities tailored to each group's current level.

Figure 4: Key actors and spaces within in an education system



However, who will actually lead TaRL activities will depend on the opportunities and constraints available in a given context. To illustrate, Figure 4 offers a broad depiction of an education system. A child's learning – the central goal – depends on a range of actors (citizens/parents, teachers, civil society organisations, private school providers and policymakers) working across a range of spaces (home, community, school, local and national government). When initiating the TaRL model, India conducted activities in communities with local citizens, and Mexico and now Mozambique have both similarly focused on actions at the community level, led by citizens and civil society organisations. In contrast, Botswana, Pakistan, and Senegal have focused more on partnerships with government that are enacted through the formal school system. Given the contextual diversity across countries, this 'free-range', adaptive approach is essential to the efficacy of actions.

An equally important element of adaption is the iterative model improvements made over time within a specific context. Key to this iterative adaption is MELS: monitoring, evaluation, learning, and sharing. Learning from experiences is an integral part of action initiatives, both to inform how the given action is implemented in future, but also the preceding steps in the citizen-led assessments that provide the foundation for action. A few examples include improving pedagogical methods through a focus on story-telling methods in literacy activities (Mali); improving community buy-in through communication with parents about the format of activities (Botswana); and improving government support for action through the incorporation of government agencies in the development of assessment tools (Nigeria).

Summary

PAL Network members are diverse in their backgrounds, in their history with CLAs, and in their evolutions from assessment to action. The Network provides a structure and platform with which to harness this diversity, using assessment for action to help raise learning for all. Citizens' actions for learning (CALs) then build off these foundations to design and implement interventions aiming to raise learning levels for the most disadvantaged. Network members vary in the types of actions they undertake and this variety stems from the common principles of organic sharing across the network and free-range adaption to meet the needs of a specific context.

References

- Alcott, B., & Rose, P. (2015). Schools and learning in rural India and Pakistan: Who goes where, and how much are they learning? *Prospects*, 45(3), 345-363.
- Alcott, B., & Rose, P. (2016). Does private schooling narrow wealth inequalities in learning outcomes? Evidence from East Africa. *Oxford Review of Education*, 42(5), 495-510.
- Alcott, B., & Rose, P. (2017). Learning in India's primary schools: How do disparities widen across the grades?. *International Journal of Educational Development*, 56, 42-51.
- Carr-Hill, R. (2013). Missing millions and measuring development progress. *World Development*, 46, 30-44.
- Chudgar, A. (2012). Variation in private school performance: the importance of village context. *Economic and Political Weekly*, 52-59.
- Goodnight, M. R., & Bobde, S. (2018). Missing children in educational research: investigating school-based versus household-based assessments in India. *Comparative Education*, 54(2), 225-249.
- Jones, S., & Schipper, Y. (2015). Does family background matter for learning in East Africa?. *Africa Education Review*, 12(1), 7-27.
- Jones, S., Schipper, Y., Ruto, S., & Rajani, R. (2014). Can your child read and count? Measuring learning outcomes in East Africa. *Journal of African economies*, 23(5), 643-672.
- Pritchett, L. (2013). *The Rebirth of Education: Schooling Ain't Learning*. Washington, D.C.: Center for Global Development.
- Pritchett, L., & Beatty, A. (2015). Slow down, you're going too fast: Matching curricula to student skill levels. *International Journal of Educational Development*, 40, 276-288.
- The International Commission on Financing Global Education Opportunity (2017). *The Learning Generation: Investing in Education for a Changing World*.
- UNESCO (2014). *Global Monitoring Report 2013/4: Teaching and Learning: Achieving Quality for All*. UNESCO, Paris.
- UNESCO Institute for Statistics (2018). Measuring equity for national education planning. In *Handbook on Measurement of Equity in Education* (C.-L. Chien & F. Huebler, eds.).

Endnote

1. Children living in nomadic or travelling families, displaced or refugee children, children in care institutions and children's homes, children attending boarding schools, and children in hospital may not be included in the sample.



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